# 8420

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U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

### DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. T-8420 Office No. T-8420

LOCALITY

State Florida

General locality Palm Beach County

Locality Greenacres City

194 6...

CHIEF OF PARTY

Lt. Comdr. J. C. Bose

LIBRARY & ARCHIVES

DATE June 3,1948

8-1870-1 (1)

8420

#### DATA RECORD

7-8120

City Greenacres

Quadrangle (II): T-8420

Declination 1° 15' E

Project Mc. (II): CS-312-A

Field Office: Tampa, Fla. Sub-Field Office: Mismi Beach, Fla. Chief of Party: Lt. Comdr. J. C. Bose

Compilation Office: Tampa, Fla.

Chief of Party: Lt. Comdr. J. C. Bose

Instructions dated (II III):24 May 1945

Copy filed in Déscriptive Repert So. 2-

Division Photogr. Office Files

Completed survey received in office: 28 August 1946

Reported to Nautical Chart Section:

Reviewed: 22 Nov- 46

Applied to chart No.

Redrafting Completed:

Begistered: 18 March 1948

Published:

Compilation Scale: 1:20,300

Published Scale:

"Scale Pactor (III): .98522

+ 1:24,000

Geographic Datum (III): North American, 1927 Datum Plane (III): M. S. L.

Reference Station (III), CONVICT, 1934

Long.:80°, 12' 19"山45 (530.30 M)

State Plane Coordinates (VI): Florida, East Zone

x = 759,770.89 ft.

1 - 805, 998.49 ft.

Military Grid Zone (VI) "B" (No overlapping zone)

#### PHOTOGRAPHS (III)

Number	<u>Date</u>	<u>Time</u>	Scale	Stage of Tide
12172	11-25-42	11:50 AM	1:20,300	(Inshore Quadrangle)
12173	<b>10</b>	þ	77	D .
12173 12174	· 17	â	ű	<b>W</b>
12175	ty	12	11	•
12175 12148 12149	, <b>w</b>	11:21 AM	Ħ	ij
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12150	#	ij	ġ.	
12151	<b>17</b>	Ď	n	n

Tide from (III): --

Mean Range:

checked by:

Spring Range;

Camera: (Kind or source) U. S. C. & G. S. 9 lens, 82 focal length

Field Inspection by, Geo. C. Whitehurst, Jr. Engr. Aidate: May and June, 1945 Lowell I. Bass, Jr. Engr. Aid

Field Bait by: J.K. Wilson

date: Mar to June 1146

date: Aug. 1947

Date of Mean High-Water Line Location (III): None

Projection and Grids ruled by (III) Washington, Officedate, January, 1944 checked by: Washington Office date: January, 1944 Control plotted by: Vincent F. Simmons date: Aug. 1945 Control checked by: Bennie H. Lyon date: Aug. 1945 Radial Plot by: Bennie H. Lyon date: Sept. 1945 date: January 1946 Charles H: Baldwin Detailed by: date: February 1946 Reviewed in compilation office by: J. A. Giles Elevations on Ptotal Entries

#### STATISTICS (III)

Land Area (Sq. Statute Wiles); 66.7'

Shoreline (More than 200 meters to opposite shore): None

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

Fumber of Recoverable Topographic Stations established: 1

Fumber of Temporary Hydrographic Stations located by radial plot: None

Leveling (to control contours) - miles: 31.6

Roman numberals 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:

ACCOMPANY

QUADRANGLE No. 8420 (G C)

Project CS-312A

July 25, 1945

#### 1. DESCRIPTION OF THE AREA

This 7½ minute quadrangle lies within Palm Beach County on the East Coast of Florida. It is bounded on the north by Latitude 26° 37' 30", on the south by Latitude 26° 30' 00", on the west by Longitude 80° 15' 00", and on the east by Longitude 80° 07' 30". The area includes approximately 66.7 square statute miles of land with elevations ranging from 20 feet on a flat ridge near the southeast portion of the area to just under 15 feet near the southwest corner of the quadrangle except for the western edge of the area which runs into gladeland, the whole area is criss corsed by a system of ditches in which the water level is controlled by flood gates and pumps for drainage and irrigation for the purpose of promoting cultivation.

The principal cultural features are Florida State Highway No. 199 (Range Line Road or West Dixie) which bisects the quadrangle from north to south with connecting roads into Lake worth, Lantana and Boynton Beach. There are no incorporated cities within this quadrangle, however, there are several small farming settlements scattered throughout the area.

There are numerous areas of cultivation throughout the quadrangle where the water can be controlled by drainage and irrigation.

The vegetation is principally pine, cypress, palm, palmetto, and grass, with small patches of scrub oak brush on the higher ground. The cypress grows in a few of the intermittent ponds and abounds along the western portion of the quadrangle bordering the gladeland. That portion of the area extending into the everglades is covered with heavy grass and scattered hummocks of custardapple trees.

The work in this area was carried on during the one of the driest periods - according to local residents - of any extent in the last ten years, consequently very few intermittent pends contained water.

#### 2. COMPLETENESS OF FIELD INSPECTION

The field inspection was done in accordance with instructions, dated Nov. 6, 1942, to War Mapping projects and supplemental instructions issued for this project. A large part of the field inspection was done by George C. Whitehurst, Jr. Engineering Aid and some in the northern half of the area w was done by Lowell I. Bass, Junior Engineering Aid. While most of this area had been recently inspected for planimetric maps, the inspection had to be supplemented in numerous cases to conform with recent instructions.

\* This project was originally intertial as a planimetric mapping project and was later converted to topographic mapping page

All important features such as new buildings, ditches, reads and new cultivation were added to give the latest possible data and are complete as of date of inspection.

#### 3. INTERPRETATION OF PHOTOGRAPHS

The color tone varies: from almost black in deep water and spots of muck to white in bare sand areas. Heavy growths of pine appear smooth and have a dark steel tone. Heavy palm is of lighter tone with a pebbly texture; grass is a light steel tone; brush is a dark grey tone with a mottled texture; palmetto shows a light grey tone with a velvety texture. Intermittent ponds vary from a light grey in sand and grass bottoms to almost black in those with wet much bottoms. In every case, a well defined berm outlines these intermittent ponds.

#### 4. HORIZONTAL CONTROL

All horizontal control was recovered in this quadrangle during the field inspection for planimetric mapping.

#### 5. VERTICAL CONTROL

All of the U.S. C. & G. S. bench marks were recovered during the field inspection for planimetric mapping and transferred to field prints No. 12149B, 12150, 12151A, 12172, 12175, 12174. Using these bench marks as a base, fly level lines were run with a wye level, between bench marks with intermediate lines to give an overall, well distributed, coverage of vertical control. Along these lines of levels, temporary bench marks were established at about \$\frac{1}{2}\$ mile intervals at identifiable points. Where suitable surfaces were available, such as hard surface roads or wooden bridges, a bottle cap was used as a mark, but where no such surface was available, stakes were driven flush with the ground and a guard stake driven near by, showing the station designation. All level: lines were run well within the required limits of accuracy, adjusted, and carefully checked. All level elevations were spotted and inked in blue with the station numbers identifying them.

#### 6. CONTOURS AND DRAINAGE

The contouring was done in accordance with instructions for this project, on photographs Nos. 12140B, 12150, 12151A, 12172, 12173 and 12174 using standard planetable methods, supplemented in a few cases by pacing and hand leveling.

A large portion of the area contained an elaborate system of drainage and irrigation ditches which interrupted the normal course of the contours. In these cases the direction of the contour at the break was indicated; the point at which the contour turned on the spoil or within the ditch was also indicated with frequent elevations spotted on the spoil banks and water level of the ditches. The spoil bank symbol reas used to indicate a continuance of the spoil, even though the contour was turned on account of the variation in elevation of the spoil. Different elevations on water level in the same ditch indicate the fluctuation caused by control by pumps and locks, rather than slope of the grade in the ditch.

After the contouring was completed there was a period of heavy rein which reised the water level in the ditches le to 2 feet, and according to local residents this was about the normal year around water level, which will cover practically all 15 foot contours within the ditches on this quadrangle.

All planetable traverses of three setups or more were tied back to level points with a closure of 0.5 foot or less.

There is no natural drainage in this quadrangle.

#### 7. MEAN HIGH WATER LINE

Not applicable to this quadrangle.

#### 8. LOW WATER LINE

Not applicable to this quadrangle,

#### 9. WHARVES AND SHORMLINE STRUCTURES

Not applicable to this quadrangle.

#### 10. DETAILS OFFSHORE FROM HIGHWATER LINE

Not applicable to this quadrangle.

#### 11. IANDMARKS AND AIDS TO NAVIGATION

Not applicable to this quadrangle.

#### 12. HYDROGRAPHIC CONTROL

Not applicable to this quadrangle.

#### 13. LANDING FIEIDS AND AFRONAUTICAL AIDS

No landing fields or aeronautical aids fall within the limits of this quadrangle.

#### 14. ROAD CLASSIFICATION

All roads were classified in accordance with instructions for this project prior to June 30, 1945. Filed in Div. Photogrammetry Office Files.

In numerous cases of 40 roads, these were deleted because of small relative importance and changing condition from year to year.

#### 15. BRIDGES

The bridges in this quadrangle were not classified, due to issuance of recent instructions for this area.

#### 16. EUILDINGS AND STRUCTURES

All habitable buildings were circled. Barns, packing sheds, or other buildings of sufficient topographic importance were labeled.

#### 17. BOUNDARY MONUMENTS AND LINES

No city boundaries fall within this quadrangle.

Precinct boundaries were secured from the registrar's office at the county court house in West Palm Beach, Florida. These boundaries follow section lines or charted cultural features, and are shown on the field inspection prints. They will feature for the field inspection prints.

#### 18. GEOGRAPHIC NAMES

A thorough investigation and a special report was submitted by .

Lowell I. Bass, Junior Engineering Aid, during the field inspection for planimetric mapping.

Approved list of hames attached to this report.

#### 19. SECTION CORNERS

All of the section corners, accessible or falling within an area where there was a possibility of identifiable points, were searched for or recovered and tied in on the field inspection prints. These marks recovered were submitted on picking cards with a short description. Only those corners marked in some manner were submitted.

Respectfully submitted

Approved and forwarded .

J.C. Bose, Lieut. Comdr.

Chief of Party

Harold A. Duffy Prin. Photo. Aid

nodato

#### MAIN RADIAL PLOT, T-8420, PROJECT 312-A

The radial plot for this quadrangle was an extension of a plot which had been previously completed for quadrangle T-8421 to the east and for quadrangle T-8423 to the south.

The centers for the following photographs (nine lens) had previously been located in the plot for quadrangle T-8421, but were re-layed in order to extend secondary control further west; 12148, 12149, 12150, and 12151. Then the following nine lens photographs were added; 12172, 12173, 12174 and 12175.

Secondary control from the previously completed plot was transferred to quadrangle T-8420 and were used as control in completing the plot. Only one triangulation station, CONVICT 1934, falls within the limits of this quadrangle. In addition to the control already mentioned, triangulation station, FERGAN in quadrangle T-8419, triangulation station JERSEY which falls in quadrangle T-8421, and triangulation station, DEWITT 1934, which falls in quadrangle T-8423, were used in controlling this plot.

The usual method of eliminating the effect of paper distortion in the unmounted nine lens photographs was employed. Templates were made as usual and secondary control picked on the photographs in the regular manner.

No unusual difficulties were encountered either with photographs or in holding control, therefore, it is believed that all parts of the sheet meet the prescribed accuracy requirements. The junctions with surrounding sheets were completed and the quadrangle was assigned to the compiler for the addition of detailing points.

Respectfully submitted

Bermie H. Lvon

Asst. Photo. Engineer

Approved and forwarded

Lieut. Comdr. J.C. Bose

Chief of Party.

#### COMPILATION REPORT TO ACCOMPANY QUADRANGLE T-8420

#### 26 & 27 - CONTROL & RADIAL PLOT

A separate report on Control and Radial Plot is being submitted See preceding two page. by Mr. B. H. Lyon, Assistant Photogrammetric Engineer.

#### 28 - DETAILING

The photographs used in detailing this quadrangle were clear, though the scale on photographs Nos, 12148, 12149, 12150 and 12151 was poor while the scale on photographs Nos. 12172, 12175 and 12174 was exceptionally good.

A large number of ditches dug since the photographs were taken were drawn on field prints by the field party.

The drafting of these ditches was done by transferring the detail points from the office prints to the field prints and drafting the ditches directly from the field prints.

The drafting the contours along spoil banks where both a 20 and 25 foot contours overlap each other only one contour is shown. labeled "20" & 25", and an arrow and note indicating where the 25 foot contour turns. All areas of this type were completed on the manuscript prior to the receipt of office inspection report for quadrangle No. T-8421 bearing the date 29 October, 1945.

Hundreds of small, intermittent ponds appear over the entire area covered by this map menuscript (excepting the true glade lands). No attempt has been made to show every one but a sufficient number has been delineated to describe this predominant feature

#### 29 - SUPPLEMENTAL DATA

Inapplicable.

#### 30 - SECTION LINES

Section lines will be added at the time of the field edit.

#### 31 through 36

Inapplicable.

44 - COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES.

None.

45 - COMPARISON WITH NAUTICAL CHARTS.

Inapplicable.

Respectfully submitted

Charles H. Baldwin By-J.A.Giles
Photogrammetric Aid.

Approved and Forwarded

Light. Comir. J.C. Bose Chief of Party.

## TAMPA OFFICE INSPECTION of T-8120

1. The woodland classifications have been

handled on a broad basis according to the instructions. Along the western limits of the Quadrangle where there are glade lands, miles of brush tramp liberally sprinkled with large and small clumps of tall trees, it was found to be difficult to avoid a "chopped up" appearance and still give a true picture of the area.

2. The trees on the hammocks in the glade lands have been considered "isolated clumps of trees in open areas" (See "Instructions for the Field Inspection and Compilation of Wooded Areas-" dated 30 June, 1945, paragraph No. 3)

If the area is to be "stuck up" with the conventional glade land symbol (See Field Memorandum No. 1 (1938), Figure No.3), obviously the above interpretation may be dispensed with.

J. In the swamp areas the limits of the "Dense Woods" (over-tint) have been indicated.

Most of these fall within large areas of "Brush" (over-tint). The two were separated in an effort to give an accurate picture of the woodland which is beleived to be peculiar to this area.

If all swamp areas, whether brush or tall trees, are to be stuck up using a single over-tint the above treatment will, of a necessity, be found to be incorrect.

Information is requested as to the manner in which the areas described in paragraphs two and three will eventually be shown on the published quadrangle. The request is made in order that the Tampa Office may draft future map manuscripts towards that end.

Respectfully submitted,

Jesse A. Giles

Tampa Review Section.

8 March, 1946.

11

FIEID EDIT REPORT GREENACRES CITY QUADHANGLE T-8420 PROJECT CS 312-A

#### 46. METHODS

In checking the map compilation, all roads were traversed by truck. There were very few roads in this quadrangle, so therefore it was necessary to walk in many places. All buildings, roads, ditches, cleared areas etc., added to the map compilation were done by planetable methods except for a very few instances where measurements were plotted from topographic features.

#### 47. ADEQUACY OF THE COMPILATION

The compilation was adequate and correct except for a very few instances where some small changes have been made since the date of the field inspection.

Attention is called to the extreme southern portion of this quadrangle near the Florida State Highway 195. This area is being developed very rapidly. The land is being cleared and ditched for cultivation and only a few houses have been built at the present time.

This quadrangle lies in the center of an area controlled by the Lake Worth Drainage District. It is the belief of the local Lake Worth Drainage District Engineer that a great portion of this quadrangle east of the range line road (state highway 199) will be cleared and ditched for cultivation in the next two or three years.

Attention is called to a fifteen foot contour located in the extreme southwestern portion of this quadrangle in the everglade area. At the time of this field edit, this area was covered by water and was inaccessible; but, after observation at other points along this everglade area, it is believed that this contour is correct as shown by the original planetable party. The elevations in this glade area usually only change from 0.2 to 0.5 feet in the lower spots.

Attention is called to a black top road leading west from Lake Worth through Greenacres City to the Range Line Road (State Highway 199). This black-top road is State Highway 174.

Attention is called to the Range Line Road (State Highway 199) this and will be applied in the This road is now under construction and will be completed in the latter part of 1946. The classification of this road will be Rd.1 with a mote that when completed. For the bench marks which will be reset along this windless when the latter part of madrangle T-8/19.

The original field work in this quadrangle was done very thoroughly and the topographer has shown the spoil elevations along ditches more thorough and much clearer than in many other quadrangles in this project.

#### 48. VERTICAL ACCURACY TEST

Harold Duffy did the original plane-table work on quadrangle T-8421 was and T-8421. The vertical accuracy test run in quadrangle T-8421 was considered sufficient for both quadrangles. See affectly of description report 17-8421. No vertical accuracy test was run in this quadrangle. Mr.

#### 14. ROAD CLASSIFICATION

All roads were reclassified according to the new instructions dated 30 June 1945.

#### 49. WOODLAND

Some few woodland changes have been made of areas that have Woodland overlay discarded. See revolv. J. R. been recently cleared. The woodland overlay was very good.

#### 18. GEOGRAPHIC NAMES

The geographic names for this quadrangle will be submitted in the attacked but a special report by Mr. Lowell I. Bass. Only a small portion of Greenacres City was included on this sheet. This small portion is located in the extreme northeastern part of this quadrangle. See Mr. Bass's report in regard to Greenacres City.

This map manuscript was examined for possible errors by Mr. I. Boyd. Mr. Boyd is the County Engineer of Palm Beach County. There were only a few road numbers, etc., in this sparsely settled quadrangle. Mr. Boyd found noverrors.

Mr. Boyd's address is West Palm Beach, Florida. The engineer of the Lake Worth Drainage District whose office is in Boynton Florida, and the county engineer of Palm Beach County have both expressed the desire to have copies of our topographic maps in Palm Beach County when they are printed.

#### 50. SECTION CORNERS

A thorough check was made in regard to section corners not found on the original field inspection. One additional corner was found on State Highway 195. This corner was pricked on photograph 12151-B and a pricking card is being submitted.

#### 51. DATE OF FIEID EDIT

The field edit work was accomplished between the month of March and June of 1946 with most of this work being done in June.

Respectfully submitted

Joseph K. Wilson Joseph K. Wilson Photogrammetric Aid

George E. Morris.

Chief of Party

The Field Edil corrections were made in the compilation office of Tampa, Fla.

QUADRANGLES T-8420, T-8421, T-8422 and T-8423.

The above area lies within Yownships 44 south through 47 south and Range 41 east through 43 east.

Paragraph one (1) of the Public Land Line report submitted 17 April 1946, is applicable to this report.

The General Land Office plats were plotted to the scale of the projection (1:20,300) for the above mentioned townships. An overlay on tracing cloth was then made of the four quadrangles, showing all section corners recovered by field party and radially cut in. An attempt was made to adjust the plotted plats to the recovered corners. Apparently the General Land Office plats are so much in error that this could not be done with any degree of accuracy. The recovered corners would not agree with the Township plats.

The field party made a thorough investigation of section line data while working in this area and secured a sectionized map of Broward County prepared by the Florida State Road Department in cooperation with the U.S. Department of Agriculture.

Local engineers were consulted and this map was recommended as being the best available.

This map compares favorably with the recovered corners and detail on the photographs. All roads, ditches and cultural lines were transferred to the overlay from the map manuscript and by visual comparison with the State road map the section lines were constructed.

Due to the lack of cultural details in certain areas (gladeland area) the lines had to be constructed by extending the controlled lines and therefore are probably in error.

The numbering system used in certain areas on the State Road map does not conform with standard General Land Office procedures, and no information could be found relative to this numbering system. This matter was discussed with a local County Engineer, (Mr. W. A. McMullen Jr., Pinellas County) and he could give no information regarding this numbering system. However, he has used this type map a great deal and found them to be very good as to the true representation of the land lines. Therefore, the numbers that appear on the map manuscript were taken from the State Road Map.

Parm Beach?

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Two recovered corners appear to be incorrect and are listed as follows:

- (1) In quadrangle T-8423 at approximate Latitude 26° 28° 53", Longitude 80° 12° 18".
- (2) In quadrangle T-8420 at approximate Latitude 26° 32° 35° and Longitude 80° 09° 20¢°. Both appear to be points on the section lines rather than corners. The recovered corners have been left on the map manuscript and encircled with a green circle. These two corners should be removed from the sheet if the Washington Office agrees that they are in error.

The lines have been shown on the front of the sheet with brown acid ink.

Respectfully submitted

william a. Pasure

William A. Rasure,

Photogrammetric Engineer

Approved and forwarded:

Lieut. Comdr. George E. Mørris, Jr.

Chief of Party.

# Division of Photogrammetry Review Report of Topographic Map Manuscript T-8420

Subject numbers not used in this report have been adequately covered in other parts of the descriptive report.

#### 26. Control.

Bench marks moved during the construction work on State Route 199 were deleted from the map manuscript.

#### 28. Drafting.

The vegetation classification, shown on an overlay, was transferred to the map manuscript and the overlay was discarded.

Corrections were made to improperly symbolized depression contours.

State Route 199, under construction, has been changed to a class 3 road and marked "being reconstructed".

A drafting overlay was prepared, by the reviewer, as an aid to the smooth draftsman. It shows road classifications, horizontal and vertical control, spot elevations, grid ticks and numbers, etc.

#### 38. Section Lines.

A system of land lines and numbers as supplied on a state road map by William Rasure appeared on the original map manuscript. These were found to be block lines and numbers used in the survey of the subdivision of Palm Beach Farms. This system of lines was deleted by the reviewer. A later survey showing the relation of the block system to the section lines was obtained. This survey used in conjunction with the recovered section corners, submitted by the field parties, enabled a positive reconstruction of the section lines, as originally planned by the General Land Office, to be made. The new system of land lines is shown on the map manuscript in brown ink.

#### 48. Accuracy Tests.

No vertical accuracy tests were run in this quadrangle. A test, made in the adjoining quadrangle T-8421, is adequately described in the descriptive report for that survey. It is believed that this map complies with the national standard map accuracy requirements.

49. Datum.-The map manuscript for this quadrangle was compiled in two parts, the major portion being on the North American 1927 datum, and a small section in the southeast corner on the North American datum.

Ticks, representing the North American 1927 datum, were added to the small section of the map manuscript. This section was then matched to the larger portion and held in place by cellophane tape.

Correction to the North American 1927 datum was made by C. Wittmann and verified by H. Brooks.

Reviewed by:

Reviewed under direction of:

15 August 1947

Chief, Review Section

APPROVED:

Technidal/Assistant to the Chief, Div. of Photogrammetry Division of Charts

Chief,

Chief, Div. of Photogrammetry Chief, Div. of Coastal Surveys

GEOGRAPHIC NAMES		C C C	os webs	ndie /		Cardina	ARCO HELDEN	ALIDS	· /
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