

8368

8368

*Diag. in pencil
Diag. on Specia Diag. Ch. No. 1007*

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. T-8368 Office No. _____

LOCALITY

State Florida

General locality Tampa Bay

Locality West of Polk City

194 3

CHIEF OF PARTY

Ray L. Schoppe - Field

Kenneth G. Crosby - Compilation

LIBRARY & ARCHIVES

DATE

Sept 25, 1946

DATA RECORD

T- 8368

Quadrangle (II): PROVIDENCE

Project No. (II): 290-B

Field Office: Tampa, Florida

Chief of Party: R. L. Schoppe

Compilation Office: Tampa, Fla.

Chief of Party: K. G. Crosby

Instructions dated (II III): 11/16/42

Copy filed in Descriptive
Report No. T- (VI)

Completed survey received in office: 11/8/43

Reported to Nautical Chart Section: 11/9/43

Reviewed: 2/29/44

Applied to chart No.

Date:

Redrafting Completed: 4/8/44

Registered:

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): J-1, 1943

Lat.: $28^{\circ}08'44''$ 547(1371.3) Long.: $81^{\circ}53'37''$ 774(1030.7) ~~Adjusted~~
m m Unadjusted ✓

State Plane Coordinates (VI): J-1, 1943

Florida West zone

*Have not been computed**2/11/44*

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>
11796	11/13/43		1:20,000	Inshore Sheet
11797	"		"	
11798	"		"	
11799	"		"	
11800	"		"	
11801	"		"	

Tide from (III): Inshore Sheet

Mean Range: --

Spring Range: --

Camera: (Kind or source) USCGS 9 lens

Field Inspection by: J.K.Wilson, T.H.Walker, Engr. Aidate: April 1943

Field Edit by:

date:

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

Projection and Grids ruled by (III) B.R.C. and P.E.B. date: 4/21/43

" " " checked by: " " date: 4/22/43

Control plotted by: B. R. Finch, Jr. Engr. Drafts. date: 8/13/43

Control checked by: H.W. Thune, Jr. Topo. Engr. date: "

Radial Plot by: Tampa Office Personnel date: 8/19/43

Detailed by: B.R. Finch, Jr. Engr. Drafts. date: Aug. - Sept. 1943

Reviewed in compilation office by: F.H. Elrod, Sr. Engr. Drafts. date: Oct. 1943

J.H.S. Billmyer, Asst. Photo. Engr.

Elevations on Field Edit Sheet

checked by:

N.S. Allen

date: 1/31/44

STATISTICS (III)

Land Area (Sq. Statute Miles); 53.2

Shoreline (More than 200 meters to opposite shore); 1.5

Shoreline (Less than 200 meters to opposite shore); None

Number of Recoverable Topographic Stations established; None

Number of Temporary Hydrographic Stations located by radial plot; None

Leveling (to control contours) - miles; 105 miles

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. 270, 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, drive-ways, and numerous other points identifiable on the photographs.

COMPILATION OF MANUSCRIPT

Compilation on the map manuscripts by radial plot methods (celluloid hand templets) 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.

COMPILATION REPORT
TO ACCOMPANY
SHEET NO. T-8368

26. CONTROL

Only three stations that were recovered fall within the tracing limits of this sheet. These stations are in the area of more important detail and, when used in conjunction with the stations on the adjoining sheets, are sufficient for controlling a radial plot. One of these stations, "H-1 (Offset)", could not be held in the main radial plot and is one of the five mentioned under the next heading.

27. MAIN RADIAL PLOT

This plot covered the eight quadrangles in the Northeastern part of the project numbered from T-8366 to T-8373 inclusive.

The nine lens photographs used were Nos. 11733 to 11737, inclusive, and 11779 to 11819, inclusive, making a total of 46 photographs from which templates were made. These photographs were printed on cellulose coated paper and all had some distortion. This distortion was taken care of in the plot by putting each blank template over an aluminum "master" template, furnished by the Washington Office, and marking the center and the 16 lines indicating the chamber junctions, corners, and the four collimating notches in blue ink. The templates were then placed over the photographs with the centers coinciding, and the radial lines traced thereon, while shifting the template to agree proportionately with the 16 control lines on the photograph. In this manner, photographic distortion was eliminated from the template.

Manuscript projections and base grids were made on the ruling machine by the Washington Office.

Before the templates were made, the photograph azimuth lines were laid out with the azimuth liners and the stereoscope. All control was carefully checked on the photographs, and the control stations were plotted on the manuscript sheet and then transferred to the base grids and inked.

The templates were laid in the usual manner; those with the strongest fixes first, etc.

While laying the plot, which was started August 19, 1943 and lasted over a period of three days, some of the templates were relaid on the master template to check for any template distortion. Little or no distortion was noted.

Triangulation and traverse control was plentiful and fairly well distributed. Sixty-seven stations were used for control and 51 stations were not recovered. Of the latter, mostly were un-monumented stations and quite a few could be identified, after the plot had been run, as road intersections, etc.

Geographic positions were furnished by the field party of 40" photographic points". However, they were not identified on the field prints, so could not be used for control on the main plot. Some of the points could also be identified later on.

All stations could be "held to" with the exception of five recovered stations which were "offset" from the traverse line. Four of these stations fell on Sheet T-8367 and one on T-8368. At the time that the plot was run it was assumed that the offset distances were not taken into account when computing the geographic positions. This assumption was checked on and found to be true. The correct geographic positions were later furnished this office by the field party and the new positions are now plotted on the survey sheet making it possible to hold the five stations that were formerly in doubt.

The control was distributed as follows:

<u>SHEET</u>	<u>RECOVERED STATIONS (Used for control)</u>	<u>NON MONUMENTED STATIONS (Not recovered)</u>	<u>PHOTOGRAPHIC POINTS (Not identified on field print)</u>
T-8366	6	7	4
8367	14	13	14
8368	3	11	12
8369	13	7	7
8370	10	-	-
8371	9	13	3
8372	7	-	-
8373	5	-	-
TOTALS	67	51	40

Excellent radial line intersections were obtained throughout the plot, and it is thought that the location of the radial points will meet the accuracy specifications.

28. DETAILING

The photographs covering this area were satisfactory for detailing and no unusual difficulty was experienced in the delineation.

The field inspection was sufficient and except for a few obvious minor errors was quite satisfactory.

Most of the area consists of pine and grass land with numerous small swamps and cypress ponds while the smaller area with the more ~~un~~important detail lies in the southern portion of the sheet.

29. SUPPLEMENTAL CONTROL

No graphic control surveys by this Bureau, or maps and plans by other organizations were used to supplement the photographs or field inspection.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

There were no existing standard topographic quadrangle maps in the Tampa Office with which T-8368 could be compared.

45. COMPARISON WITH NAUTICAL CHARTS

None of the published nautical charts show the area covered by this sheet in detail.

Respectfully submitted,

Betty R. Finch
Betty R. Finch,
Jr. Engineering Draftsman

Forwarded by:

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

DESCRIPTIVE REPORT

Project CS 290 B - Quadrangle T-8368

1. The area is a $7\frac{1}{2}$ minute quadrangle bounded as follows: on the west by longitude $82^{\circ}00'00''$, on the north by latitude $28^{\circ}15'00''$, on the east by longitude $81^{\circ}52'30''$, and on the south by latitude $28^{\circ}07'30''$.

The entire area is covered with small cypress swamps. The southern part of the area has numerous orange groves. The western and northern and eastern sections of this quadrangle are very flat, with elevations ranging from 140 feet on the east to 115 on the north and 100 feet to the extreme northwest. The southern area is more rolling, and the elevations go up to two hundred feet. The southern area is more populated, while the northern, eastern, and western sections have very few people; this part of the quadrangle is grazing country for cattle.

A very small portion of the area is densely wooded and this is chiefly along or near streams.

Few hard surfaced roads are to be found and most are sand roads of a 4 U class, making automobile travel difficult in both the extreme wet and dry seasons.

2. The field inspection for the clarification and classification of details on the photographs has been completed. There are no major power lines carried on prominent steel towers in the area.

3. Deciduous trees appear on the photograph in the darkest tones, while the evergreens have a lighter tone. In lightly wooded areas any lighter tone generally indicates a higher elevation.

Unimproved sand roads appear to be first class highways, due to the white sand showing so plainly.

5. Levels were run in this quadrangle from adjacent bench marks. Fly levels were run from these major lines with ^{a maximum} ~~an~~ error of closure of 0.5 of a foot. All major lines closed with a maximum error of closure of 0.3 of a foot. There was a total mileage of levels run in this quadrangle of 105 miles. There were very few bench marks, due to the lack of good roads. The only bench marks in this quadrangle were Coast and Geodetic Survey bench marks. All level lines were adjusted.

6. The contouring was chiefly done by Thomas H. Walker, Engineering Aid, while Joseph K. Wilson, Engineering Aid, finished the southern portion of this quadrangle. Thomas Walker worked on photographs 11798, 11799, 11801 while Joseph Wilson worked only on photograph 11796.

The contour interval was 20 feet and the work was done directly on the photograph. An attempt was made to keep the work as near the center portion of the photograph as possible in an effort to minimize distortion and large changes in scale.

The field work was done by a four man planetable party who covered the area thoroughly in an effort to locate all surface changes and to classify the culture of the land. Elevations were carried by direct levels and vertical angles. The usual closure was 0.3 of a foot.

The intermittent drainage was very hard to see on the photographs. The cypress swamps are low, flat places and there is no definite drainage. In such instances a symbol (NDD) was used on the photographs.

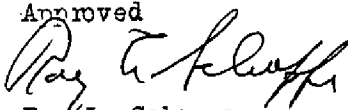
The stereoscope was used to some extent, but due to the flatness of the country the accuracy is limited.

7. The mean high water line was established by inspection and plane-table traverse to those areas where the water line was not so easily located from inspection of the photograph.
 8. The low water line was established as above mentioned. According to inhabitants in this area, the bodies of water within the quadrangle were never as low as they were at the time this survey was made.
 9. There are no wharves or shoreline structures here.
 10. Details off-shore from the high water line do not exist.
 11. None
 12. None
 13. None
 14. Roads were classified according to instructions. There were very few good roads in this quadrangle, most of the roads being 4 and 4 U roads.
 15. All bridges in this quadrangle have been classified by Mr. C. C. Fryer, Junior Topographic Engineer.
 16. All dwellings in this quadrangle were circled in red, and those not easily seen on the photograph were located by planetable and blocked in. Any building not a dwelling was labeled as such. There were very few public buildings. All buildings that were not substantial were deleted.
 17. There were no boundary monuments or lines to include.
 18. The work on Geographic Names was handled by Mr. Jack W. Stingley.
- A separate report touching on this subject will be submitted.


Respectfully submitted,

Joseph K. Wilson
Engineering Aid


Approved


Ray L. Schoppe
Chief of WMFP#2

4. Existing triangulation has been supplemented by the Lakeland- Zephyrhills traverse extending across the southwestern corner of the quadrangle and by the Lakeland-Polk City traverse extending across the southeastern corner of this quad. These traverses were run by William A. Rasure, Prin. Photo. Aid.


C. F. Chenworth
Lieut. U.S.C&G S.

Approved


Ray L. Schoppe
Comdr. U.S.C&G S.
Chief of Party

FIELD EDIT REPORT TO ACCOMPANY
QUADRANGLE T-8368
Project CS 290 B

46. Methods. In checking the compilation, all roads were traversed by truck. A considerable area in the northeastern portion of the quadrangle, which is not served by roads, was traversed on foot. All buildings, ditches, etc., that are not shown on the compilation, but are discernible on the photographs, were noted in the field, located under the stereoscope, and transferred from the photograph to the print of the compilation by tracing paper, holding to road intersections and other topographic features in the immediate vicinity for control. All others were plotted by measurements from topographic features. All buildings added by the field edit party are dwellings, unless otherwise labeled.

In accordance with instructions, black ink was used for all classifications and additions except drainage, which was inked in blue. Green ink was used for all deletions.

All citrus was classified by the field edit party. Where the trees are large, and overlap the ground, they were classified as "Z". Where they are large, but scattered, they were classified as "X"; and where they are less than ten feet tall, and will not conceal troops and vehicles, they were classified as "W".

47. Adequacy of the Compilation. In general, the compilation was adequate. A few buildings and roads were omitted, and these have been added by the field edit party.

48. Accuracy tests. This is to be covered by a separate report.

14. Road Classification. All roads not previously classified were classified according to instructions.

18. Geographic Names. All geographic names added were taken from a geographic name sheet completed by Jack W. Stingley, Jr. Topo. Engr. *L.A.*

Submitted by:

George E. Varnadoe

George E. Varnadoe
Prin. Photo. Aid
January 25, 1944

Approved:

Ray L. Schoppe

Ray L. Schoppe, Chief of Party

Remarks

Decisions

1		
2		Road Maps
3		
4		281818-819
5		"
6		"
7		"
8		"
9		282818-819
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GEOGRAPHIC NAMES

Survey No. T-8368

PROVIDENCE quadrangle

Name on Survey

	A	B	C	D	E	F	G	H	K	
✓ <u>Polk County</u>	✓									1
✓ <u>State Highway No. 2</u>	✓									2
										3
✓ <u>Providence</u>										4
✓ <u>Providence Road</u>										5
✓ <u>Sick Lake</u>										6
✓ <u>Old Polk City Road</u>	(State No. 2, above)									7
✓ <u>Orangedale</u>										8
✓ <u>Rock Ridge Road</u>										9
										10
										11
										12
										13
										14
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										27

Names underlined in red Approved
by L. H. K. on 3/14/47

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.

published quadrangle at 1:20,000 scale
Black and white cloth-mounted copy of the/~~map-~~
~~manuscript.~~ 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 ~~political boundaries,~~ woodland, ~~marsh,~~ and ~~swamp limits,~~ refer to the published quadrangle for the finally adopted ~~positions.~~ outlines.

Descriptive Report.

Division.

Filed in the Photogrammetric ~~Section~~ -- ~~Surveys Branch~~

Field inspection photographs.

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

Field edit sheet.

Descriptions of recoverable topographic stations (Form 524), filed in ~~Reviewing Unit.~~ 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.

Original celluloid manuscript.

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 field work by Commander K. T. Adams, 1944.~~

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.

~~Original celluloid manuscript.~~

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-8368

PROVIDENCE 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 run in this quadrangle and found to be satisfactory. See the files in the Division of Photogrammetry.

The nearest vertical accuracy test was run in quadrangle T-8369.

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.

There are no previous topographic surveys in this area.

Comparison with Nautical Charts Nos.

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:

No nautical charts cover this area.

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

Only changes of a minor nature were necessary during the review of this map manuscript.

Reviewed 2-16-44 By Lillian A. Lee
under direction of D. H. Benson

Inspected by B. G. Jones B.G. Jones 8/46

Examined and approved:

K.T. Adams
Chief, ~~Surveys Branch~~
Division of Photogrammetry

~~Chief, Topography Section~~

Robert W. King
Chief, Div. of Charts
Nautical Chart Branch
Raymond P. Egan
Chief, Div. of Coastal
Surveys