

9161

Diag. Cht. No. 1245

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. Ph-30(48) Office No. T-9161

LOCALITY

State FLORIDA

General locality EAST COAST

Locality VOLUSIA COUNTY

194

CHIEF OF PARTY

G. E. Morris, Jr., Chief of Party

R. A. Gilmore, Tampa Photogrammetric Office

LIBRARY & ARCHIVES

DATE Sept - 2 - 1952

# DATA RECORD

T-9161

Project No. (II): Ph-30(48)

Quadrangle Name (IV):

Field Office (II): Titusville, Florida

Chief of Party: George E. Morris, Jr.

Photogrammetric Office (III): Tampa, Fla.

Officer-in-Charge: Ross A. Gilmore

Instructions dated (II) (III): 13 July 1948

Copy filed in Division of  
Photogrammetry (IV)

The Director's Instructions, Project Ph-30(48)  
dated July 13, 1948.

*Office Files*

Method of Compilation (III): Graphic

Manuscript Scale (III): 1: 20,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): None

Date received in Washington Office (IV): 1-3-50

Date reported to Nautical Chart Branch (IV): 1-6-50

Applied to Chart No.

Date:

Date registered (IV): 19 May '52

Publication Scale (IV): 1:24,000

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III):

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): GODFREY, 1934

Lat.: 28° 54' 13."525 (416.4 meters) Long.: 80° 55' 47."157 (1277.6 meters) Adjusted  
~~Unadjusted~~

Plane Coordinates (IV):

State: Florida Zone: East

Y = 1,661,232.27 Feet

X = 522,472.40 Feet

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.





Camera (kind or source) (III): Single-Lens U.S. Coast and Geodetic Survey

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
48J-524-28	4-21-48	1333-35	1: 20,000	- 0.2
48J-535-39	"	1343-45	"	
48J-584-86	4-22-48	0921-22	"	
48J-669-71	"	1134-35	"	
48J-578	"	0911	"	
48J-579	"	0912	"	

Tide (III)

Reference Station: MAYPORT  
Subordinate Station: PONCE DELEON INLET  
Subordinate Station: ~~Indian River North~~  
Washington Office Review by (IV): J. L. Rihn

Ratio of Ranges	Mean Range	Spring Range
1.0	4.5	5.3
0.5	2.3	2.7

In the Indian River the periodic tide is less than 0.5 ft.  
Date: 15 Aug 50

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV): L. M. Gazik

Date: 31 Oct 51

Land Area (Sq. Statute Miles) (III): 62.6  
Shoreline (More than 200 meters to opposite shore) (III): 1  
Shoreline (Less than 200 meters to opposite shore) (III): 8.7  
Control Leveling - Miles (II): 62 4th Order  
Number of Triangulation Stations searched for (II): 26  
Number of BMs searched for (II): 4  
Number of Recoverable Photo Stations established (III): 18  
Number of Temporary Photo Hydro Stations established (III): None

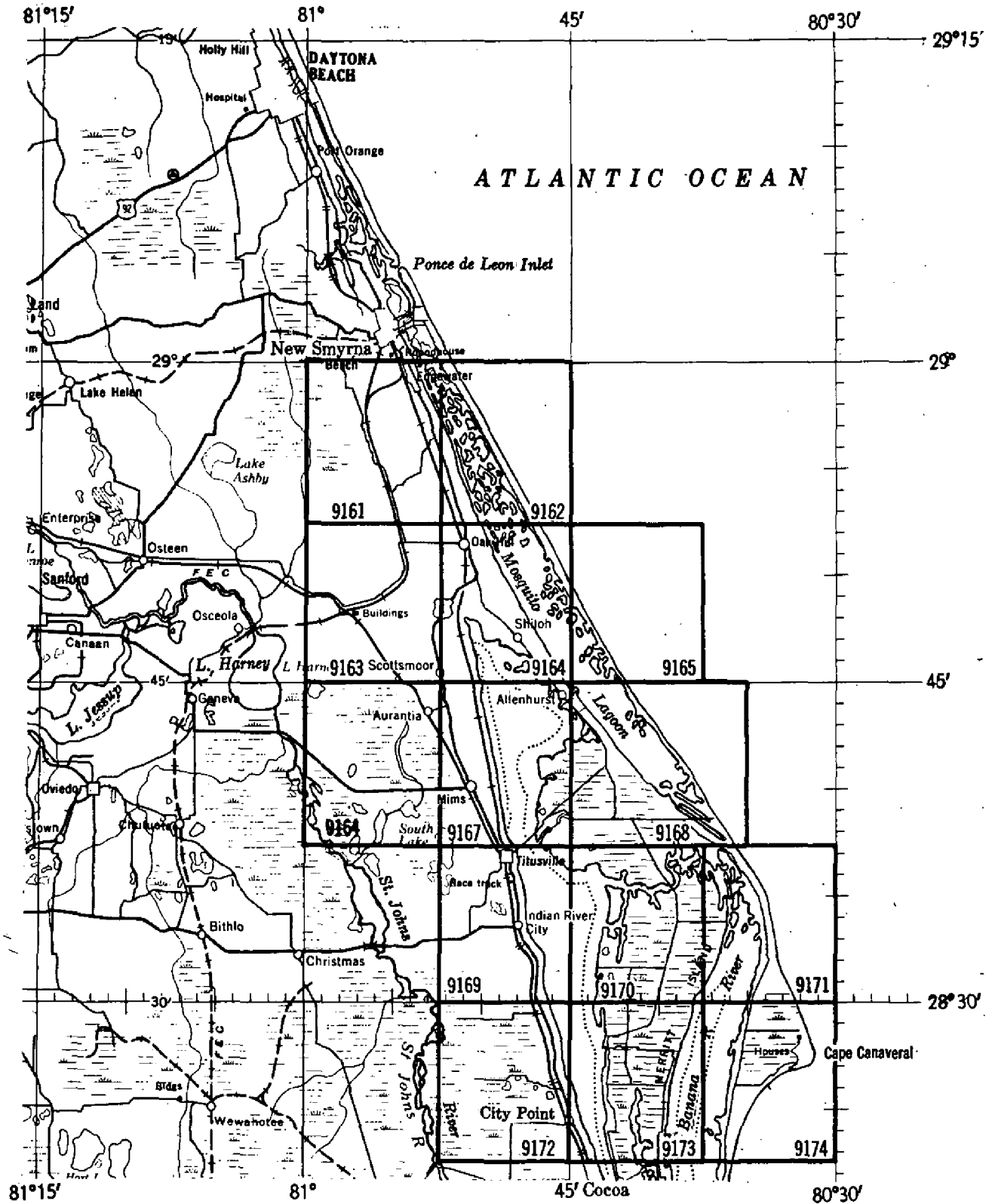
Recovered: 19 Identified: 14  
Recovered: 4 Identified: 4

(14 Land Lines mon, 3 topo., 1 az mk) EHR

Remarks:



FLORIDA, City Point to Edgewater



Compiled by the U. S. Coast and Geodetic Survey at scale 1:20,000  
 Printed and distributed by the U. S. Geological Survey at scale of 1:24,000

Summary to Accompany T-9161

This map is one of a series of 14 topographic 7½ minute quadrangles in Project Ph-30(48) and is one of the northernmost maps in the project. It covers part of Indian River North, Florida. These topographic maps were compiled at 1:20,000 scale and are to be published by the U. S. Geological Survey as standard topographic quadrangles.

The registered copies under T-9161 will include the original descriptive report, a cloth-mounted print of the manuscript at a scale of 1:20,000, and a cloth-mounted color print of the published map at a scale of 1:24,000.



FIELD INSPECTION REPORT  
QUADRANGLE T-9161  
N 28°52.5' - W 80°52.5'/7.5'  
PROJECT PH-30(48)  
George E. Morris, Jr., Chief of Party

All phases of the field work were completed in accordance with The Director's Instructions, Project Ph-30(48), dated 13 July 1948, and applicable General Instructions except for the deviation noted in paragraph 16.

Horizontal control recovery and identification, and shoreline inspection was by Cecil A. Navin, Topographic Engineer. 73% of the fourth order leveling was by James E. Hundley, Cartographer(Photo), and 10% was by John S. Winter, Cartographic Survey Aid. All other work was completed by the writer, Grover B. Torbert, Cartographic Survey Aid.

Field work was started 28 January 1949 and completed 6 June 1949.

1. DESCRIPTION OF THE AREA

The quadrangle is situated in the southeast part of Volusia County.

The entire area is of flat relief except for two low, but prominent, ridges that extend NW-SE through the quadrangle. U. S. Highway #1 traverses the easternmost of these two ridges, and this ridge cuts through only the NE corner of the quadrangle. The other ridge, approximately three miles farther west, extends the full length of the quadrangle along the west side of Turnbull Hammock, and part of the Maytown Branch of the Florida East Coast Railway is built along this ridge.

Turnbull Hammock varies from one to two miles in width and extends the full length of the quadrangle. The western part of the quadrangle is poorly drained and is comprised of large cypress swamp areas interspersed with smaller areas of semi-open prairie land.

The NE corner of the quadrangle extends almost to the Atlantic and includes a portion of Indian River North (Hillsborough River) with the Intracoastal Waterway channel along the west shore, and numerous mangrove islands on the east side of the channel.

The main line of the Florida East Coast Railway is parallel to, and approximately one-half mile west of U. S. Highway #1.

The small incorporated town of Edgewater is located along U. S. Highway #1 and the west shore of Indian River North (Hillsborough River) near the north limit of the quadrangle.

A small undeveloped area within the corporate limits of New Smyrna Beach extends south into the north part of the quadrangle west of the main line of the Florida East Coast Railway.

With the exception of the area along the west shore of Indian River North (Hillsborough River) and U. S. Highway #1 and a scattering of small citrus groves in Turnbull Hammock, the area is almost completely undeveloped.

The principal livelihoods of the area are: tourist trade along U. S. Highway #1, fishing along Indian River North (Hillsborough River), cattle ranching in the western part of the quadrangle, citrus farming, and logging operations.

## 2. COMPLETENESS OF FIELD INSPECTION

Field inspection, believed to be adequate and complete, has been shown on the following photographs: 48-J-510, 48-J-524, 48-J-526, 48-J-527(2), 48-J-528(2), 48-J-535, 48-J-536, 48-J-577, 48-J-578, 48-J-579, 48-J-583, 48-J-584, 48-J-585, 48-J-586.

## 3. INTERPRETATION OF THE PHOTOGRAPHS

Photographic detail was fair and no appreciable difficulty of interpretation was experienced.

## 4. HORIZONTAL CONTROL

Within the quadrangle two U.S.C. & G.S. stations were searched for, and one was recovered and identified.

North of the quadrangle (also project) nine U.S.C. & G.S. stations were searched for, five were recovered, and six (3 reference marks, of lost or destroyed stations) were identified. Fifteen Florida Geodetic Survey traverse stations were searched for, thirteen were recovered and seven were identified. This identification provided strong fixes along the flight lines just north of the project limits.

Horizontal control identification was made on the following photographs: 48-J-508, 48-J-533, 48-J-538, 48-J-581, and 48-J-668.

## 5. VERTICAL CONTROL

Within the quadrangle, two U.S.C. & G.S. and one U.S.M. third-order bench marks were searched for, recovered, and identified approximately on the contour photographs.

North of the quadrangle Florida Geodetic Survey Traverse Station K-87, also a third-order bench mark, was used for control of fourth-order levels.

Seventy-five temporary bench marks were set along 62 miles of fourth order levels for contour control. The maximum error of closure for any loop was 0.52 ft., and all closures exceeding 0.30 ft. were adjusted.



## 6. CONTOURS AND DRAINAGE

All contouring was done by planetable methods, and the maximum error of closure was 0.4 ft.

See paragraph 6 in Field Inspection Report for quadrangle T-9162 concerning contours on spoil islands along the Intracoastal Waterway.

A satisfactory contour junction was made with quadrangle T-9163 to the south and quadrangle T-9162 to the east. The north and west limits are also project limits and elevations have been shown along these limits in accordance with general instructions for contouring project limits.

Contouring was done on the following photographs: 48-J-510, 48-J-524, 48-J-526, 48-J-527(2), 48-J-528(2), 48-J-535, 48-J-536, 48-J-577, 48-J-578, 48-J-579, 48-J-583, 48-J-584, 48-J-585, and 48-J-586.

## 7. MEAN HIGH WATER LINE

Adequately symbolized on photographs 48-J-670 and 48-J-671.

## 8. LOW WATER LINE

The maximum displacement of the MLWL offshore from the MHWL does not exceed six to eight feet anywhere in the quadrangle and no attempt has been made to delineate this line.

## 9. WHARVES AND SHORELINE STRUCTURES

Adequately labeled on the shoreline inspection photographs.

## 10. DETAILS OFFSHORE FROM HIGH WATER LINE

Adequately labeled on the shoreline inspection photographs.

## 11. LANDMARKS AND AIDS TO NAVIGATION

There are no objects suitable for charting as landmarks within the quadrangle.

Nine fixed aids to navigation were pricked direct, or located by theodolite cuts, and the proper forms are submitted. *See Review Report*

## 12. HYDROGRAPHIC CONTROL

No photo-hydro stations required for this project.

## 13. LANDING FIELDS AND AERONAUTICAL AIDS

None.

#### 14. ROAD CLASSIFICATION

All roads have been classified on the field inspection photographs in accordance with Photogrammetry Instructions No.10, dated 14 April 1947, and Amendment dated 24 October 1947.

#### 15. BRIDGES

There are no bridges over navigable water within the quadrangle.

#### 16. BUILDINGS AND STRUCTURES

Classified in accordance with Photogrammetry Instructions No.29, dated 1 October 1948, with the exception that all buildings to be mapped have been circled on the field inspection photographs.

#### 17. BOUNDARY MONUMENTS AND LINES

It is believed that an adequate number of public land monuments have been recovered to facilitate easy plotting of the public land lines except in the western part of the quadrangle where the vegetation and the nature of the terrain made extensive search impractical at the time of field inspection.

A map of Cone Properties (6 sheets of photostats submitted) by C. H. Moneyppenny, registered engineer and surveyor, Daytona Beach, Florida, was secured from William E. Swoope, Jr., registered surveyor, of New Smyrna Beach, Florida. This survey covers a large area along U. S. Highway #1 and the survey was controlled by original, or accepted corners, and the measurements are reputed to be reliable by local surveyors.

Recovered monuments were described on Forms 524 and identification has been shown on the following photographs: 48-J-525, 48-J-527(2), 48-J-528(2 of 2), 48-J-534, 48-J-537, 48-J-577, 48-J-669, and 48-J-670.

Other boundaries are the subject of a special report for the entire project by Lowell I. Bass, Cartographic Survey Aid. *Filed in Div of Photogrammetry*

#### 18. GEOGRAPHIC NAMES

Subject of a special report for the entire project by Lowell I. Bass, Cartographic Survey Aid. *Filed in Geographic Name Section, Div. of Charts*

#### 19. TOPOGRAPHIC STATIONS

Three monuments, two standard U.S.C. & G.S. disks and one township line monument, were identified on the photographs and Forms 524 are submitted.

The position for azimuth mark, RM NO.3 GODFREY 1934 can be computed from the new description for GODFREY 1934 submitted on Form 526.




Two azimuth marks north of the project, useable for hydrographic control, were identified on the photographs and Forms 524 are submitted.

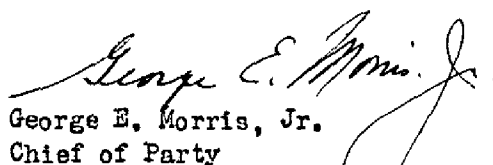
20. JUNCTION WITH OTHER AGENCIES

A junction was made along the north limit with Army Map Service 1:50,000, 10 foot contour interval, PORT ORANGE FLORIDA QUADRANGLE MAP and all detail was in good agreement except for the junction of contours in the following localities: beach area between Indian River North(Hillsborough River) and the Atlantic Ocean, in Edgewater east of U. S. Highway No.1, and along a North-South road at longitude  $80^{\circ}58.0'$ (approx). A recheck was made in each area of disagreement and a plethora of spot elevations have been shown in these areas.

Submitted  
6 June 1949

  
Grover B. Torbert  
Cartographic Survey Aid

Approved and forwarded  
6 June 1949

  
George E. Morris, Jr.  
Chief of Party

[illegible]

1 FT. - 3048006 METER

COMPUTED BY: B.F. Lampton

DATE.....September 29, 1948.....

CHECKED BY: H. R. Wagner

DATE October 1, 1948

M-2388-12



NORTH of

MAP T-9161

PROJECT NO. Ph-30(48)

SCALE OF MAP 1: 20,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\nu$ -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)	FORWARD	(BACK)
K-99 (F.G.S.) 1934	F.G.S. P.10	N.A. 1927	1,705,409.86	522,918.23	5,409.86 (4,590.14)			1648.9 (1399.1)			
K-100 (F.G.S.) 1934	"	"	1,706,281.22		2,918.23 (7,081.77)			889.5 (2158.5)			
CORONADA BEACH SILVER W.T. FINIAL 1934	P.10 Pl.Coar. P.26		524,901.77		6,281.22 (3,718.78)			1914.5 (1133.5)			
K-87 (F.G.S.) Sub.Point 1934	Comp.	"	1,705,497.51		4,901.77 (5,098.23)			1494.1 (1553.9)			
K-78 (F.G.S.) Sub.Point 1934	"	"	1,709,623.91		9,623.91 (0,376.09)			2933.4 (114.6)			
K-84 (F.G.S.) Sub.Point 1934	"	"	531,852.35		1,852.35 (8,147.65)			564.6 (2483.4)			
NEW SMYRNA BLACK W.T. FINIAL Sub.Point 1934	"	"	1,705,497.51		5,497.51 (4,502.49)			1675.6 (1372.4)			
K-81 (F.G.S.) Sub.Point 1934	"	"	508,899.71		8,899.71 (1,100.29)			2712.6 (335.4)			
K-93 (F.G.S.) Sub.Point 1934	"	"	1,714,481.45		4,481.45 (5,518.55)			1365.9 (1682.1)			
RM. 2 HILL 1934	"	"	485,041.05		5,041.05 (4,958.95)			1536.5 (1511.5)			
RM. 1 1874	"	"	1,713,544.83		3,544.83 (6,455.17)			1080.5 (1967.5)			
DUSS	"	"	499,367.67		9,367.67 (632.33)			2855.3 (192.7)			
			1,709,768.58		9,768.58 (231.42)			2977.5 (70.5)			
			501,223.33		1,223.33 (8,776.67)			372.9 (2675.1)			
			1,700,412.94		412.94 (9,587.06)			125.9 (2922.1)			
			523,991.09		3,991.09 (6,008.91)			1216.5 (1831.5)			
			1,713,234.15		3,234.15 (6,765.85)			985.8 (2062.2)			
			494,894.16		4,894.16 (5,105.84)			1491.7 (1556.3)			
			1,703,617.98		3,617.98 (6,382.02)			1102.8 (1945.2)			
			516,959.49		6,959.49 (3,040.51)			2121.3 (926.8)			
			1,701,943.28		1,943.28 (8,056.72)			592.3 (2455.7)			
			537,203.97		7,203.97 (2,796.03)			2195.8 (852.2)			
			1,714,619.03		4,619.03 (5,380.97)			1407.9 (1640.1)			
			530,872.21		872.21 (9,127.79)			265.9 (2782.2)			

1 FT. = 3048006 METER

COMPUTED BY: R.R. Wagner

DATE April 6, 1949

CHECKED BY: M.M. Slavney

DATE April 7, 1949

M-2488

DATE

[illegible]

1 FT. = 3048006 METER

COMPUTED BY: R.R. Wagner

DATE April 6, 1949

CHECKED BY: M.M. Slavney

DATE April 7, 1949

M-238



## COMPILATION REPORT T-9161

PHOTOGRAMMETRIC PLOT REPORT

This report was submitted with the Descriptive Report for T-9167.

31. DELINEATION

This map manuscript has been compiled by the graphic method.

All the photographs were of good scale with the exception of 48J-535-536-537 and 538.

The field inspection of the shoreline was adequate. The inshore inspector failed to make junction with quadrangle T-9162 in his vegetation inspection. Areas called "S" by the inspector of T-9162 were not labelled anything on this quadrangle. Little attention was paid to the numerous trails or roads which made it difficult to junction with the Army Map Service Quadrangle "Port Orange" (1943) to the north where several are shown. The compiler was unable to determine whether they are roads, trails or firebreaks. *See item 52*

32. CONTROL

Only <sup>two</sup> ~~one~~ primary control stations appear within the limits of this quadrangle. A sufficient number of well placed secondary control points were established by the main radial plot to insure good detail points.

33. SUPPLEMENTAL DATA

General Land Office plats.

34. CONTOURS AND DRAINAGE

Generally the contouring was good. In the extreme northeast corner of the quadrangle at the junction with T-9162 the contouring is questionable and is being referred to the field editor for checking. *See item 53*

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline of this quadrangle is limited to a small area along the Intracoastal Waterway in the northeast corner of the manuscript.



#16

The field inspector noted that numerous small white areas apparent on the photographs are oyster bars and that they uncover approximately 2 feet at M.H.W. They consequently, have been shown as unlabeled islets.

See Item 6 for information regarding the M.L.W.L.

36. OFFSHORE DETAILS

None.

37. LANDMARKS AND AIDS

Nine fixed aids pricked direct or located by theodolite are being submitted on Form 567, four of these are being referred to the field editor for check or relocation. *See item 56*

No landmarks were recommended by the field inspection.

38. CONTROL FOR FUTURE SURVEYS

Seventeen Forms 524 are submitted and accompany this report upon transmittal. Fourteen of these are section or land grant recovered monuments.

All topographic stations usable by the hydrographer are listed under Item 49.

There are no photo-hydro stations.

39. JUNCTIONS

This manuscript joins survey No. T-9162 on the east, T-9163 on the south and "PORT ORANGE" quadrangle (1943) by the Army Map Service on the north. There is no contemporary survey on the west. The junctions on the east and south are in agreement. The junction with the Port Orange quadrangle is in agreement from the Florida East Coast railroad eastward to the limits of the quadrangle. Westwardly the railroad and roads were not in agreement. These were extended 2 cm. according to instructions. Disagreeing contours were referred to the field editor. *See item 53*

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

41 THROUGH 45.

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

A comparison was made with U.S.C. & G.S. Planimetric Map T-4530 compiled in 1930 at scale of 1: 20,000

Attention is called to the shoreline changes along the Intra-coastal Waterway beginning at latitude 28° 58', longitude 80° 53' and extending southeastwardly to the manuscript limits. These changes are caused by the construction of the new Intracoastal Waterway as shown on this map manuscript.

Inshore areas are in reasonably good agreement.

47. COMPARISON WITH NAUTICAL CHARTS

In comparison with U.S. C. & G.S. Nautical Chart No. 843, scale 1: 40,000, published November 1938, correction date September 4, 1945, the manuscript and chart are in good agreement.

The shoreline changes noted in Item 46 have been corrected on this chart.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Approved and Forwarded:

*Ross A. Gilmore*  
Ross A. Gilmore, 12/4/49  
Chief of Party.

*Rudolph Dossett*  
Rudolph Dossett  
Cartographer (Photo.)



48. GEOGRAPHIC NAME LIST

- BROWN'S BAY ✓
- EDGEWATER ✓
- EDGEWATER JUNCTION ✓
- ELWINDER CREEK ✓
- FLORIDA EAST COAST RR. ✓
- HUCOMER ✓
- LITTLE COW CREEK ✓
- LITTLE SNAPPER CREEK ✓
- MASSEY RANCH ✓
- PINE ISLAND BAY ✓
- POTTS CREEK ✓
- SNAKE CREEK ✓
- SAND POINT ✓
- SOUTH CANAL ✓
- U. S. 1 ✓
- VALCO ROAD ✓
- WEBSTER CREEK ✓
- Florida \* ✓
- Creighton ✓
- Indian River North (Intracoastal Waterway) ✓
- Three Sisters Islands ✓

• Ambrose Hull Grant ✓

• Samuel Betts Grant ✓

• Charles Sibbold Grant ✓

• John Lowe Grant ✓ ← LOW

• Joseph Wales Grant ✓

• John Bolton Grant ✓

• Turnbull Hummock ✓

Fla AIA (F9162) ENR

Jose Sanchez Grant

Jane Murray Grant

Geronimo Alvarez Grant

(This name pending with USBGM: use this name instead of Hillsborough R. until it acts.) 8-1-50 L.A.

Jose Sanchez Gr.  
Jane Murray G  
Geronimo Alvarez G

\* = Decis. BGN

• = Approved name

1-19-50

a.j.w.

50.

## PHOTOGRAMMETRIC OFFICE REVIEW

T-9161

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

## CONTROL STATIONS

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

## ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline J.G. 13. Low-water line J.G. 14. Rocks, shoals, etc. J.G. 15. Bridges J.G. 16. Aids to navigation J. G. 17. Landmarks J.G. 18. Other alongshore physical features J.G. 19. Other along-shore cultural features J.G.

## PHYSICAL FEATURES

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

## CULTURAL FEATURES

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

## BOUNDARIES

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

## MISCELLANEOUS

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 William A. Rasure  
Reviewer Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

## FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

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.

\_\_\_\_\_  
Compiler\_\_\_\_\_  
Supervisor

43. Remarks:

FIELD EDIT REPORT  
T-9161

51. METHODS

The field edit of this quadrangle was accomplished by traversing, via truck, all passable roads, by boat, and by walking to other areas in which the reviewer requested information or for a general check on the adequacy of the map compilation.

Planetable, theodolite and tape methods were used to make corrections and additions.

The reviewer's questions are answered on the discrepancy prints whenever possible.

All deletions have been noted on the field edit sheet. Additions and corrections have been noted on the field edit sheet and field photographs 48J-528(print #2) 48J-534, 48J-536, 48J-537, 48J-583.

All work shown on the photographs is properly referenced on the discrepancy print <sup>or</sup> ~~an~~ field edit sheet.

A legend appears on the field edit sheet indicating the different colored inks used for the various additions, corrections and deletions.

52. ADEQUACY OF COMPILATION

The map compilation is believed to be adequate and complete with the corrections added by the field editor.

53. MAP ACCURACY

The horizontal position of the map details, in general, appears to be good.

The contours in the extreme northeast corner of this quadrangle ~~was~~ <sup>were</sup> corrected on field photograph 48J-510 and submitted with field edit data for quadrangle T-9162. Some minor corrections were made in the contours near latitude 29° 00' 00", longitude 80° 58' 00", latitude 28° 55' 00" - 28° 56' 00" longitude 80° 57' 00" .

54. RECOMMENDATIONS

None.



55. EXAMINATION OF PROOF COPY

It is believed that William E. Swope, Jr. Registered Engineer, 124 Canal Street, New Smyrna Beach, Florida, is best qualified to examine a proof copy of this quadrangle.

56. AIDS TO NAVIGATION

Theodolite cuts were obtained for Indian River North Daybeacons (Hillsborough River) 180, 184, and Light 181 which are submitted on Form 24A.

57. BOUNDARY MONUMENTS AND LINES

One boundary monument was recovered and identified. Form 524 is submitted. Several additional points on boundary lines have been indicated on field photographs, 48J-528, prints, 536, and 537. The data for these points on line was taken from Florida East Coast Railroad plans, dated 1916.

58. GEOGRAPHIC NAMES

The cultural feature bearing the name "Turnbull Hammock" has been indicated on the field edit sheet. It extends southeasterly into quadrangles T-9163 and T-9164. Its limits on T-9163 is from latitude  $28^{\circ} 48' 45''$  north to limits of quadrangle, longitude  $80^{\circ} 55' 00''$  slanting southeasterly to  $80^{\circ} 53' 40''$  thence to  $80^{\circ} 52' 30''$  into quadrangle T-9164 at latitude  $28^{\circ} 48'$  longitude  $80^{\circ} 51' 35''$  thence in a northerly direction along railroad track to 5-foot contour, thence along 5-foot contour to junction with T-9163 again.

Approved and Forwarded:

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

*James E. Hundley*

James E. Hundley  
Cartographer (Photo.)  
March 17, 1950

**Act 9**

1949

The positions given have been checked after listing by

John C Richter  
John C. Richter, Texas Photogrammetric Office

**George E. Morris, Jr.** *Chief of Party.*

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



DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

# PHOTOGRAMMETRIC REVIEW SECTION

~~TO BE CHARTED~~  
~~TO BE EXPEDITED~~

**STRIKE OUT ONE**

Tampa, Florida March 3, 1950

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

The positions given have been checked after listing by

used by **Rudolph Dossett**  
**Tampa Photogrammetric Office**

**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*

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

# PHOTOGRAMMETRIC REVIEW SEC. 1. NONFLOATING AIDS CREDITS MARKS FOR CHARTS

STRIKE OUT ONE  
TO ~~BE~~X~~O~~~~CH~~~~AR~~~~DE~~~~X~~  
TO BE DELETED

**Tampa, Florida**

March 3 1950

I recommend that the following objects which have ~~(been inspected)~~ been inspected from seaward to determine their value as landmarks be ~~examined~~ *(deleted from)* the charts indicated.

The positions given have been checked after listing by

Rudolph Dossett

**Tampa Photogrammetric Office**

**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*

Review Report T-9161  
Topographic Map  
14 August 50

62. Comparison with Registered Topo Surveys:- This survey supersedes common areas on T-1344, 1:20,000 (1874); T-4133, 1:20,000 (1925); and T-4530, 1:20,000 (1928) for charting purposes.

63. Comparison with Maps of other Agencies: None

64. Comparison with Contemporary Hydro Surveys: None

65. Comparison with Nautical Charts:- No. 843, 1:40,000 4/3/50. Additions and corrections made during review have been shown in red ink on the manuscript. There were no changes of <sup>importance</sup> ~~importance~~ ~~to~~ ~~the~~ Nautical Charts.

66. Landmarks and Aids to Navigation:- Landmarks and aids are listed on Form 567 and filed as Chart Letter No. 19 (1950) in the Division of Charts. See carbon copy following Field <sup>Editor</sup> ~~Inspection~~ Report.

67. Adequacy of Results:- This map complies with National Map Accuracy Standards.

68. Overlay:- An overlay has been prepared showing road classification, control, etc. This map will be edited and published by the U. S. Geological Survey.

Reviewed by:

Jack L. Rihn  
Jack L. Rihn, Cartographer

Approved by:

S. V. Griffin 6/24/52  
Chief, Review Section

O. S. Reading  
Chief, Div. of Photogrammetry

H. C. Edmonson  
Chief, Nautical Chart Branch <sup>6FJ</sup>

Earl O. Heston  
Chief, Div. Coastal Surveys  
E. H.

## HISTORY OF HYDROGRAPHIC INFORMATION

T-9161, Florida

The available hydrography covering Hillsborough River<sup>\*</sup> is considered to be inadequate for this compilation.

*\* See item 48*

*R. E. Elkins*

R. E. Elkins - 9/25/50  
Nautical Chart Branch