

original
W.D.

8384

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.	Office No. T-8384
LOCALITY	
State	Florida
General locality	Hillsborough County
Locality	East of Tampa Bay
Balm Gird.	
194 4	
CHIEF OF PARTY	
Ray L. Schoppe	
LIBRARY & ARCHIVES	
DATE	September 25, 1946

B-1870-1 (1)++

8384

DATA RECORD

T-8384

Quadrangle (II): Balm
N 2745-W 82.5/7.5

Project No. (II): CS 290 B

Field Office: War Mapping Chief of Party: Ray L. Schoppe
Party # 2

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)

Completed survey received in office: 4/24/44

Reported to Nautical Chart Section: 4/25/44

Reviewed: 5/44 Applied to chart No. Date:

Redrafting Completed: 6/30/44

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): D 35

Lat.: 27°50'42.313" (1302.4M) Long.: 82°19'37.326" (1021.3M) Adjusted
~~Unadjusted~~

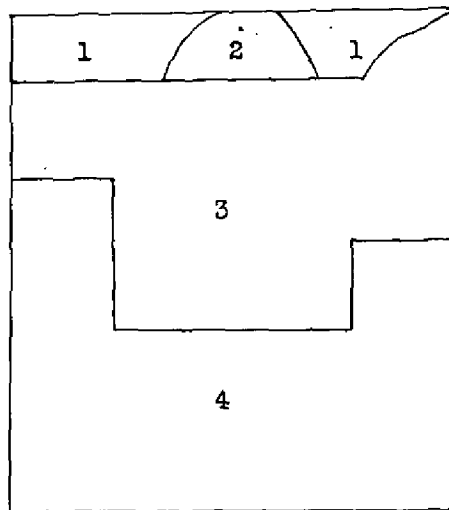
State Plane Coordinates (VI):

X = 394,315.29

Y = 1,276,471.48

Military Grid Zone (VI) "B"

Florida West Zone



- 1 Kummel
- 2 Varnadoe
- 3 Wright
- 4 Gillerman

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
11723	11/12/42	--	1:20,000	(
11724	"	--	"	(
11740	"	--	"	(In-shore sheet.
11741	"	--	"	(

Tide from (III): --

Mean Range: --

Spring Range: --

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

Field Inspection by: Bernhardt Kummel, H.B. Wright, date: March, 1943,
Geo. E. Varnadoe, Elliot Gillerman. Jan., 1944.

Field Edit by:

date:

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

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

" " " checked by: " " date:

Control plotted by: E. Andrews, Photo. Aid date: Jan., 1944

Control checked by: J. Collins date: Jan., 1944

Radial Plot by: Tampa Office Personnel date: Jan., 1944

Detailed by: Alpha E. Abbitt, Asst. Eng. Driftsman date: 3-4/44

Reviewed in compilation office by: M. M. Slavney, date: April, 1944
Prin. Eng. Driftsman

Elevations on Field Edit Sheet
checked by: M V Parker

date: 5/17/44

STATISTICS (III)

Land Area (Sq. Statute Miles): 66

Shoreline (More than 200 meters to opposite shore):
6.9 Sta. Miles

Shoreline (Less than 200 meters to opposite shore):
3.1 Sta. Miles

Number of Recoverable Topographic Stations established: --

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

Leveling (to control contours) - miles: 83

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 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.

DESCRIPTIVE REPORT TO ACCOMPANY
QUADRANGLE T-8384
Project CS 290 B

1. Description of the Area. The area involved is a $7\frac{1}{2}$ -minute quadrangle, bounded on the north by north latitude $27^{\circ}52\frac{1}{2}'$, on the west by west longitude $82^{\circ}22\frac{1}{2}'$, on the south by north latitude $27^{\circ}45'$, and on the east by west longitude $82^{\circ}15'$, and is situated in Hillsborough county, Florida, to the east of Tampa Bay.

The quadrangle ranges in elevation from 161 feet above sea level in the southeastern corner, to sea level along the lower reaches of the Alafia River in the northwestern portion. In general the slope of the land is west toward Tampa Bay. The land is smooth broken only by the drainage and by a few isolated low sand ridges and knolls, except in the southeastern corner, which is somewhat rougher.

An interesting feature of the topography is the presence of sand ridges trending north-south, and rising slightly above the general elevation of the land slope. Two ridges are especially prominent, one to the west of highway 41, affects the drainage pattern noticeably, causing Bullfrog Creek, which formerly flowed westerly, to turn north along the east side of the ridge and flow north for about six miles, almost to the Alafia River, before it is able to fend and break the ridge, and so cut across to Tampa Bay.

The area is drained by the Alafia River, which flows along the northern edge, and two of its tributaries which enter it from the south; and by Bullfrog Creek, and its principal tributary, Little Bullfrog Creek, which drain the entire southern and western portions. Numerous small ponds, many with no outside drainage, are present in the central part of the quadrangle.

Most of the area is covered with scattered pine, palmetto, and grass, and is used only for grazing. In the southeast, around Balm, and in the north near Riverview, there is some truck gardening and citrus cultivation. No other towns, other than Riverview and Balm, fall within the limits of this quadrangle. U. S. Highway 41 cuts through the quadrangle from north to south, and the Seaboard Airline Railroad runs across the southeast corner, through Balm.

2. Completeness of Field Inspection. Field inspection was accomplished in conjunction with the contouring, on 1:20,000 scale nine lens photographs, numbers 11721, 11722, 11724, 11725, 11739, 11740, 11741, and 11686. All drainage, vegetation, and cultural features were classified and identified according to instructions.

3. Interpretation of the Photographs. Deciduous trees appear on the photographs as dark masses, and when isolated trees

8384

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. Refer to report by horizontal control party.

Indefinite
5. Vertical Control. Vertical control for the planetable work was accomplished by James M. Grover, Photogrammetric Aid, and party, using U. S. Coast and Geodetic Survey bench marks. Because of the lack of topographic detail which ordinarily controls the location of control points, many of these points were necessarily marked with stakes. Some areas were so barren of detail as to make even the use of stakes unreliable. It was considered wise to leave these to the contour party, who, having both vertical and horizontal control, could more accurately spot elevations in these areas.

6. Contours and Drainage. Contouring was completed on 1:20,000 scale nine lens photographs numbers 11686, 11721, 11722, 11724, 11725, 11739, 11740, and 11741. The area was contoured by two distinct field parties, one under the supervision of Elliot Gillerman, Jr. Topo. Engr., and the other by H. B. Wright, Photo. Aid. Small areas were completed also by parties of Bernhardt Kummel and George E. Varnadoe, Jr. Topo. Engr., and Prin. Photo. Aid respectively.

Contouring was accomplished 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 inked using the stereoscope, and checked in the field. All streams are marked and classified, and ditches to be shown on the finished map are so indicated.

The error of closure of all traverses was within the limits of accuracy, both vertical and horizontal.

8384

7. Mean High-Water Line. Inapplicable to this quadrangle.
8. Low-Water Line. Inapplicable to this quadrangle.
9. Wharves and Shoreline Structures. There are no wharves or shoreline structures within the limits of the quadrangle.
10. Details Offshore from the High-Water Line. Inapplicable to this quadrangle.
11. Landmarks and Aids to Navigation. A fire tower is present within the limits of the quadrangle, situated on the west side of highway 41, about one-half mile north of Big Bullfrog Creek. The tower is 88 feet high, and the ground elevation at the base is 65 feet. The tower is picked and circled in red on photograph 11722. Form for landmark should be submitted for this tower after it is radially plotted.
12. Hydrographic Control. Inapplicable to this quadrangle.
13. Landing Fields and Aeronautical Aids. There are no landing fields or aeronautical aids within the limits of this quadrangle.
14. Roads. All roads were classified according to the instructions, and the route numbers or names are 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 on the finished map have been circled and classified. Names of public buildings are included. Buildings obscured by trees, and new buildings have been measured in from identifiable detail.
17. Boundary Monuments and Lines. This will be completed at the time of field edit.
18. Geographic Names. This will be the subject of a separate report.
19. Vegetation. All vegetation has been classified in accordance with instructions.

20. Junctions. Junctions to the north and west were compared and checked in the field. This is also true to the south, but along this line there is a possibility that an error may have been made in transferring the junction from photograph 11721 to photographs 11722 and 11741. The junction should be checked, therefore, between photographs 11722 and 11721, and 11741 and 11721. To the east the area has never been topographically mapped.

21. Data. On photographs 11722, 11741, and 11686, all contours are in brown and elevations obtained by the planetable are indicated by a brown "X". Supplemental fly level elevations are in blue. Drainage is in blue. Culture and vegetation are in red, and deletions are in green, indicated by "X". On the remaining photographs, the color scheme is the same except that some of the contours are a red-brown. Work on photographs 11725 and 11739 was done by Bernhardt Kummel; that on photographs 11724 and 11740 by H. B. Wright; and George E. Varnadoe; and that on photograph 11686, 11722, and 11741, by Elliot Gillerman.

Respectfully submitted:
January 28, 1944

Bernhardt Kummel
Jr. Topo. Engr.

Approved:

H. B. Wright
Photo. Aid



Ray L. Schoppe
Chief of Party

George E. Varnadoe
Prin. Photo. Aid



Elliot Gillerman
Jr. Topo. Engr.

COMPILATION REPORT

To Accompany

SHEET NO. T-8384

26. CONTROL

Five traverse stations established by the Florida Mapping Project fall within the tracing limits of the sheet. All could be held to in the radial plot. More control in the eastern and southern parts of the sheet would have been desirable, but it is thought that the radial points as plotted are within the required limits of accuracy.

27. RADIAL PLOT

The main radial plot was run for T-8384 in conjunction with sheets T-8385, 8391, 8392, 8393, 8394, 8395, and 8396. No great difficulty was experienced and all control could be held to. However, the southern part of T-8394 and the southeastern corner of T-8395 were later found to be in error; but were corrected--after the radial plot for the sheets to the south had been run.

28. DETAILING

All photographs used in detailing were clear and of good scale except for the area in the southeastern corner of the quadrangle.

The field inspection was adequate for detailing except for a few discrepancies and omissions which are shown on an overlay which is being submitted with the sheet.

All junctions checked satisfactorily except for the one with previously compiled sheet T-8383. Several discrepancies occur along this junction due to a few radial points being moved, a different system of vegetation classification, and some intermittent ponds being omitted on T-8383. These errors should be corrected in the Washington Office.

The suggested corrections were made at the junction between T-8383 and T-8384 is now satisfactory. MVP 3/18/44
Approximately seven square miles in the northwest corner were compiled previously on a scale of 1:10,000. Corrections and additions have been made in this area to agree with the revised radial plot and the 1:20,000 photographs.

34. LANDMARKS AND AIDS TO NAVIGATION.

One landmark, a fire look-out tower, falls on this sheet. The position of this tower is submitted on attached Form 567.

45. COMPARISON WITH NAUTICAL CHARTS

None of the published nautical charts cover this area in detail.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

There are no previously published standard topographic quadrangle maps of the area covered by T-8384.

Respectfully submitted,

Alpha E. Abbitt

Alpha E. Abbitt,
Asst. Engr. Driftsman.

Forwarded by *H. L. Schoppe*

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

FIELD EDIT REPORT
To Accompany
SHEET NO. T-8384

46. METHODS

In editing the map compilation, all roads were traversed by truck. Due to the presence of many roads, walking was necessary only in a few places in order to make a visual inspection of all topographic features. All buildings, roads, ditches, etc., that were added to the compilation were plotted by measurements from topographic features.

All additions, corrections and deletions are to be found on the lithograph print of the map compilation. Red ink was used for all additions, classifications and corrections; green ink was used for all deletions.

The elevations shown on the map compilation were not checked against those on the field photographs, as the photographs were not accessible to the field edit party.

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.

48. ACCURACY TESTS

The writer has no knowledge of any accuracy tests in this quadrangle. For the horizontal accuracy test nearest this quadrangle, see report for quadrangle T-8383.

14. ROAD CLASSIFICATIONS

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

15. BRIDGES

All bridges not previously classified were classified according to instructions. The classifications given bridges by the field edit party are to supersede all other classifications.

Forwarded by:



Ray L. Schoppe,
Chief of Party.

Respectfully submitted,

George E. Varnadoe,
Prin. Photo. Aid.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

TO BE CHARTED } **STRIKE OUT ONE**

Tampa Photogrammetric Office
Tampa, Florida

April 6, 1944

I recommend that the following objects which have ~~been~~^{been} inspected from seaward to determine their value as landmarks, be charted on ~~(A-1154) (A-1155)~~ the charts indicated.

The positions given have been checked after listing.

Ray L. Schoppa

Chief of Party.

[illegible]

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

T-8384

Remarks

Decisions

1		USGB
2		"
3		Railway Guide
4		Road Maps
5		278823
6		277822-23
7		"
8		"
9		"
10		"
11		"
12		278822
13		"
14		"
15		"
16		"
17		"
18		278823
19		"
20		"
21		"
22		"
23		"
24		"
25		"
26		
27		

GEOGRAPHIC NAMES

Survey No. T-8384

BAIM quadrangle

1 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	
✓ <u>Florida</u>	✓								1
✓ <u>Hillsborough County</u>	✓								2
✓ <u>Seaboard Air Line Ry</u>	✓								3
✓ <u>U.S. No. 41/Florida 5</u>	✓	(<u>Tamiami Trail</u>)							4
✓ <u>Alafia River</u>	✓								5
✓ <u>Balm</u>	✓								6
<u>Balm Grade School</u>									7
<u>Balm Baptist Church</u>									8
✓ <u>Little Bullfrog Creek</u>	✓								9
✓ <u>Tripple Creek Ranch</u>	✓								10
✓ <u>Balm-Riverview Road</u>	✓								11
✓ <u>Boggy Creek</u>	✓								12
✓ <u>Bell Creek</u>	✓								13
✓ <u>Pelleham Branch</u>	✓								14
✓ <u>Fishhawk Creek</u>		(a small section of it on this quad. not enough)							15
✓ <u>Nitto Lake</u>	✓								16
✓ <u>Bell Shoals Bridge</u>	✓								17
✓ <u>Jerry Pond</u>									18
✓ <u>Rice Creek</u>	✓								19
✓ <u>Riverview</u>	✓								20
✓ <u>Williams Bridge</u>	✓								21
<u>Riverview School</u>									22
<u>Riverview Methodist Church</u>									23
✓ <u>Alafia Sulphur Springs</u>	✓								24
✓ <u>Bullfrog Creek</u>	✓								25
									26
									27

Names underlined in red approved
by L. Heck on 6/2/44

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- 8384

BALM 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 test was run in quadrangle T-8383.

The nearest vertical accuracy test was run in quadrangle T-8385 in Project 290-A.

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 June 1, 1944 By M. Virginia Parker
under direction of D. H. Benson (J.M.)

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 M. Hughes
Chief, Div. of Charts
Nautical Chart Branch
Raymond E. Egan
Chief, Div. of Coastal
Surveys