

9101

Diag. Cht. No. 1244

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-35B(48) Office No. T-9101

LOCALITY

State Florida

General locality Florida East Coast

Locality Samsula

1949-52

CHIEF OF PARTY

H.F. Garber, Chief of Field Party
A.L. Wardwell, Tampa Photo. Office

LIBRARY & ARCHIVES

DATE November 10, 1959

9101

DATA RECORD

T- 9101

Project No. (II) **Ph-35B (48)** Quadrangle Name (IV):Field Office (II): **Manteo, North Carolina**Chief of Party: **Harry F. Garber**Photogrammetric Office (III): **Tampa, Florida**Officer-in-Charge: **Arthur L. Wardwell**Instructions dated (II) (III): **30 December 1949**Copy filed in Division of
Photogrammetry (IV)*Office Files*Method of Compilation (III): **Graphic**Manuscript Scale (III): **1:20,000**Stereoscopic Plotting Instrument Scale (III): **Inapplicable**Scale Factor (III): **None**Date received in Washington Office (IV): **9-14-51** Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): **3/20/58**

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): **N. A. 1927**Vertical Datum (III): **MSL**

Mean sea level except as follows:

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

i.e., mean low water or mean lower low water

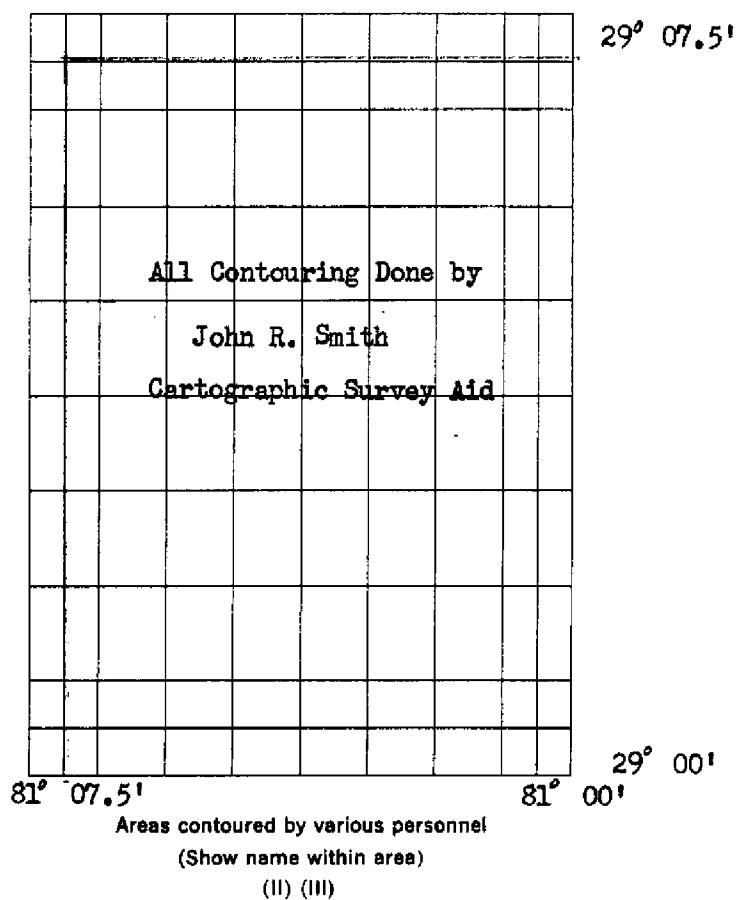
Reference Station (III): **SPRUCE, 1934**Lat.: **29° 06' 12".218(376.2m)** Long.: **81° 02' 06".813 (184.2m)**Adjusted
UnadjustedPlane Coordinates (IV): **Transverse Mercator** State: **Florida** Zone: **East**

Y=

X=

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

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



DATA RECORD

Page 3

Field Inspection by (II): John R. Smith, Cartographic Survey Aid Date: 9 January 1950
to 1 May 1950

Planetable contouring by (II): John R. Smith, Cartographic Survey Aid Date: 9 January 1950
to 1 May 1950

Completion Surveys by (II): *James E. Hundley* Date: *9 Dec. 1952*

Mean High Water Location (III) (State date and method of location): Inapplicable

Projection and Grids ruled by (IV): S. R. (W. O.) Date: 29 Sept. 1950

Projection and Grids checked by (IV): S. R. (W. O.) Date: 2 Oct. 1950

Control plotted by (III): Richard A. Reece Date: 11 Oct. 1950

Control checked by (III): Robert R. Wagner Date: 12 Oct. 1950

~~Radial Plot or Stereoscopic~~
~~Control extension by (III):~~ Milton M. Slavney Date: 6 Nov. 1950

Planimetry
Stereoscopic instrument compilation (III): Inapplicaby Date:
Contours Date:

Manuscript delineated by (III): Richard A. Reece Date: 31 Jan. 1951

Photogrammetric Office Review by (III): Jesse A. Giles Date: 14 June 1951

Elevations on Manuscript
checked by ~~xxx~~ (III): Richard A. Reece Date: 19 Jan. 1951

Camera (kind or source) (III): Fairchild Cartographic 6" Metrogon lens - Camera "0"

Number	Date	Time	Scale	Stage of Tide
49-0-120 to 124 incl.,	4/14/49	09:30	1:20,000	No Tide
49-0-137 to 142 incl.,	4/14/49	09:45	"	"
49-0-143 to 147 incl.,	4/14/49	09:45	"	"
49-0-166 to 171 incl.,	4/14/49	10:00	"	"

Tide (III)

Inshore Quadrangle

Reference Station:

Subordinate Station:

Subordinate Station:

No tide

Ratio of Ranges	Mean Range	Spring Range

Washington Office Review by (IV): Everett H. Ramey

Date: 28 Dec 1953

Final Drafting by (IV): A.P. Berry

Date: 9/17/58

Drafting verified for reproduction by (IV): Wm O. Hallum

Date: 10/3/58

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 65

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

Shoreline (Less than 200 meters to opposite shore) (III): 5 mi.

Control Leveling - Miles (II): 17.0

Number of Triangulation Stations searched for (II): 38

Recovered: 28

Identified: 12

Number of BMs searched for (II): 37

Recovered: 28

Identified: 18

Number of Recoverable Photo Stations established (III): 17

Number of Temporary Photo Hydro Stations established (III): none

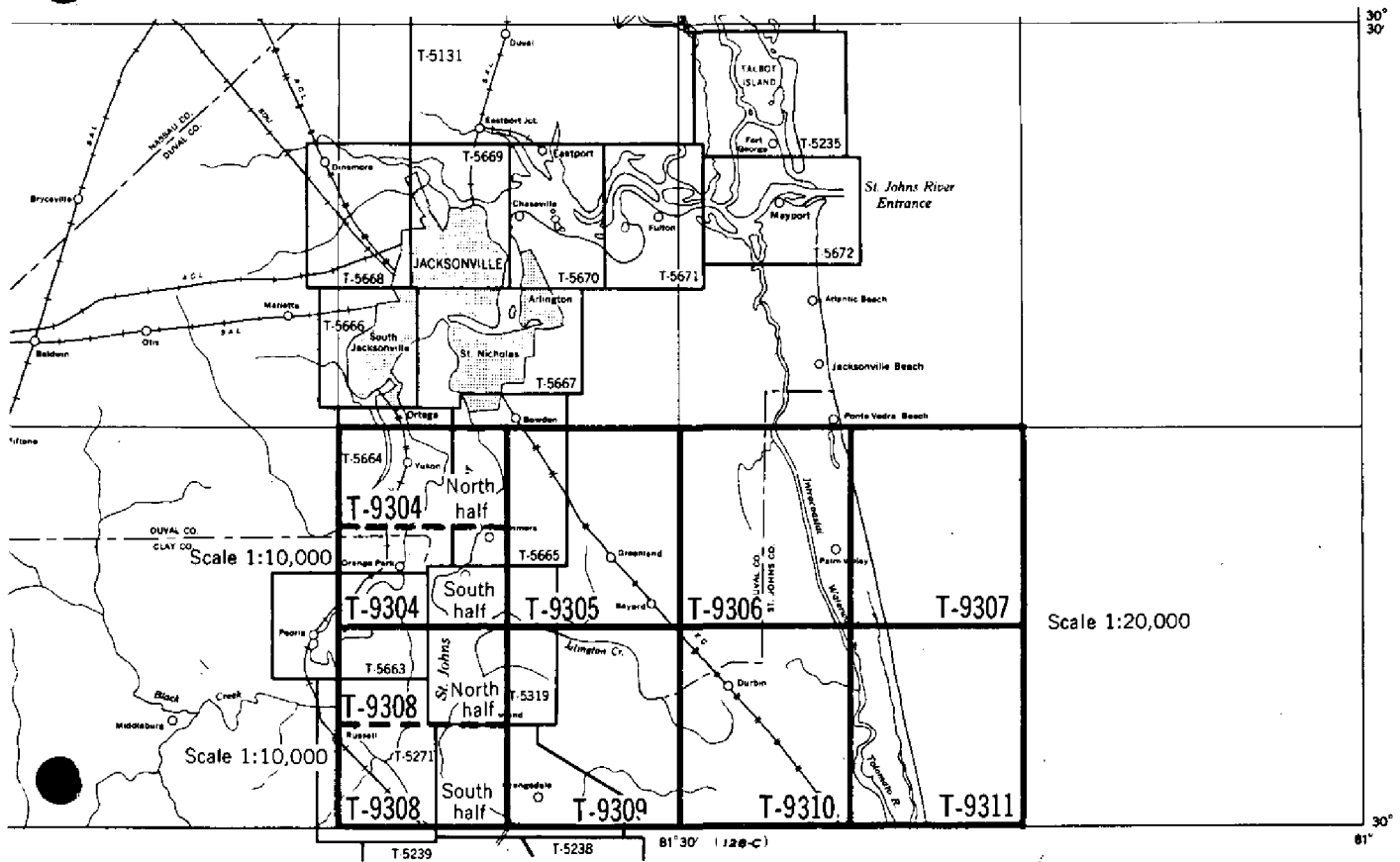
Remarks:

TOPOGRAPHIC MAPPING PROJECT

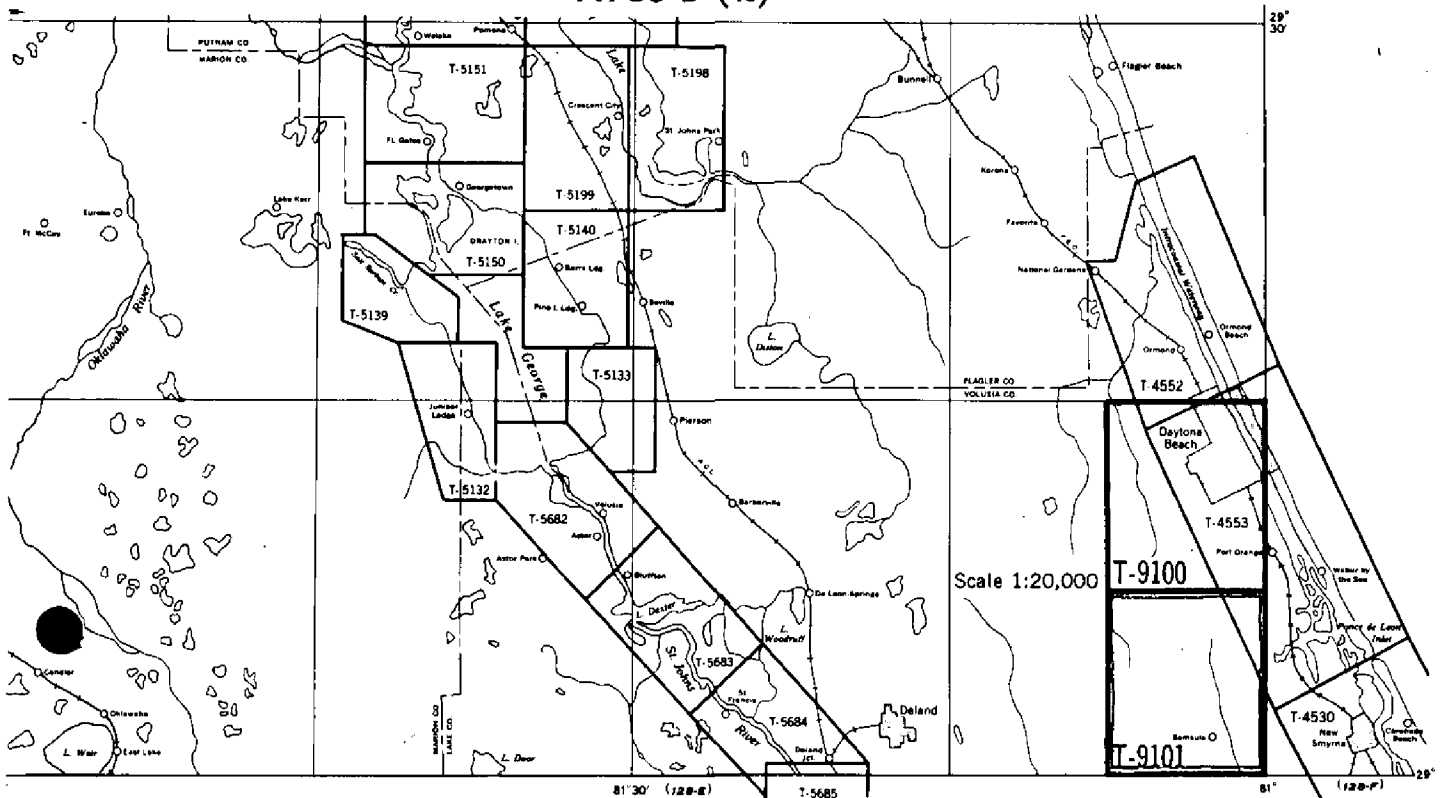
FLORIDA, East Coast

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PH-35-A (48)



PH-35-B (48)



Summary to Accompany Topographic Map T-9101

Map T-9101 is one of ten topographic maps in project Ph-35(48). It falls in Volusia County, Florida and includes the head waters of Spruce Creek.

Project Ph-35(48) is a graphic compilation project. Field work in advance of compilation included complete field inspection, the recovery and identification of control, the location of land lines and boundaries, the investigation of geographic names and contouring by planetable methods directly on the photographs.

This map was compiled at a scale of 1:20,000 using single-lens photographs taken in 1949. After compilation the map was field edited. The map manuscript will be forwarded to the Geological Survey where it will be drafted and published as a standard $7\frac{1}{2}$ minute topographic quadrangle.

Items registered under T-9101 will include a descriptive report, a ~~lithographic~~ ^{CRONAK} print of the map manuscript at a scale of 1:20,000 and a copy of the published map at a scale of 1:24,000,

FIELD INSPECTION REPORT
 QUADRANGLE T-9101
 29-00-00/81-00-00
 Project Ph-35 B (48)

Harry F. Garber, Chief of Party

The field work for this quadrangle was done in accordance with instructions dated 30 December 1949 (Projects Ph-35 (48) A & B), under the direction of Joseph K. Wilson, Supervisor. Field work in addition to those phases listed on pages 2-3, was done by the following personnel:

<u>NAME AND TITLE</u>	<u>PHASE</u>	<u>DATE</u>
Henry R. Spies	Horizontal Control	20 March 1950
Cartographic Survey Aid	Recovery	1 April 1950

This report is written in accordance with Paragraph 724 of the Preliminary Edition of the Topographic Manual dated June 1949.

2. AREAL FIELD INSPECTION

This quadrangle lies in the east central portion of Volusia County about eight miles west of the town of New Smyrna Beach.

The settlement of Samsula, located at the junction of Florida State Highways No. 40 and No. 415, lies in the south central portion of the quadrangle and is the only settlement within the area.

The area is served by Florida State Highways No. 40 and No. 415. Florida State Highway No. 40 runs in a southwest-northeast direction through the entire quadrangle. Florida State Highway No. 415 runs in a southwest direction from the settlement of Samsula. Two county roads lead north from the settlement of Samsula.

Spruce Creek is the only natural drainage in the area and runs in a southeast direction from the central portion of the quadrangle.

Spruce Creek Airport which lies about two miles north of Samsula was an auxiliary airfield for the Deland Naval Air Station during World War II. It has now been leased to local cattlemen for pasture.

The raising of cattle is the chief occupation while lumbering and turpentine are carried on in a small scale.

A privately owned game preserve lies in the southwest part of the quadrangle.

The vegetation consists of about 5% cultivated area, 40% cypress swamp and the remainder palmetto, pine and scrub oak.

The photographs were not too clear, being slightly "fuzzy". However, it is believed that adequate field notes will clear up any difficulty in the photograph interpretation. The field inspection is believed to be adequate.

3. HORIZONTAL CONTROL

(a) No supplemental control was established.

(b) All stations are on the NA 1927 datum

(c) Stations not established by the USC&GS are:

<u>Station</u>	<u>Agency</u>	<u>Order</u>	<u>Datum</u>
K-68, 1934	Florida Geodetic Survey	Third	NA 1927
K-69, 1934	" " "	"	" "
K-70, 1934	" " "	"	" "
K-71, 1934	" " "	"	" "
K-72, 1934	" " "	"	" "
K-73, 1934	" " "	"	" "
K-74, 1934	" " "	"	" "
K-75, 1934	" " "	"	" "
K-76, 1934	" " "	"	" "
K-77, 1934	" " "	"	" "
K-78, 1934	" " "	"	" "
K-79, 1934	" " "	"	" "
K-80, 1934	" " "	"	" "
K-81, 1934	" " "	"	" "
K-82, 1934	" " "	"	" "

(d) Search was made for all known control. Stations reported as "lost" or "not recovered" are:

K-63	Florida Geodetic Survey, 1934
K-66A	" " " 1934
K-73	" " " 1934
K-77	" " " 1934
K-80	" " " 1934
K-89	" " " 1934
K-90	" " " 1934
K-96	" " " 1934
K-97	" " " 1934
K-98	" " " 1934

Seven stations which are located outside the quadrangle limits were identified to control the radial plot.

K-29, 1934	Florida Geodetic Survey
K-64, 1934	" " "
K-66, 1934	" " "
K-88, 1934	" " "
K-99, 1934	" " "
Ponce DeLeon Lighthouse Center, 1934	
Rose, 1934	

4. VERTICAL CONTROL

(a) A search was made for all known vertical control. Bench marks submitted on Form 685-A are: *See § 3 (d) above.*

<u>Name</u>	<u>Agency</u>	<u>Order</u>
K-68	Florida Geodetic Survey	Third
K-69	" " "	"
K-70	" " "	"
K-71	" " "	"
K-72	" " "	"
K-73	" " "	"
K-74	" " "	"
K-75	" " "	"
K-76	" " "	"
K-77	" " "	"
K-78	" " "	"
K-79	" " "	"
K-80	" " "	"
K-81	" " "	"
K-82 & K-83 <i>CHR</i>	" " "	"
L-15	U. S. Coast & Geodetic Survey	First
M-15	U. S. Coast & Geodetic Survey	First
N-15	U. S. Coast & Geodetic Survey	First
P-15	U. S. Coast & Geodetic Survey	First

(b) Seventeen miles of supplemental levels for contouring were run with a wye level starting and closing on bench marks of Third Order accuracy or better. The greatest closure on any line was .35 feet.

(c) The first and last fly level points were 01-1 and 01-25.

(d) Inapplicable.

5. CONTOURS AND DRAINAGE

The contouring was done by planetable methods directly on single-lens photographs, (1:20000 scale), at a contour interval of five (5) feet.

The natural drainage is by Spruce Creek which is located in the east central portion of the quadrangle and with very small ditches and canals leading to the creek. All of which drain into the Halifax River to the east. A greater portion of the quadrangle is very flat and contain numerous isolated intermittent ponds and cypress swamps. The natural drainage for these areas is by seepage.

The highest natural elevation within the quadrangle is 52 feet which is located in the southwestern part.

6. WOODLAND COVER

The cover was classified in accordance with Paragraph 5433 of the Preliminary Edition of the Topographic Manual dated June 1949.

See § 56

7. SHORELINE AND ALONG SHORE FEATURES

(a) The portion of Spruce Creek which falls within the quadrangle limit is about 150 feet in width and is only navigable by small skiffs.

Other phases inapplicable.

8. OFFSHORE FEATURES

Inapplicable.

9. LANDMARKS AND AIDS

(a) No land marks were recommended.

(c) One aeronautical aid (Airway Beacon) is recommended on Form 567 for charting.

(d) Inapplicable.

10. BOUNDARIES, MONUMENTS AND LINES

These are covered in a "Special Boundary Report" ^{*} which will be submitted at a later date by Leo. F. Beugnot. ^{HR} Joseph K. Wilson.

* Filed in Div. of Photogrammetry.

Twelve section corners were recovered and identified in this quadrangle.

See § 57

This entire quadrangle falls within Commissioners District No. 5 in Volusia County.

A blueprint of the boundaries of Spruce Creek Airport is submitted with the quadrangle data. The field inspector has delineated the approximate limits of the airport on the photographs.

See §57

11. OTHER CONTROL

Recoverable topographic stations are:

Forms 524 filed. EHK

SECTION CORNER $\frac{33/34}{4/3}$ T16S-T17S-R32E, 1950

SECTION CORNER $\frac{17/16}{20/21}$ T17S-R33E, 1950

SECTION CORNER $\frac{17/16}{20/21}$ T17S-R31E-R32E, 1950

SECTION CORNER $\frac{26/25}{35/36}$ T16S-R32E, 1950

SECTION CORNER $\frac{29/28}{32/33}$ T16S-R33E, 1950

SECTION CORNER $\frac{21/22}{28/27}$ T17S-R32E, 1950

SECTION CORNER $\frac{18/17}{19/20}$ T17S-R31E- 1950

SECTION CORNER $\frac{31/32}{6/5}$ T16S-T17S-R32E, 1950

SECTION CORNER $\frac{34/35}{3/2}$ T16S-T17S-R32E, 1950

SECTION CORNER $\frac{19/20}{30/29}$ T16S-R33E, 1950

SECTION CORNER $\frac{18/17}{19/20}$ T17S-R33E, 1950

SECTION CORNER $\frac{23/24}{26/25}$ T16S-R32E, 1950

USN BOUNDARY MONUMENT NO. 1, 1950
USN BOUNDARY MONUMENT NO. 2, 1950
USN BOUNDARY MONUMENT NO. 3, 1950
USN BOUNDARY MONUMENT NO. 4, 1950
AIRWAY BEACON

12. OTHER INTERIOR FEATURES

All roads and buildings have been classified in accordance with Paragraph 5441 and 5446 of the Preliminary Edition of the Topographic Manual dated June 1949. *See §58*

There are no bridges or cables over navigable waters. There is one airport, (See paragraph two).

13. GEOGRAPHIC NAMES

This is the subject of a "Special Report" which will be submitted at a later date by Joseph K. Wilson. *Filed in Geographic Names Section Div. of Charts.*

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

Except as noted in paragraph 10 and 13, there are no special data for this quadrangle.

19 May 1950
Submitted by:

John R. Smith

John R. Smith
Cartographic Survey Aid

Approved and forwarded
June 1950

Harry E. Garber

Harry E. Garber
Chief of Party

PHOTOGRAMMETRIC PLOT REPORT.

21. AREA COVERED.

This report is on the photogrammetric plot for Ph-35A(48), Jacksonville to St. Augustine, and Ph-35B(48), Daytona Beach. Ph-35A consists of eight 7'30" quadrangles between latitude 30°00' and 30°15', and extending from the Atlantic Coast westward to longitude 81°45'. Ph-35B consists of two 7'30" quadrangles between latitude 29°00' and 29°15', and longitude 81°00' and 81°07'30". All the quadrangles are topographic surveys.

The sketch on page 15 of this report shows the arrangement of quadrangles, the centers of the photographs used, and the control identified for use in this plot.

22. METHOD.

Radial Plot.

The photogrammetric plot for Ph-35A and B consisted of three separate radial plots, all with hand templets. One radial plot was run for six 1:20,000 scale quadrangles, T-9305, T-9306, T-9307, T-9309, T-9310 and T-9311 in Ph-35A. Another radial plot was run for the two 1:10,000 quadrangles, T-9304 and T-9308, of Ph-35A. The third radial plot was for the two 1:20,000 quadrangles, T-9100 and T-9101 of Ph-35B.

Map Manuscripts.

The map projections are on vinylite with the polyconic projection in black and the Florida East Mercator Grid Coordinates in red. The map projections for T-9304 and T-9308 of Ph-35A are in North and South halves at 1:10,000 scale. The map projections for T-9305, T-9306, T-9307, T-9309, T-9310, and T-9311 of Ph-35A and T-9100 and T-9101 of Ph-35B are at 1:20,000 scale.

All the horizontal control recovered or established by the Field Part was plotted and checked. Substitute stations identified and located for controlling the radial plot were plotted graphically unless the substitute station was more than 1,000 feet from the main station, or more than one instrument set-up was made, in which case the position ^{was} computed and the station plotted conventionally and checked.

Photographs.

All the photographs used were single-lens taken during 1949 with Camera "O".

The 1:20,000 radial plots for T-9305, T-9306, T-9307, T-9309, T-9310 and T-9311 of Ph-35A and T-9100 and T-9101 of Ph-35B used ratio prints at 1:20,000 from 1:40,000 scale negatives. Ninety-eight (98) photographs were used, numbered as follows:

49-0-121 to 49-0-128 Incl.
 49-0-132 to 49-0-141 Incl.
 49-0-143 to 49-0-153 Incl.
 49-0-160 to 49-0-170 Incl.
 49-0-216
 49-0-218 to 49-0-225 Incl.
 49-0-228 to 49-0-236 Incl.
 49-0-240 to 49-0-249 Incl.
 49-0-253 to 49-0-262 Incl.
 49-0-266 to 49-0-275 Incl.
 49-0-278 to 49-0-287 Incl.

The radial plot for the 1:10,000 quadrangles, T-9304 and T-9308 of Ph-35A used ratio prints at 1:10,000 scale from 1:40,000 scale negatives. Thirty (30) photographs were used, numbered as follows:

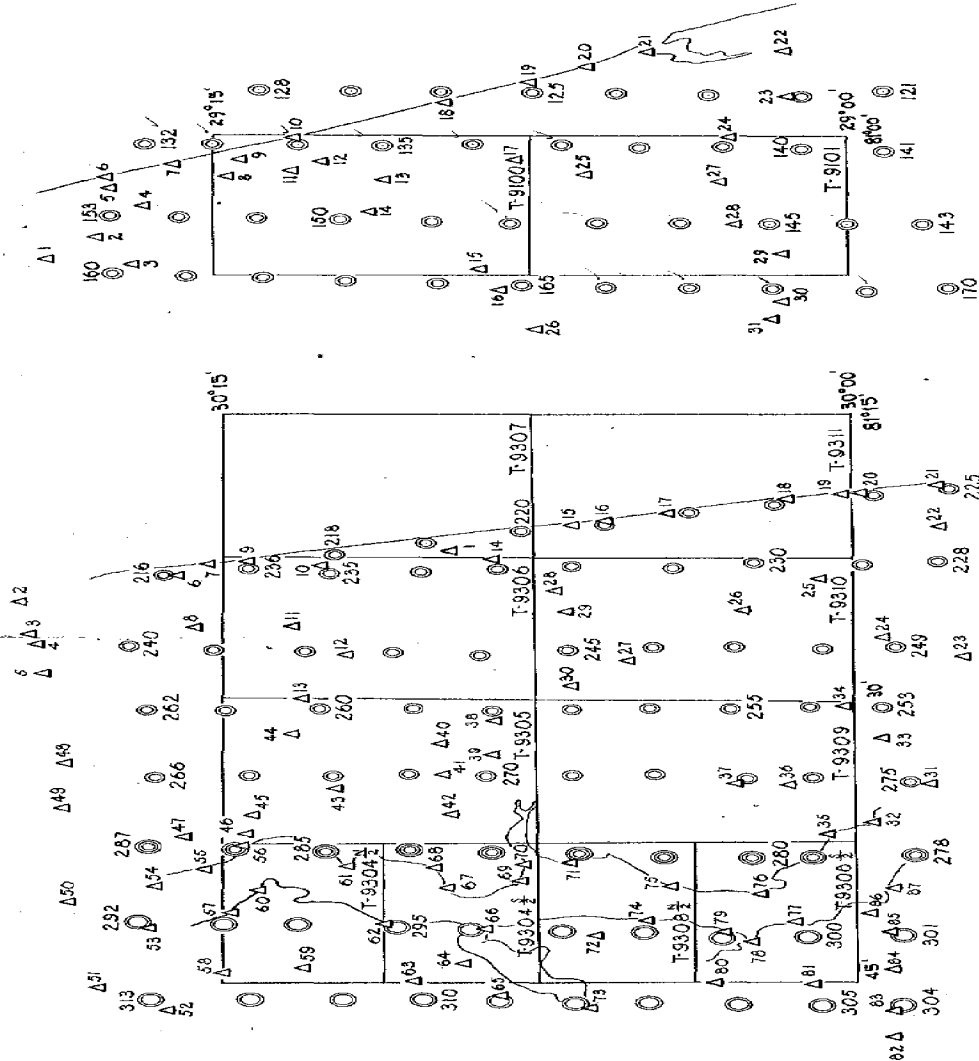
49-0-278 to 49-0-287 Incl.
 49-0-292 to 49-0-301 Incl.
 49-0-304 to 49-0-313 Incl.

The photograph fiducial marks were made by using a marked glass plate in the enlarger during printing.

Azimuths, transfer of control and selection of pass points were conventional for radial plot. Along the junction of the 1:10,000 and the 1:20,000 radial plots, T-9304 and T-9308 with T-9305 and T-9309, identical pass points were selected on the different scale plots to serve as an added check.

Contact prints were available but were not needed for the radial plot.

- [illegible]



PH-35B(48)

PH-35A(48)

▲ HORIZONTAL CONTROL STATION
 ◎ CENTER OF SINGLE LENS 1:20,000 RATIO PRINTS
 ◎ CENTER OF SINGLE LENS 1:10,000 RATIO PRINTS

SKETCH FOR REPORT ON
PHOTOGRAMMETRIC PLOT OF PH-35(48)

Templets.

Vinylite templets were used for all the photographs. A master templet, furnished by the Washington Office, was used to correct for paper distortion. The templet furnished was for a maximum of 2.4 diameter enlargement, so extreme care was taken in preparing the templets for the 4.0 diameter ratio prints of T-9304 and T-9308, which in some cases required considerable adjustment.

Closure and Adjustment.

When the map projections were received, and noted to be vinylite, it seemed reasonable to consider laying the radial plot directly on the projection. The sheets were large enough to cover most of the control identified outside the project and as a check the sheets were taped together and a "Dog-Ear" of vinylite added for observation some time before the radial plot. Close examination at the end of the test period revealed no movement and excellent junctions. The radial plots were therefore run on the map projections saving time and effort.

The order of field work dictated the sequence of the radial plots and the radial plot for T-9100 and T-9101 of Ph-35B was run first. A preliminary plot indicated that all the control would hold and that the final plot would develop southward from the northeast part of T-9100. In the final laydown 49-O-153, 49-O-152, 49-O-132, 49-O-133, 49-O-134 and 49-O-125 were laid in order; then 49-O-145, 49-O-140 and 49-O-122. The plot was continued between these groups of photographs with the areas covered by 49-O-161 to 49-O-164 and in the middle of T-9101 requiring the most adjustment; some adjustment was necessary south of the line of control in T-9101. Adherence to control, azimuths and tight pass point intersections indicate a strong plot. The radial plot for T-9100 and T-9101 was completed on November 6, 1950.

The radial plot for the 1:10,000 quadrangles; T-9304 and T-9308, of Ph-35A was run next. In addition to selecting pass points that could also be used in the 1:20,000 scale plot, all control in T-9305 and T-9309 that could be used to control this plot was utilized. The preliminary radial plot promised excellent results and disclosed one control discrepancy, SUB. PT. TTB-24, 1947, on T-9308, which was resolved before starting the final plot. The radial plot for T-9308 was completed on November 24, 1950, and for T-9304 was completed on November 30, 1950, with what are believed to be excellent results.

Photograph centers 49-0-278 to 49-0-287, inclusive, and some pass points located on the radial plot for T-9304 and T-9308 were transferred to the map projections for T-9305 and T-9309 in preparation for the radial plot of 1:20,000 quadrangles T-9305, T-9306, T-9307, T-9309, T-9310 and T-9311. A preliminary radial plot was run and all control looked good. Some 1917 U.S.G.S. transit travers stations, whose positions came from photostats of what were apparently original lists, had been assumed to be on the North American Datum and had been changed to North American 1927. The datum corrections were corroborated in areas adequately fixed by other control.

The final radial plot of the 1:20,000 part of Ph-35A was done conventionally from fixed templates through those less strongly fixed and bridging those with least control. The control was held, azimuths were held, and pass points gave tight intersections, all of which indicate a tight plot. Pass points were located beyond the project limits to assure good junctions with future work, and the junction with T-9304 and T-9308 is very good. The dates of completion for the various quadrangles are:

T-9305 and T-9309 - on December 12, 1950
 T-9306 - on December 15, 1950
 T-9310 - on December 18, 1950
 T-9307 - on December 19, 1950
 T-9311 - on December 20, 1950.

23. ADEQUACY OF CONTROL.

There was sufficient control for these radial plots, and the identification was generally very good. One hundred and twenty (120) stations were identified, of which all but two were used. ST. PAUL'S CATHOLIC CHURCH SPIRE, 1906, on T-9100, "Doubtful" in identification, surrounded by foliage, was not used because it was very close to considerable positively identified control. Substitute Point ELLZEY, 1933, was not used because it fell too far south of T-9310. All the control, including three "Doubtful" stations was held in the radial plot.

24. SUPPLEMENTAL DATA.

Inapplicable.

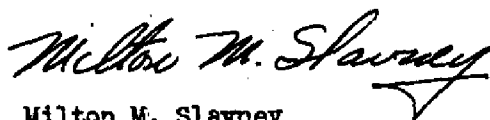
25. PHOTOGRAPHY.

Photograph coverage was adequate, and considering the ratio of enlargement the prints were of good definition and contrast.

There was little evidence of tilt and nowhere enough to merit special attention.

26. GENERAL.

A final check was made of all the map manuscripts to insure proper transference of all pass points, control and photograph centers to the material limits of all manuscripts. "Dog-ears" for photograph centers needed for compilation were added before releasing the manuscripts.



Milton M. Slavney
Cartographer (Photo.)
Tampa Photogrammetric Office

Approved and Forwarded:



Arthur L. Wardwell
Chief of Party

MAP T-9101

PROJECT NO. Ph-35B(48)

SCALE OF MAP 1:20,000

SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR x -COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
PONCE DE LEON IN- LET LIGHTHOUSE CENTER, 1934	Pl.Coord. Pge 50	N.A. 1927	1,725,446.03 522,908.77	5,446.03 (4,553.97) 2,908.77 (7,091.23)	EAST OF PROJECT		
ROSE, 1934	Pl.Coord. Pge 16	"	1,733,869.77 518,804.52	3,869.77 (6,130.23) 8,804.52 (1,195.48)	"		
SMYRNA, 1934	G.Ps. 123	"	29 02 50.740 81 00 08.010			1,562.1 (285.1) 216.7 (1,406.6)	
SPRUCE, 1934	"	"	29 06 12.218 81 02 06.813			376.2 (1,471.0) 184.2 (1,438.2)	
K 28 (Fla. Geod. Sur.)	Volusia Co. Sta. Desc.	"	1,740,986.58 446,520.88	986.58 (9,013.42) 6,520.88 (3,479.12)	WEST OF PROJECT		
K 29 (Fla. Geod. Sur.)	"	"	1,741,627.49 444,677.70	1,627.49 (8,372.51) 4,677.70 (5,322.30)	"		
K 64, 1934 (Fla. Geod. Sur.)	"	"	1,706,751.00 447,680.47	6,751.00 (3,249.00) 7,680.47 (2,319.53)	"		
K 65, 1934 (Fla. Geod. Sur.)	"	"	1,706,562.88 449,964.19	6,562.88 (3,437.12) 9,964.19 (35.81)	"		
K 66, 1934 (Fla. Geod. Sur.)	"	"	1,705,627.73 452,370.87	5,627.73 (4,372.27) 2,370.87 (7,629.13)	"		
K 67, 1934 (Fla. Geod. Sur.)	"	"	1,705,190.57 459,249.41	5,190.57 (4,809.43) 9,249.41 (750.59)	"		
K 68, 1934 (Fla. Geod. Sur.)	"	"	1,705,972.42 463,544.55	5,972.42 (4,027.58) 3,544.55 (6,455.45)	"		
K 69, 1934 (Fla. Geod. Sur.)	"	"	1,705,976.22 464,812.87	5,976.22 (4,023.78) 4,812.87 (5,187.13)	"		

1 FT. = 3048006 METER

COMPUTED BY: I. I. Saperstein

DATE 10 July 1950

CHECKED BY: R. A. Reece

DATE 1 Aug 1950

2 of 3

MAP T-9101..... PROJECT NO. Ph 35B(48)..... SCALE OF MAP 1:20,000..... SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR N-COORDINATE LONGITUDE OR X-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
				FORWARD	(BACK)		FORWARD	(BACK)	
K 70, 1934 (Fla. Geod. Sur.)	Volusia County Sta. Desc.	N.A. 1927	1,705,600.11 466,736.67	5,600.11 (4,399.89)					
K 71, 1934 (Fla. Geod. Sur.)	"	"	1,705,879.11 468,500.94	5,879.11 (4,120.89)					
K 72, 1934 (Fla. Geod. Sur.)	"	"	1,706,548.94 469,170.54	6,548.94 (3,451.06)					
K 74, 1934 (Fla. Geod. Sur.)	"	"	1,710,032.53 472,869.43	32.53 (9,967.47)					
K 75, 1934 (Fla. Geod. Sur.)	"	"	1,710,801.57 475,099.18	801.57 (9,198.43)					
K 76, 1934 (Fla. Geod. Sur.)	"	"	1,712,015.60 478,404.64	2,015.60 (7,984.40)					
K 78, 1934 (Fla. Geod. Sur.)	"	"	1,714,509.94 485,021.03	4,509.94 (5,490.06)					
K 79, 1934 (Fla. Geod. Sur.)	"	"	1,714,746.21 487,042.31	4,746.21 (5,253.79)					
K 81, 1934 (Fla. Geod. Sur.)	"	"	1,713,179.56 495,179.66	3,179.56 (6,820.44)					
K 82, 1934 (Fla. Geod. Sur.)	"	"	1,713,577.49 499,161.76	3,577.49 (6,422.51)					
K 83, 1934 (Fla. Geod. Sur.)	"	"	1,711,157.16 499,925.01	1,157.16 (8,842.84)					
K 86, 1934 (Fla. Geod. Sur.)	"	"	1,706,214.37 508,051.86	6,214.37 (3,785.63)					
				8,051.86 (1,948.14)					

1 FT. = 3048006 METER

COMPUTED BY: I. I. Sapperstein

DATE 10 July 1950

CHECKED BY: R. A. Reece

DATE 1 Aug 1950

M. 2388-12

20.

PROJECT NO. Ph-35B(48)

SCALE OF MAP 1:20,000

SCALE FACTOR 1.0000

[illegible]

1 FT. = 3048006 METER

COMPUTED BY: I. I. Saperstein

DATE.....10 July 1950.....

CHECKED BY: R.A. Reese

DATE 1 Aug 1950

M-2389.12

21

COMPILATION REPORT T-910131. DELINEATION.

The graphic method was used.

Omissions by the Field Inspector and areas in question have been noted on the discrepancy overlay.

Photographs were clear and of good scale.

32. CONTROL.

Sufficient pass points were located by the radial plot to insure accurate establishment of detail points.

33. SUPPLEMENTAL DATA.

An attempt was made to establish the boundary (angles and distances) for Spruce Creek Airport from a blue print of a plan prepared by Robert and Company Associates, Inc., Atlanta, Georgia, in March 1943, for the U. S. Navy. The effort was not entirely successful; some of the information given on the blue print would not fit the positions of the recovered monuments shown on the map manuscript.

G.L.O. plats used for land line data. ENR

See § 57

34. CONTOURS AND DRAINAGE.

No difficulty was encountered in the delineation of drainage or in the transferring of contours from the field photographs.

35. SHORELINE AND ALONGSHORE DETAILS.

Inapplicable except for a portion of Spruce Creek, whose shoreline was adequately inspected. See Item 7.

36. OFFSHORE DETAILS.

Inapplicable.

37. LANDMARKS AND AIDS.

No unusual method was used in locating the one aeronautical aid listed on Form 567.

38. CONTROL FOR FUTURE SURVEYS.

Seventeen (17) Forms 524 are being submitted with this report.

A list of recoverable topographic stations has been prepared and included in Item 49. *None listed. ENR*

39. JUNCTIONS.

There is no contemporary survey to the west or south of this quadrangle. PORT ORANGE Quadrangle, scale 1:50,000, dated 1944, to the east is not in agreement. There are discrepancies of 50 meters or more in the position of roads and shorelines. Contours do not make junction. Detail has been delineated beyond the neat line according to instructions. *See §67*

40. HORIZONTAL AND VERTICAL ACCURACY.

No statement. *See §53*

41. PUBLIC LAND LINES AND BOUNDARIES.

The twelve (12) section corners recovered by the field inspector have been located on the manuscript and their scaled position given on Forms 524. Section lines have been shown on an ozalid print for investigation and approval by the field editor. *See §57*

The boundary of Spruce Creek Airport should be checked during field edit. See Item No. 33.

46. COMPARISON WITH EXISTING MAPS.

There are no maps available in this office for comparison

See § 62

47. COMPARISON WITH NAUTICAL CHARTS.

The Nautical Charts available do not encompass the area of this manuscript, so no comparison can be made.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.

None.

ITEMS TO BE CARRIED FORWARD.

None.

Richard A. Reece
Richard A. Reece
Cartographic Survey Aid

Ward

Approved and Forwarded:

Arthur L. Wardwell
Arthur L. Wardwell, Chief of Party.

48. GEOGRAPHIC NAME LIST.COMMISSIONERS DISTRICT NO. 5FLORIDASAMSULASPRUCE CREEKSPRUCE CREEK AIRPORT (ABAND.)STATE NO. 40State No. 415TOMOKA ROADVOLUSIA COUNTYor (Inoperative) ^{ENTR}Names underlined in
red are approved.

2-8-52

L. Heck

49. NOTES FOR THE HYDROGRAPHER.

No statement required; inshore quadrangle.

PHOTOGRAMMETRIC REVIEW SECTION DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

AERONAUTICAL

NON-FLOATING AIDS OR LANDMARKS FOR CHARTS

STRIKE OUT ONE
TO BE CHARTED
~~TO BE DELETED~~

Tampa Photogrammetric Office, Tampa, Fla. 6 June 1951

I recommend that the following objects which have ~~been~~ inspected from seaward to determine their value as landmarks be charted on ~~(attached form)~~ the charts indicated.

The positions given have been checked after listing by ~~Richard A. Leese~~

Arthur L. Wardwell

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating*

PHOTOGRAMMETRIC OFFICE REVIEW

1. Projection and grids J.G. 2. Title J.G. 3. Manuscript numbers J.G. 4. Manuscript size J.G.

5. Horizontal control stations of third-order or higher accuracy M.M.S. 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) J.G. ~~7. Photographic stations~~ 8. Bench marks J.G.
9. Plotting of sextant fixes J.G. 10. Photogrammetric plot report J.G. 11. Detail points J.G.

(Nautical Chart Data)

[illegible]

20. Water features J.G. 21. Natural ground cover J.G. 22. Planetable contours J.G. ~~23. Spot elevations~~
~~24. Contours in general~~ J.G. 24. Contours in general J.G. 25. Spot elevations J.G. 26. Other physical
 features J.G.

27. Roads J.G. 28. Buildings J.G. ~~29. Railroads~~ 30. Other cultural features J.G.

31. Boundary lines J.G. 32. Public land lines J.G.

33. Geographic names J.G. 34. Junctions J.G. 35. Legibility of the manuscript J.G. 36. Discrepancy overlay J.G. 37. Descriptive Report J.G. 38. Field inspection photographs J.G. 39. Forms J.G.

40. Jesse A. Giles Jesse A. Giles William A. Rasure
Reviewer Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Richard A. Reese William A. Reese
Comptroller Supervisor

43. Remarks:

FIELD EDIT REPORT
Project Ph-35(48)
Quadrangle T-9101

51. METHODS

The field edit of this area was accomplished by standard surveying methods in conjunction with visual inspection. Actual field work started 22 September 1952 and was completed 8 October 1952.

Field edit data is shown on the field edit sheet, discrepancy prints, field photographs 49-0-138, 145, 146, 147, 166 and 167, and in this report.

The reviewer's questions are answered on the discrepancy prints when feasible.

A legend appears on the field edit sheet which is self-explanatory.

52. ADEQUACY OF COMPILATION

The map compilation is adequate and will be complete after field edit data have been applied.

53. MAP ACCURACY

The horizontal accuracy of the map detail is relatively good. *See §66*

The accuracy of the contouring, in general, is good.

Contour corrections were made, in scattered areas, throughout the map. The major contour corrections were along both sides of Spruce Creek in the vicinity of Spruce Creek Airport.

54. RECOMMENDATIONS

None.

55. EXAMINATION OF PROOF COPY

It is believed that Mr. W. E. Swoope, Jr., registered land surveyor, of New Smyrna Beach, Florida, is best qualified to examine a proof copy of this work.

56. WOODLAND COVER

Ref. to item 6 - Field Inspection Report.

Numerous changes in the classification of vegetation have been made on field photographs 49-0-146, 147, 166 and 167.

57. PUBLIC LAND LINES AND BOUNDARIES

Ref. to item 41 - Compilation Report.

Several additional boundary monuments, majority being Spruce Creek Airport, were recovered and located on the field edit sheet.

A copy of the legal description of Spruce Creek Airport was obtained from Naval Air Bases Command, Sixth Naval District, Naval Air Station, Jacksonville, Florida, and is submitted with this report.

58. OTHER INTERIOR FEATURES

Ref. to item 12 - Field Inspection Report.

Additional roads and buildings have been shown on the field edit sheet.

The reclassification of all roads north of Florida State Road #40 and west of Tomoka Road was absolutely necessary since they are impassable after a heavy rainfall and accessible by jeep only in the dry seasons.

The new road, shown on the field edit sheet, traversing the extreme southern portion of this area, has been completed for grade, etc. It is to be surfaced with bituminous asphalt at a later date and then become a part of Florida State Road #40.

59. JUNCTIONS

A satisfactory junction has been made with Quadrangle T-9100 to the north. A U. S. Coast and Geodetic Survey topographic survey is in progress to the east (T-9913). There are no contemporary surveys to the south and west. See §67 *Review*

17 November 1952

Submitted by:

James E. Handley
James E. Handley, *by R.*
Cartographer

9 December 1952

Approved by:

Paul Taylor
Paul Taylor
Lt. Comdr., USC&GS
Chief of Party

LEGAL DESCRIPTION

1071.8 ACRES MORE OR LESS LOCATED IN VOLUSIA COUNTY, FLORIDA

SPRUCE CREEK SATELLITE FIELD

All that land lying and being situated in Sections 25 and 36, Township 16 South, Range 32 East and in Sections 30 and 31, Township 16 South, Range 33 East, more particularly described as follows:

COMMENCING at the northeast corner of Section 36, Township 16 South, Range 32 East; thence S. $0^{\circ} 57' 00''$ E., along the east boundary of said Section 36 and along the center of a graded road 3331.22 feet to a concrete monument at the southeast corner of the $N\frac{1}{2}$ of the $NE\frac{1}{4}$ of the $SE\frac{1}{4}$ of said Section 36, the true point of beginning.

From the point of beginning thus described run S. $88^{\circ} 49' 40''$ W., along the south line of the $N\frac{1}{2}$ of the $NE\frac{1}{4}$ of the $SE\frac{1}{4}$ of Section 36, and along the south line of the $NE\frac{1}{4}$ of the $NE\frac{1}{4}$ of the $SW\frac{1}{4}$ of said section 3331.93 feet to a concrete monument at the southwest corner of said $NE\frac{1}{4}$ of the $NE\frac{1}{4}$ of the $SW\frac{1}{4}$; thence N. $1^{\circ} 04' 10''$ W., along the west line of said $NE\frac{1}{4}$ of the $NE\frac{1}{4}$ of the $SW\frac{1}{4}$ and along the west line of the $SE\frac{1}{4}$ of the $SE\frac{1}{4}$ of the $NW\frac{1}{4}$ of said section 1334.32 feet to a concrete monument at the northwest corner of said $SE\frac{1}{4}$ of the $SE\frac{1}{4}$ of the $NW\frac{1}{4}$; thence S. $88^{\circ} 51' 50''$ W., along the south line of the $N\frac{1}{2}$ of the $SE\frac{1}{4}$ of the $NW\frac{1}{4}$ of said Section 36 667.87 feet to a concrete monument at the southwest corner of said $N\frac{1}{2}$ of the $SE\frac{1}{4}$ of the $NW\frac{1}{4}$; thence N. $1^{\circ} 05' 30''$ W., along the west line of the $E\frac{1}{2}$ of the $NW\frac{1}{4}$ of said section 2001.96 feet to a concrete monument at the northwest corner of the $NE\frac{1}{4}$ of the $NW\frac{1}{4}$ of said section; thence S. $88^{\circ} 54' 20''$ W., along the division line between Sections 25 and 36 1335.49 feet to a concrete monument at the southwest corner of said Section 25; thence N. $0^{\circ} 08' 00''$ W., along the west line of said Section 25, 1325.04 feet to a concrete monument at the northwest corner of the $SW\frac{1}{4}$ of the $SW\frac{1}{4}$ of said Section 25; thence N. $88^{\circ} 57' 50''$ E., along the north line of said $SW\frac{1}{4}$ of the $SW\frac{1}{4}$ 800 feet to a concrete monument at the northeast corner of a tract of land owned by Belle Murray and Jennie L. Griffin; thence N. $49^{\circ} 40' 40''$ E. 2088.72 feet to a concrete monument on the north line of the $SW\frac{1}{4}$ of said Section 25; thence N. $89^{\circ} 01' 30''$ E., along the north line of the $S\frac{1}{2}$ of said section, 1218.44 feet to a concrete monument at the top of a bluff on the east side of Spruce Creek Swamp; thence along

the top of said bluff, the following courses and distances:
 N. $0^{\circ} 59' 20''$ W., 220.07 feet to a concrete monument;
 N. $62^{\circ} 26' 30''$ E., 300 feet to a concrete monument;
 N. $54^{\circ} 33' 00''$ E., 690 feet to a concrete monument;
 N. $59^{\circ} 56' 40''$ E., 320 feet to a concrete monument;
 N. $80^{\circ} 57' 00''$ E., 285 feet to a concrete monument;
 N. $60^{\circ} 28' 30''$ E., 366.58 feet to a concrete monument
 on the east boundary of Section 25; thence N. $0^{\circ} 31' 50''$ W.,
 along the east boundary of Section 25, being also the division
 line between Townships 16 North, Ranges 32 and 33 East, for a
 distance of 600 feet more or less to the center of Spruce Creek;
 thence following the meanders of Spruce Creek in an easterly
 direction to an intersection with the east line of the $W\frac{1}{2}$ of
 Section 30, Township 16 North, Range 33 East; thence S. $0^{\circ} 12' 40''$
 E., along said east line of the $W\frac{1}{2}$ of Section 30, 2600 feet to a
 concrete monument at the northeast corner of the $N\frac{1}{2}$ of the $SE\frac{1}{4}$
 of the $SW\frac{1}{4}$ of said Section 30; thence continuing S. $0^{\circ} 12' 40''$
 E., 658.89 feet to a concrete monument; thence N. $89^{\circ} 59' 50''$
 E., along the north line of the $S\frac{1}{2}$ of the $SW\frac{1}{4}$ of the $SE\frac{1}{4}$ of
 said Section 30, 1328.81 feet to a concrete monument at the
 northeast corner of said $S\frac{1}{2}$ of the $SW\frac{1}{4}$ of the $SE\frac{1}{4}$ of section 30;
 thence S. $0^{\circ} 19' 10''$ E., along the east line of the $S\frac{1}{2}$ of the
 $SW\frac{1}{4}$ of the $SE\frac{1}{4}$ of Section 30, 658.99 feet to a concrete mon-
 ument on the division line between Sections 30 and 31; thence
 S. $1^{\circ} 06' 30''$ E., along the east line of the $NW\frac{1}{4}$ of the $NE\frac{1}{4}$ of
 Section 31; 1333.71 feet to a concrete monument at the south-
 east corner of said $NW\frac{1}{4}$ of the $NE\frac{1}{4}$ of Section 31; thence
 S. $89^{\circ} 32' 10''$ W., along the south line of the $NW\frac{1}{4}$ of the $NE\frac{1}{4}$
 of said section 31, 1327.23 feet to a concrete monument at the
 southwest corner of said $NW\frac{1}{4}$ of the $NE\frac{1}{4}$; thence S. $1^{\circ} 13' 20''$ E.,
 along the east line of the $W\frac{1}{2}$ of Section 31, 2021.69 feet to a
 concrete monument at the southeast corner of the $N\frac{1}{2}$ of the $N\frac{1}{2}$
 of the $SW\frac{1}{4}$ of Section 31; thence S. $89^{\circ} 04' 10''$ W., along said
 south line of the $N\frac{1}{2}$ of the $N\frac{1}{2}$ of the $SW\frac{1}{4}$ 2629.22 feet to a
 concrete monument at the southwest corner of said $N\frac{1}{2}$ of the $N\frac{1}{2}$
 of the $SW\frac{1}{4}$, said point being also on the division line between
 Township 16 South, Ranges 32 and 33 East; thence S. $0^{\circ} 57' 00''$ E.,
 along said division line 47.03 feet to the point of beginning.

EXCEPTING THEREFROM the following described Church Lot as shown
 on the plat of Spruce Creek Heights, recorded in the Public
 Records of Volusia County, Florida, in Map Book 9, Pages 97,
 98, 99 and 100, said exception being more particularly described
 as follows:

BEGINNING at a concrete monument on the division line between Section 25, Township 16 South, Range 32 East and Section 30, Township 16 South, Range 33 East, said point being located 138.33 feet southerly from the northwest corner of the $S\frac{1}{2}$ of the $SW\frac{1}{4}$ of the $SW\frac{1}{4}$ of said Section 30; thence westerly along the north line of Oak Avenue as shown on aforesaid plat; 225 feet to a concrete monument; thence northerly along the east line of 1st Street as shown on said plat, 460 feet to a concrete monument; thence easterly along the south line of Pine Avenue as shown on said plat, 225 feet to a concrete monument on the division line between Township 16 South, Ranges 32 and 33 East; thence southerly along said division line to the point of beginning.

Containing after said exception 1071.8 acres, more or less.

Review Report
Topographic Map T-9101
28 December 1953

62. Comparison with Registered Topographic Surveys.-

T-4553 1:20,000 1930

A small area adjacent to Spruce Creek is common to the two surveys. There is some difference between the two surveys in the delineation of Spruce Creek. Survey T-9101 is to supersede the above survey for nautical charting purposes.

63. Comparison with maps of other agencies.- None

64. Comparison with Contemporary Hydrographic Surveys.- None

65. Comparison with Nautical Charts.- None

66. Adequacy of Results and Future Surveys.- This map meets the National Standards of Map Accuracy and complies with project instructions.

67. Junctions.- During this review junction was made between this survey and the field inspection photographs of survey T-9913. This required only the addition of a small segment of contour which was omitted in survey T-9101. It did not involve a datum discrepancy. Unless the field edit on T-9913 discloses further discrepancies, the two surveys may be considered to junction.

Reviewed by:

Everett H. Ramey
Everett H. Ramey

APPROVED

L. C. Lande
Chief, Review Branch
Div. of Photogrammetry

L. D. Hansen
Chief, Div. of Photogrammetry

25 Nov 54 (AD)

Max Bruckett
Chief, Nautical Chart Branch
Division of Charts

J. Bowie
Chief, Div. of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. T-9101

Record of Application to Charts

[illegible]

M-216A-1

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