

# 8401

Diag'd, on diag. ch. No. 1256

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey Air Photo Compilation

Field No. \_\_\_\_\_ Office No. T-8401

### LOCALITY

State Florida

General locality Manatee River

Locality Lorraine

1944

### CHIEF OF PARTY

Comdr. Ray L. Schoppe

### LIBRARY & ARCHIVES

DATE March 19, 1948

8-1870-1 (11)++

# 8401

## DATA RECORD

T-8401

Quadrangle (II): LORRAINE 7½, Florida Project No. (II): CS 290

Field Office: Tampa, Fla. Chief of Party: Ray L. Schoppe

Compilation Office: Tampa, Fla. Chief of Party: Ray L. Schoppe

Instructions dated (II III): 11/16/42 Copy filed in Descriptive  
Report No. T- (VI)  
Div. Photogram Office Files

Completed survey received in office: 10 May, 1944

Reported to Nautical Chart Section:

Reviewed: 6/10/44 Applied to chart No. 586 Date: 19 May, 1947

Redrafting Completed: 21 June, 1944

Registered: ~~30 Jan 1948~~ ~~30 Jan 1947~~ Published: 1944

Compilation Scale: 1:20,000 Published Scale: 1:31,680

Scale Factor (III): 1.00

Geographic Datum (III): N.A. 1927 Datum Plane (III): M.S.L. 1929

Reference Station (III): E-9, 1944 (Traverse station)

Lat.: 27°25'54.838" (1687.8M) Long.: 82°25'49.698" (1364.9M) Adjusted  
~~Unadjusted~~

State Plane Coordinates (VI):

*not computed at time of review  
Florida, West zone.*

X =

Y =

Military Grid Zone (VI)

Zone B

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
11628	11-42		1:20,000	Inshore Sheet
11626	"		"	
11625	"		"	
11694	"		"	
11695	"		"	

Tide from (III): --

Mean Range: --

Spring Range: --

Camera: (Kind or source) U. S. C. & G. S. 9 lens

Contouring and  
Field Inspection by: E. Gillerman

date: Mar. 1944

Field Edit by: *Hiram B. Wright*

date: 18 May 1944

Date of Mean High-Water Line Location (III):

Projection and Grids ruled by (III) Wash. Office date:

" " " checked by: " " date:

Control plotted by: M. Rutkin date: Mar. 1944

Control checked by: J. H. S. Billmyer date: Mar. 1944

Radial Plot by: Tampa Office Personnel date: Mar. 1944

Detailed by: Alpha E. Abbitt date: Apr. 1944

Reviewed in compilation office by: J. A. Giles date: May 1944

Elevations on Field Edit Sheet  
checked by: *R.B. Collier*

date: 4/9/44

STATISTICS (III)

Land Area (Sq. Statute Miles): 64.4

Shoreline (More than 200 meters to opposite shore): --

Shoreline (Less than 200 meters to opposite shore): 26.2

Number of Recoverable Topographic Stations established: --

Number of Temporary Hydrographic Stations located by radial plot: --

Leveling (to control contours) - miles: 85

Roman numerals indicate whether the item is to be entered by, (II) Field Party, (III) Compilation Party, or, (VI) the Washington Office.

When entering names of personnel on this record give the surname and initials (not initials only).

Remarks:

## General Procedure in the Production of Topographic Quadrangles for the War Department

This quadrangle, together with similar adjoining maps produced under Project C.S.290-C, was prepared by the Coast and Geodetic Survey for the War Department under "General Specifications for War Department Mapping Program" issued about December 1941, in which is incorporated the "Standard of Accuracy for a National Map Production Program" issued by the Bureau of the Budget under date of June 10, 1941.

The general procedure in the production of this and the adjoining quadrangles was:

### FIELD SURVEYS

Aerial photography with the Coast and Geodetic Survey nine-lens camera, with airplane and flight crew furnished by the U. S. Coast Guard. The photographs were taken to the scale of 1:20,000.

Ground inspection of the photographs for identification of control points, and classification and clarification of planimetric details on the photographs.

Contouring by planetable directly on the photographs. Supplementary vertical control was established by means of an extensive subordinate level net, furnishing unmarked elevations at road intersections, driveways, and numerous other points identifiable on the photographs.

### COMPILATION OF MANUSCRIPT

Compilation on the map manuscripts by radial plot methods (celluloid hand templates) of all planimetry and contours. These manuscripts were drawn on the scale of 1:20,000 on celluloid sheets on which polyconic projections had been ruled with the Projection Ruling Machine in the Washington Office. Compilation was accomplished in the Baltimore Tampa Photogrammetric Office.

### FIELD EDIT

Comparison of a copy of the manuscript with the ground. This included inspection for completeness and accuracy as well as the location by planetable methods of additional details, checking of nautical and aeronautical aids to navigation, etc.



Accuracy Tests - Application of systematic horizontal and vertical accuracy tests to check the maps for conformity with the specifications. These tests consisted of comparison of the map position and elevation of selected random points with the true position and elevation as independently determined by standard survey methods.

#### PROCESSING IN THE WASHINGTON OFFICE.

Review - Examination of the manuscript for accuracy and completeness of compilation and compliance with specifications, correcting where necessary; addition of military and state grids and other special features; and verification of the general adequacy of the manuscript as a basis for the production of a finished map.

Drafting and Reproduction - Preparation of smooth color separation drawings on 1:20,000 scale on metal-mounted "blue-line" copies of the manuscript. From these drawings, negatives and printing plates were prepared for reproduction of the finished map on the scale of 1:31,680 or 1:25,000.

DESCRIPTIVE REPORT TO ACCOMPANY  
QUADRANGLE T-8401  
Project CS 290 C  
Ray L. Schoppe, Comdr., Chief of Party

1. Description of the Area. The area involved is a  $7\frac{1}{2}$  minute quadrangle in Manatee County, Florida, and is bounded on the north by north latitude  $27^{\circ}30'$ , on the east by west longitude  $82^{\circ}22\frac{1}{2}'$ , on the south by north latitude  $27^{\circ}22\frac{1}{2}'$ , and on the west by west longitude  $82^{\circ}30'$ . It is low-lying and relatively flat, with a gradual slope toward the northwest. No point in the area rises above 60 feet above mean sea level. The Braden River enters the quadrangle along the eastern edge near the southern boundary, and curves through the southern and western portions, to enter the Manatee River just off the northwest corner of the quadrangle. The river is tidal in its lower reaches near the western edge of the quadrangle.

The drainage is toward the Braden River, except in the northwest corner. Here the land drains northward toward the Manatee River, through Mill Creek and smaller tributaries.

Most of the eastern portion of the quadrangle is extremely flat, and numerous ponds and sink holes, many with no external drainage, are present. The ponds are also plentiful in the southeastern portion of the area.

Scattered pine, palmetto, and grasslands cover the entire area, and heavy growths of deciduous occur only along the Braden River and in a few scattered swamps, mostly in the western portion. The area is entirely devoted to grazing. Human habitations are sparsely located, and no villages or towns lie within the limits of the quadrangle. Florida state highway #161 crosses the northern part from east to west, and Florida state highway 18A crosses the southern part of the area, also from east to west. Other roads are few.

3. Completeness of Field Inspection. The field inspection was completed on nine-lens photographs, scale 1:20,000, Nos. 11626, 11628, 11631, 11693, 11694, and 11695. All drainage, vegetation, and cultural features are identified and classified, and standard symbols are used, according to instructions.

4. Interpretation of the Photographs. Deciduous trees appear on the photographs as dark masses, and when isolated trees are present they appear as small ink spots. Isolated evergreen have a more elongated shape, and when the pines are thickly bunched, the tone is much lighter than where the deciduous first occur.

A heavy growth of deciduous indicates a swamp, although many of the high sand ridges are overgrown with oak. The distinction between the two is easy after one is familiar with the photographs. High spots are usually lighter in tone, and lower areas are darker. White areas, covered with trees, or bare, indicate sand spots; and are almost invariably high. In general, citrus groves are found on high places.

4. Horizontal Control. Horizontal control was recovered and identified on the photographs by W. Bever, Jr. Topo. Engr., and J. A. Webb, Sr. Photo. Aid. Proper recovery notes and identification cards have been completed.

5. Vertical Control. Vertical control for the planetable work was completed by the parties of J. W. Brett, Sr. Photo. Aid, and W. H. Warren, Asst. Photo. Aid, Mr. Brett completing the southern half of the quadrangle, and Mr. Warren completing the northern half.

Level loops originated at U. S. Coast and Geodetic Survey bench marks, and all loops closed within the required limits of accuracy. All errors in closure were adjusted.

6. Contours and Drainage. Contouring was done on photographs Nos. 11626, 11628, 11695, 11693, and 11694, by standard methods. Planetable locations were taken from identifiable points on the photographs, or short traverses were run from such points to the desired setups. The table was oriented by sighting at or along detail on the photograph wherever possible. In addition, a magnetic meridian was placed on the photographs with the aid of the declinator, by setting up at a point where a strong magnetic orientation could be obtained. This was checked frequently, and was used to orient the planetable when other methods could not be employed. Standard topographic methods were used in carrying elevations and in locating the individual rod shots. Very little hand leveling was used, as the area is open except along streams.

Drainage was identified and classified as shown on the photographs. Streams were located by rod shots, and with the aid of the stereoscope. Ponds, marshes, and swamps were distinguished and classified.

For items 7, 8, 9, and 10, refer to descriptive report for original planimetric maps.

11. Landmarks and Aids to Navigation. No landmarks or aids to navigation are present within the limits of the quadrangle.

12. Hydrographic Control. Refer to descriptive report for original planimetric maps.



13. Landing Fields and Aeronautical Aids. There are no landing fields or aeronautical aids within the limits of the quadrangle.

14. Roads. All roads were classified according to instructions, and the route numbers or names indicated wherever they are known.

15. Bridges. All bridges have been classified according to instructions by C. C. Fryer, Jr. Topo. Engr.

16. Buildings and Structures. All buildings to be shown are circled in red and classified according to instructions.

17. Boundary Monuments and Lines.

See addenda by C. C. Fryer, Jr. Topo. Engr.

18. Geographic Names. This will be the subject of a special report.

19. Vegetation. All vegetation has been classified in accordance with instructions.

20. Junctions. Junctions to the north, west, south, and east have been checked in the field and found to be satisfactory.

21. Data. All contours were completed on photographs 11626, 11628, 11693, 11694, and 11695. Field inspection was completed on the same photographs, and in addition, on photograph 11631. Supplemental levels are shown on photographs 11626, 11627, and 11695.

Contours are in brown, and elevations obtained by the planetable are indicated by brown "x". Supplemental level elevations are shown in blue. Cultural features and vegetation are in red, and drainage is in blue. Deletions are indicated by green "x".

46. Field Edit Methods. The entire quadrangle was field inspected on photographs. Refer to item 2 of this report.

47. Adequacy of the Compilation. The compilation made from planimetric maps covers only a narrow strip along the northern edge of the quadrangle. No attempt was made to field edit the compilation, and the entire area was field inspected on the photographs. The entire quadrangle, therefore, should be field edited after it is completely compiled.

48. Accuracy tests. A horizontal accuracy test will be run through a portion of this quadrangle by a geodetic traverse party under the supervision of Lieut. Comdr. G. W. Lovesee. *Filed in Div. Photograph General Files under "Sp'l Reports." See Review report.*

A vertical accuracy test will be run on this quadrangle at a later date. *No vertical test was made.*

Respectfully submitted:

March 17, 1944

*Elliot Gillerman*  
*J. Vago Engr.*

Elliot Gillerman  
Jr. Topo. Engr.

Approved:

*Ray L. Schoppe*  
Ray L. Schoppe  
Chief of Party

The political subdivision lines as shown on the photographs have been transferred to the photographs from a general highway and transportation map prepared by the Florida State Roads Department. This map is published on a small scale and an attempt has been made to transfer the political subdivisions boundaries to the photographs as accurately as possible; but due to the varied scale of the photographs on which they were placed it is not to be assumed that they are correct. It is recommended they be checked in the field by the field edit party on the compilations which are to a true scale of 1:20,000.

Each photograph that touches or borders on a quadrangle should be examined to locate these boundaries. In many cases they will appear on the wings of the photographs.

This same rule must be followed in regard to the classification of bridges.

Respectfully submitted:

C. C. Fryer  
Jr. Topo. Engr.  
March 24, 1944

COMPILATION REPORT  
To Accompany  
SHEET NO. T-8401

26. CONTROL ✓

Five triangulation stations fall within the limits of this sheet. All of these were held to in the radial plot.

27. MAIN RADIAL PLOT ✓

A discussion of the main radial plot, of which this sheet is a part, is included in the descriptive report for sheet T-8399.

28. DETAILING ✓

All the photographs used in detailing the sheet were clear and of good scale.

The field inspection was adequate for detailing the sheet. All discrepancies and omissions in the field inspection have been shown on the discrepancy overlay.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES ✓

No existing topographic quadrangle maps were available for comparison.

45. COMPARISON WITH NAUTICAL CHARTS ✓

None of the detail on the nautical charts extends far enough inland to cover the area of this compilation.

Respectfully submitted,

*Alpha E. Abbitt*  
Alpha E. Abbitt,  
Asst. Engr. Draftsman

Forwarded by

*Ray L. Schoppe*  
Ray L. Schoppe,  
Chief of Party.



FIELD EDIT REPORT  
To Accompany  
SHEET NO. T-8401

46. METHODS

In editing the map compilation, all roads were traversed by truck. Due to the presence of many roads, the area was well covered by this method; and only in a few places was it found necessary to walk in order to cover the entire area.

All roads, buildings, ditches and other features were added to the ozalid print of the map compilation by measurements from topographic features or by plane table methods.

All citrus was classified as Cit. C or Cit.A\* and all mangrove, unless otherwise classified, should be classed as A or B. All additions, corrections and deletions are to be found on the ozalid print of the map compilation. In accordance with the instructions, black ink was used for all additions and classifications. Green ink was used for all deletions.

47. ADEQUACY OF THE COMPILATION

The compilation was found to be adequate and complete, except for the additions, deletions and corrections noted on the field edit sheet.

The elevations shown on the ozalid print of the map compilation were not checked against those shown on the field photographs by the field edit party, as the photographs were not accessible to this party. However, stake AB 4, as noted on discrepancy overlay, was checked and corrected on the ozalid print.


48. ACCURACY TEST

Covered by a separate report.

14. ROAD CLASSIFICATIONS

All road classifications were checked in the field and corrections were made where necessary. All roads not previously classified were classified according to instructions.

Approved by:

  
Ray L. Schoppe,  
Chief of Party.

Respectfully submitted,

Hiram B. Wright,  
Photogrammetric Aid. May 18, 1944

\* Citrus orchards will be shown with the orchard symbol.  
Mangrove will be shown with standard mangrove symbol.

T-8401

Remarks.

Decisions

1		USGB
2		
3		
4		Road Maps
5		275825 USGB
6		
7		274823-824
8		II
9		II
10		II
11		II
12		II
13		II
14		II
15		275824
16		II
17		II
18		274823-824
19		II
20		II
21		II
22		II
23		274824
24		
25		
26		
27		
M 234		



# GEOGRAPHIC NAMES

Survey No. T-8401

LORRAINE

Name on Survey

	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
A	B	C	D	E	F	G	H	K	
Florida									1
<u>Manatee County</u>	✓								2
<u>Sarasota County</u>	✓								3
State Nos. <u>18A</u> , 161									4
<u>Braden River</u>	✓								5
									6
<u>Cooper Creek</u>	✓								7
<u>Cedar Creek</u>	✓								8
<u>Rattlesnake Slough</u>	✓								9
<u>Arcadia Road</u>	✓	(18A)							10
<u>Lorraine</u>	✓								11
<u>Lorraine Road</u>	✓								12
<u>Wolf Slough</u>	✓								13
<u>Rye Grade</u>	✓	(road)							14
<u>Mill Creek</u>	✓								15
<u>Gates Creek</u>	✓								16
<u>Shell Road</u>	✓								17
<u>Foxleigh</u>	✓	(ranch)							18
<u>Elwood Park</u>	✓	(partly here)							19
<u>Braden River Cemetery</u>	✓								20
<u>Oneco Bridge</u>	✓								21
<u>Ward Lake</u>		Not shown							22
		(name OK if feature exists)							
<u>Gap Creek</u>	?	(See map with T8400)							23
									24
									25
									26
									27

Names underlined in red approved  
by L. Heck on 6/15/44

## RECORDS

Between January, 1942 and July, 1944, this Bureau completed 323 quadrangles. These maps have been published, or are in the process of being published on scales of 1:31,680 or 1:25,000. This series of quadrangles includes a land area of approximately 15,000 square miles. Incident to this work, a considerable volume of survey records and data has accumulated which will be filed for future reference. This material is filed as follows:

### Registered and Filed in the Vault.

Cloth-mounted copy of the published quadrangle..

Black and white cloth-mounted copy of the published quadrangle at 1:20,000 scale. This copy is filed to preserve original survey detail shown on the manuscript at 1:20,000 scale which may not have been shown on the published sheet. For woodland, refer to the published quadrangle for the finally adopted outlines.

Descriptive Report.

### Filed in the Photogrammetric Division.

Field inspection photographs.

Contoured photographs (on which planetable contouring work was performed.)

Field edit sheet.

Descriptions of recoverable topographic stations (Form 524), filed in Review Section.

Supplementary traverse and level records.

Field notes, computations, lists of positions, and tabulations of results of horizontal and vertical accuracy tests.

Reproduction proof.

Correction sheet (copy of quadrangle showing in red changes to be made when next printed.)

Check lists of work performed on each sheet in the Washington Office during review, drafting, edit, and reproduction.

Copies of specifications and all instructions to field parties and field offices.

Filed in Reproduction Branch..

Glass negatives of the color separation drawings.

Filed in the Library.

Special report on office work by B. G. Jones, 1944.

Season's report on field work by Commander F. L. Gallen, 1944.

Season's report on field work by Commander R. L. Schoppe, 1944.

Delivered to the Army Map Service in accordance with the contract.

Film negatives and film positives of the color separation drawings.

All color separation drawings.

A correction sheet consisting of a copy of the first edition of the quadrangle with notes in red indicating changes desirable at the next printing.



DIVISION OF CHARTS

SURVEYS BRANCH

REVIEW OF AIR PHOTOGRAPHIC SURVEY T-8401

Lorraine, Fla. QUADRANGLE

This quadrangle manuscript has been examined for completeness, accuracy, and conformity with the specifications. It is adequate for smooth drafting, reproduction and publication. Revisions found to be necessary in this office are discussed on the next page.

Horizontal and Vertical Accuracy

A horizontal accuracy test was made from station SCHROEDER to MANAT (T-8400-8401). All points scaled showed a difference of less than .5 mm except three. The map is considered to be of the required accuracy.

No vertical test was run.

Previous Surveys

This manuscript has been compared with the following previous topographic surveys of this Bureau and other agencies. This map is satisfactory to supersede the previous surveys over the common area.

*None*

Comparison with Nautical Charts Nos.

586 1:50000  
1256 1:50000

The manuscript has not been applied to the charts at the date of this review. The following comments are pertinent to the compilation and correction of nautical charts:

The following revisions of the map manuscript were found to be necessary and were accomplished as a part of this review:

Reviewed 10 June 1944 By R.B. Collier  
under direction of D. H. Benson per L.T.S.

Inspected by B. G. Jones B.G. Jones 2/48

Examined and approved:

[Signature]  
Chief, Surveys Branch

[Signature]  
Chief, Topography Section  
Nautical Chart Branch

K.T. Adams  
Chief, Div. of Charts  
Photogrammetry

C.K. Green  
Chief, Div. of Coastal  
Surveys

POST-OFFICE ADDRESS: 1101 E. Broadway  
Tampa, 5, Florida

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

June 7, 1944

Mr. Bennett G. Jones  
U. S. Coast & Geodetic Survey  
Washington, 25, D. C.

Dear Casey:

In checking some of our records, it is believed that Traverse Station A-9-1944 was plotted in error by approximately 5.6 M. on T-8401. If it is not, the ozalid is in local error. A tracing is attached showing the change. This was traced from an ozalid and no correction was made for distortion. It is requested that you check this station and if found in error, please change the road as per tracing.

The G. P. of A-9 is --

27° 28' 31.117" 957.78 M. (889.0)  
82° 23' 44.723" 1227.8 M. (419.6)

Guess you are rather busy now--the same as we were a month ago. Hope you find the work satisfactory that was turned out during my stay here.

Hope you and the family are well.

Best regards,

*Mike*

*P.S. You might let me know how this is, if not too much trouble. Mike*

*The end was so small that it was important to uplot the station  
my*



## NAUTICAL CHARTS BRANCH

SURVEY NO. T8401

### Record of Application to Charts

[illegible]

**M-2168-1**

**A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.**