

8369

Diag'd. in pencil on Special Diag. Ch. No. 1007

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. T-8369 Office No. T-8369

LOCALITY

State Florida

General locality Tampa Bay

Locality Polk City

194 3

CHIEF OF PARTY

Ray L. Schoppe - Field

Kenneth G. Crosby - Compilation

LIBRARY & ARCHIVES

DATE

Sept 25, 1946

B-1870-1 (1)

8369

DATA RECORD

T- 8369

Quadrangle (II): Polk City

Project No. (II): CS 290 B

Field Office: 1101 E. Broadway
Tampa, Florida

Chief of Party: R. L. Schoppe

Compilation Office:
Tampa, Florida

Chief of Party: K. G. Crosby

Instructions dated (II III):
Nov. 16, 1942Copy filed in Descriptive
Report No. T- (VI)

Completed survey received in office: 1/17/44

Reported to Nautical Chart Section: 1/18/44

Reviewed: *L. J. Murray* Applied to chart No. *4/25/44*

Date:

Redrafting Completed: 6/9/44

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): POLK, 1935

Lat.:

Long.:

Adjusted

28° 11' 10.306" (317.2m) 81° 49' 18.198" (496.4m)

State Plane Coordinates (VI): Florida - West Zone

X = 557,430.58

Y = 1,400,381.47

Military Grid Zone (VI) "B"

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
11783	11/13/42		1:20,000	Inshore sheet
11784	"		"	
11785	"		"	
11786	"		"	
11787	"		"	
11788	"		"	

Tide from (III): ----

Mean Range: ----

Spring Range: ----

Camera: (Kind or source) U. S. C. AND G. S. nine lens

Field Inspection by: J. J. Babic, Photo. Aid date: April, 1943

Field Edit by: date:

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

Projection and Grids ruled by (III) B.R.C & F.E.B date: Apr. 21, 1943

" " " checked by: B.R.C. date: "

Control plotted by: B. R. Finch, Jr. Engr. Drft. date: Aug. 16, 1943

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

Radial Plot by: Tampa Office Personnel date: Aug. 19, 1943

Detailed by: Frances M. Gaines, Photo. Aid date: Nov.-Dec. 1943

Reviewed in compilation office by: A.L. Kidwell, Jr. Photo. Engr. date: January 1944
J.H.S. Billmyer, Ass't Photo. Engr.

Elevations on Field Edit Sheet G. E. Varnadoe
checked by: date: March, 1944

STATISTICS (III)

Land Area (Sq. Statute Miles); 64.8 Sq. miles

Shoreline (More than 200 meters to opposite shore); 20.1 st. mi.

Shoreline (Less than 200 meters to opposite shore); 3.7 " "

Number of Recoverable Topographic Stations established; ----

Number of Temporary Hydrographic Stations located by radial plot;

Leveling (to control contours) - 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.290-B, 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 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

Project CS 290 B - Quadrangle T-8369

1. The area covered by this quadrangle was generally flat country with little relief, except in the area around Polk City and due south of it. This more hilly country is devoted to citrus raising and the remainder of the quadrangle, which is flatter, is used for truck gardening and cattle grazing. The latter area (70% of the area) has a large number of small, isolated contours and in the rainy season is more or less like a sponge; travel through this area is rather difficult. There are a great number of cypress swamps throughout the entire area.
2. The field inspection was done in conjunction with the contouring and all woods, buildings, roads, etc. have been identified on the four photographs which cover this quadrangle. The municipal boundaries of the area were supplied by Mr. Harry F. Smith, City Clerk of Polk City, and were indicated on the photograph. To the best of my knowledge, all field inspection on the quadrangle has been completed.
3. Dense woods, that is those of cypress or pine, have photographed very black while those areas wooded by scrub oaks and brush have taken on a much lighter hue. Higher land also photographed light. Water areas are in two colors; some have photographed as white, while others appeared black. Citrus groves are in two colors: the older, more dense groves are darker than the newer, less dense groves.
4. There is one triangulation station within the quadrangle. A new transit traverse was run through this area by the U. S. Coast and Geodetic Survey with William A. Rasure as chief of sub-party.

5. Two long lines were run in this quadrangle between bench marks of a second order line of levels with small closures. These were followed by secondary loops beginning and ending with recoverable points on the initial lines. All closures were well within the allowable error with the exception of the ZB and ZL lines.

These two lines, of eleven and fifteen miles respectively, were re-run in part until the errors were found; this gave these two lines small closures well within the allowable error.

All Coast and Geodetic Survey and Geological Survey bench marks have been searched for in this quadrangle and recovery cards have been submitted.

The following is a list of the second order line of levels which were utilized in the supplemental level lines in this quadrangle:

H-104	} Fall on T-8368	S-104
J-104		T-104
K-104		U-104
L-104		V-104
M-104		W-104
N-104		Polk 1935
P-104		Polk 1
Q-104		
R-104		

6. Contours were sketched onto the photographs and were established by planetable survey. Closures were a little poor at the ^{beginning} ~~effect~~ of the work, but none were displaced more than a foot and one-half. These closures were poor due to a bad instrument which was later replaced by a more accurate instrument; with the use of the better instrument, the closures were less than one-half foot. Drainage in this area is poor and rather difficult to find under a stereoscope. What drainage is inked in on the photographs is correct and was established

by traverse or inspection. The area with the larger closures is in the hilly country just south and east of Polk City. Contours were on 20-foot intervals.

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 mentioned in paragraph 7, but due to recent heavy rains which followed the very dry season the line may be slightly displaced. According to inhabitants in this area, the bodies of water in the quadrangle have never been as low as they were when the survey took place.

*lakes
only*

9. There were a number of bath houses and boat houses on the lakes, but these have been deleted due to the fact that they are not substantial buildings.

10. There were no off-shore details, as the survey was entirely inland.

11. About the only prominent landmark which is available is the silver water tank in Polk City.

12. There is no hydrographic control.

13. In the south central section of the quadrangle, there is a landing field which is now being used by the Lodwick School of Aeronautics of Lakeland to train pilots to land and take off. There are no buildings or hangars on the field and the terrain, although fairly level, is bumpy. This observation was made from watching the trainers use the field. The field is probably large enough for trainers and smaller fighter planes, but it is too small to accomodate our larger aircraft. There is also an abandoned municipal airfield which is located in the

*actually
on sheet
T8372*

northeast section of Polk City. This area is now planted with cotton and other crops and could, in an emergency, be used for landing.

*not shown
as indicated
on manuscript*

14. This classification also took place during the general contouring.

Roads were classified in accordance with the rules of this department, with the exception of the area northwest of Polk City, where there are two roads which were classified as 4 UP although they are but trails. These are shown, for they are the only means of egress into this large territory.

15. Bridges were inspected and classified by Mr. C. C. Fryer, Junior Topographic Engineer. With a few exceptions, the bridges are very poorly built and are used principally by inhabitants of the area. Most roads in the grazing areas are also guarded by "cattle guards" which will not support large, heavy loads.

16. All dwellings in the area have been circled in red and those not easily seen on the photograph have been located by planetable survey and blocked in. Barns are also shown in outlying sections. In the area just north and east of the abandoned Polk City airport is a colored settlement. As the dwellings were far from substantial, they were deleted; the few exceptions are circled in red. The two schools in the quadrangle are shown as are the church, post office, and other business establishments.

17. No boundary monuments and lines were encountered, with the exception of the municipal boundaries of Polk City.

18. The names of the bodies of water shown are those found on other authentic maps and from investigation amongst the inhabitants of the area.

Jack W. Stingley, Junior Topographic Engineer, has reported all others.

Approved

Ray L. Schoppe
Ray L. Schoppe, Chief of WLEP#2


Respectfully submitted,

Joseph J. Babic
Joseph J. Babic, Photo. Aid

4. The existing triangulation has been supplemented by the Lakeland - Polk City traverse which terminates in this quadrangle. This traverse was 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 Survey
Chief of Party

COMPILATION REPORT
To Accompany
SHEET T- 8369

26. CONTROL

Thirteen recovered triangulation and traverse stations which fall on the sheet were used for control. Ten of these stations lie between Polk City and the west edge of the quadrangle and three fall north of the northern tracing limits. All could be "held to" in the radial plot. All stations which fall with the detail limits, and for which there are picking cards, should be shown on the published reproduction of the sheet. All "PP", (Picture point), stations should be deleted from the sheet after the final review is made, as these stations are not monumented and were not identified on the photographs by the field party. The amount of control was sufficient for an accurate radial plot when used in conjunction with the control on the adjoining sheets.

27. RADIAL PLOT

The main radial^{plot} of which this sheet was a part, is discussed in the compilation report for sheet T-8368

28. DETAILING

The photographs from which the detailing was done were clear and of fair scale. The field inspection was sufficient and complete except for a few obvious errors of a minor nature.

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 notes.

Precinct lines were taken from a map of Polk County furnished by the field party.

36. LANDING FIELDS AND AERONAUTICAL AIDS

Two landing fields are mentioned in the field inspection report under heading number thirteen. One of these fields actually falls within the limits of Sheet T-8370. The junction between T-8369 and T-8370 was incorrectly marked on the field print.

See notes on pages 3 and 4 of field inspection report.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

There are no existing standard topographic quadrangle maps in the Tampa Office with which T-8369 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,

Frances M. Gaines

Frances M. Gaines, Photo Aid.

Forwarded by:

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

FIELD EDIT REPORT
Quadrangle T-8369

Items 1 through 13 are covered in the Field Inspection Report.

14. Road Classification. All roads not previously classified have been classified by the field edit party according to instructions, and in a few instances, roads have been reclassified.

Items 15 through 17 are covered in the Field Inspection Report.

18. Geographic Names. A Geographic Names Report for this quadrangle was completed by J. W. Stingley, Jr. Topo. Egr.; but as the field edit party did not have access to this report and the name sheet accompanying it, no check against this sheet has been made to ascertain if all geographic names appear on the compilation. Inquiries were made during the field edit, and no geographic names were found that do not appear on the compilation.


46. Methods. The field edit methods are the same as those discussed in the field edit report accompanying Quadrangle T-8376. All elevations found on the compilation have been checked against those on the photographs, and corrections made where necessary. All corrections, additions, and deletions are to be found on the cloth-bound print.

47. Adequacy of the Compilation. The compilation was found to be adequate except for the additions, deletions, and changes shown on the field edit sheet.

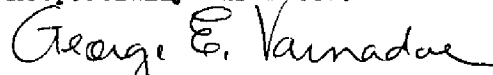
48. Accuracy Tests. A vertical accuracy test was accomplished by the writer, on field photograph 11787, at latitude $28^{\circ}10.7'$ and longitude $81^{\circ}49'$. This test was accomplished by running a cross section across several contours and following each contour for several hundred feet on either side of the cross section. The accuracy test is inked in purple, with shots on the contour at intervals of approximately 150 feet, which are shown by dots. The test proves the contours are within the required limits of accuracy.

No horizontal accuracy test was run in this quadrangle. The horizontal accuracy test run nearest this quadrangle is in quadrangle T-8371. This traverse terminates in this quadrangle, but all stations in this quadrangle were used for horizontal control.

Approved:


Ray L. Schoppa
Chief of Party

Respectfully submitted:


George E. Varnadue, Prin. Photo. Aid
March 21, 1944

T-8369

	Remarks	Decisions
1		USGB
2		
3		Railway Guide
4		Road Maps
5		
6		281817-818: all names
7		on this section sheet
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. T-8369

POLK CITY quadrangle

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
✓ Polk County									2
✓ Seaboard Air Line Ry									3
✓ Fla. Nos. 2, 61, 207, 215									4
									5
✓ Lake Mattie									6
✓ Lake Mattie Marsh									7
Gum Lake		no lake shown							8
✓ Camp Lake									9
✓ Lake Alfred Road		(No. 215)							10
✓ Haines City Road		(No. 207)							11
✓ Lake Juliana									12
✓ Lake Tennessee									13
✓ Lake Agnes									14
✓ Little Lake Agnes									15
✓ Mt. Olive Church									16
✓ Clearwater Lake									17
✓ Mud Lake									18
✓ Polk City									19
✓ Lake Helene									20
✓ Old Polk City Road									21
									22
									23
									24
									25
									26
									27

Names underlined in red approved
by L. H. C. K. on 5/6/44

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.

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- 8369

POLK CITY 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

The nearest horizontal accuracy test was run in quadrangle T-8371.

A vertical accuracy test was run in this quadrangle and found to be satisfactory. See Item 48 in the Field Edit Report enclosed in this Descriptive Report.

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 4/25/44 By Howard G. Murray
under direction of D. H. Benson (per D.H.)

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. Knox
Chief, Div. of Charts
Nautical Chart Branch
Ramon P. Gorman
Chief, Div. of Coastal
Surveys