

9169

Diag. Cht. No. 1245

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC-PHOTOGRAMMETRIC

Field No. Ph-30(48) Office No. T-9169

LOCALITY

State FLORIDA

General locality EAST COAST

Locality BREVARD COUNTY

1949

CHIEF OF PARTY

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

R.A. Gilmore, Tampa Photogrammetric Office.

LIBRARY & ARCHIVES

DATE July - 18 - 1952

B-1870-1 (1)

9169

DATA RECORD

T-9169

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

Quadrangle Name (IV): ~~WDS SE~~

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)
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): 8-19-49

Date reported to Nautical Chart Branch (IV): 8-26-49

Applied to Chart No.

Date:

Date registered (IV): 19 May 1952

Publication Scale (IV):

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): TITUSVILLE SOUTHEAST BASE, 1934

Lat.: 28° 37' 27."134 (835.3m) ✓ Long.: 80° 49' 23."157 (629.0m)

Adjusted
Unadjusted

Plane Coordinates (IV): Transverse Mercator State: Florida Zone: East

Y= 1,559,626.08

X= 556,752.94

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

Field Inspection by (II): James A. Clear, Jr.

October 1948
Date: February 1949

Planetable contouring by (II): James A. Clear, Jr.

October 1948
Date: February 1949

Completion Surveys by (II): James E. Hundley

Date: Nov. - Dec. 1949

Mean High Water Location (III) (State date and method of location): ~~Air Photo Compilation~~
 Identified on photographs in field. April, 1948
 Photographs taken April 1948.

Projection and Grids ruled by (IV): W.E.W. (W.O.)

Date: Oct. 25, 1948

Projection and Grids checked by (IV): W.E.W. (W.O.)

Date: Oct. 25, 1948

Control plotted by (III): B.F. Lampton

Date: Nov. 17, 1948

Control checked by (III): R.R. Wagner

Date: Nov. 24, 1948

Radial Plot ~~or Stereoscopic~~ M.M. Slavney
~~Control extension~~ (III):

Date: March 7, 1949

Planimetry
 Stereoscopic Instrument compilation (III):
 Contours

Date:

Date:

Manuscript delineated by (III): I.I. Saperstein

Date: Apr.-June, 1949

W.W. Dawsey

Photogrammetric Office Review by (III): J.A. Giles

Date: July, 1949

Elevations on Manuscript
 checked by (II) (III): I.I. Saperstein (III)

Date: July 1949

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

PHOTOGRAPHS (III)					
Number	Date	Time	Scale	Stage of Tide	
4-22-48J-681	Apr. 22, 1948	11:42	1: 20,000		
682	"	11:41	"	No Periodic Tide	
683	"	11:41	"	"	
684	"	11:41	"	"	
685	"	11:40	"	"	
-19-48J-484	Apr. 19, 1948	0920	"	"	
485	"	0920	"	"	
486	"	0921	"	"	
487	"	0922	"	"	
4-22-48J-570	Apr. 22, 1948	0902	"	"	
571	"	0903	"	"	
4-19-48J-472	Apr. 19, 1948	0908	"	"	
473	"	0909	"	"	
474	"	0910	"	"	
475	"	0910	"	"	
476	"	0911	"	"	
4-19-48J-458-459	"	0857	"	No Periodic Tide	

Reference Station:
Subordinate Station:
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range

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

Date: *13 Sept 1950*

Final Drafting by (IV): *G.S.*

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV): *Everett H. Ramey*

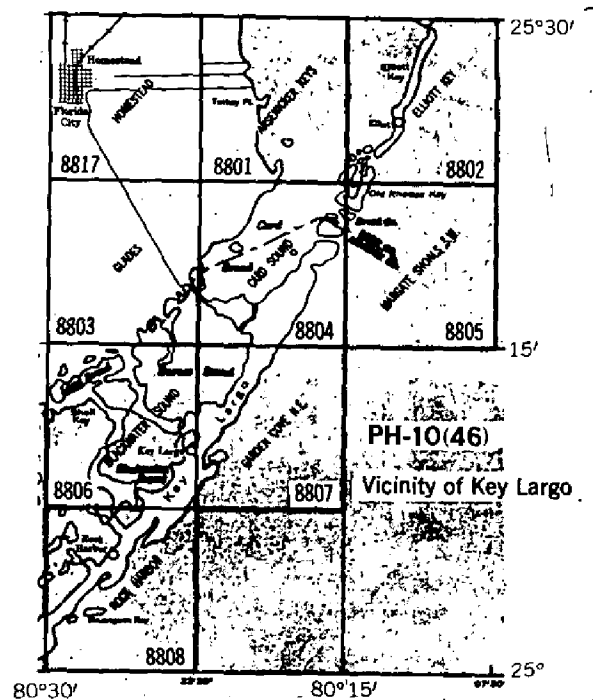
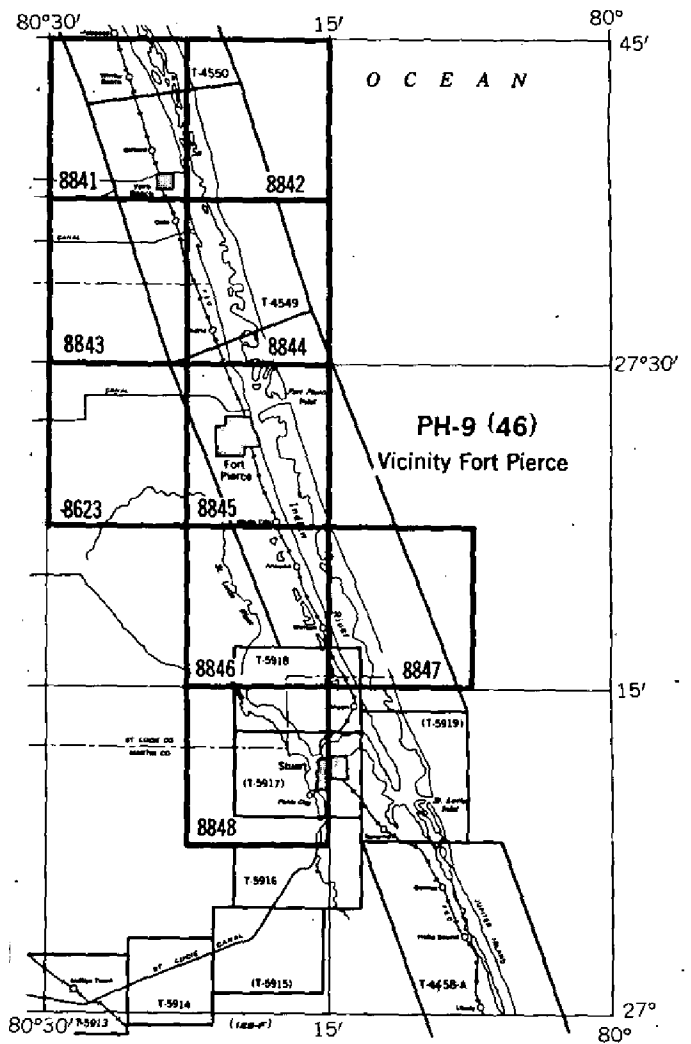
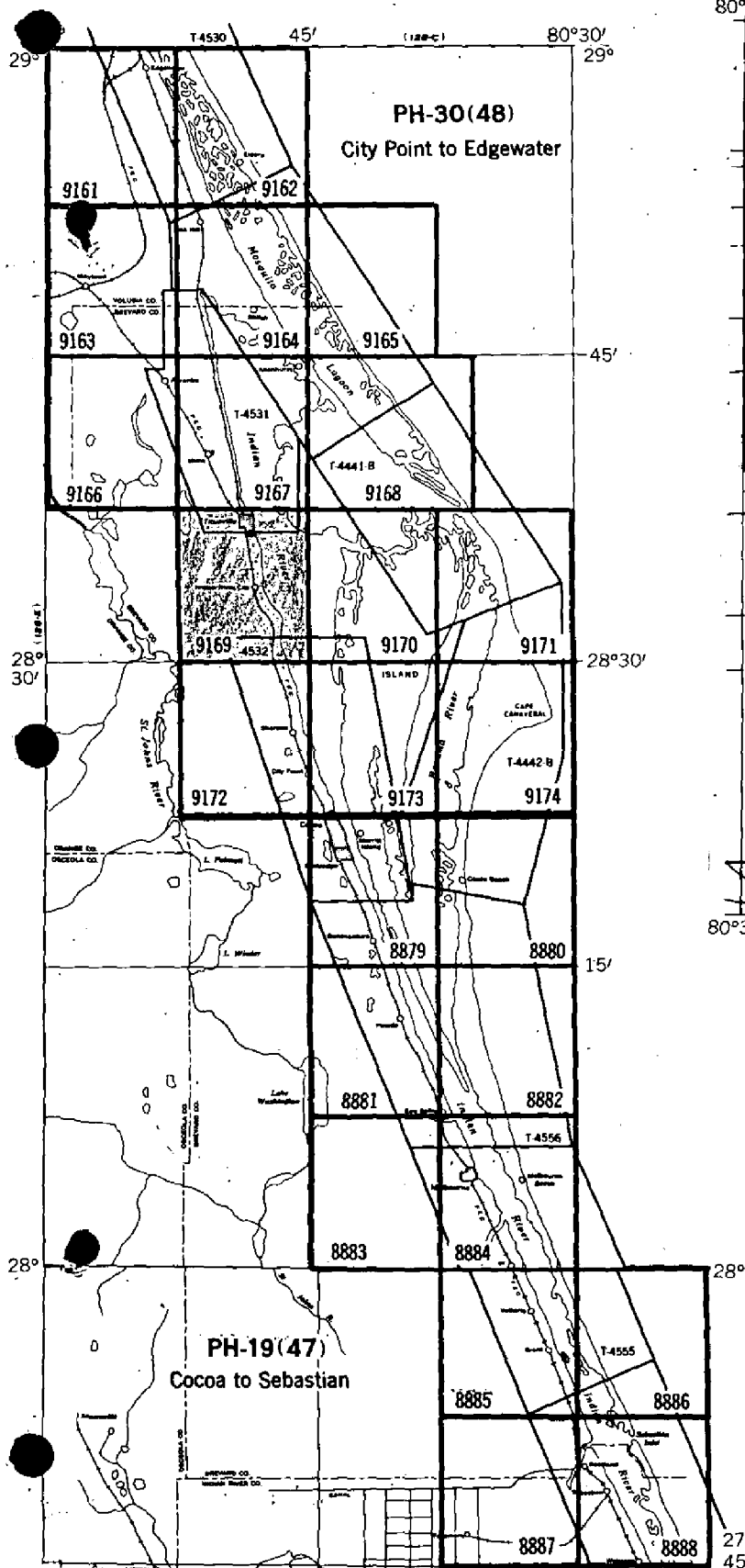
Date: *23 Aug 1951*

Land Area (Sq. Statute Miles) (III): *45 miles*
Shoreline (More than 200 meters to opposite shore) (III): *14.9 miles*
Shoreline (Less than 200 meters to opposite shore) (III): *0.7 miles*
Control Levelling - Miles (II): *37 miles, 4th Order*
Number of Triangulation Stations searched for (II): *61* Recovered: *39* Identified: *20*
Number of BMs searched for (II): *16* Recovered: *15* Identified: *13*
Number of Recoverable Photo Stations established (III): *24* (number includes
Number of Temporary Photo Hydro Stations established (III): *None* *13 section and boundary mon.)*

Remarks:

TOPOGRAPHIC MAPPING PROJECTS

FLORIDA EAST COAST



6

Summary to Accompany T-9169

Topographic map T-9169 is one of fourteen similar maps in project Ph-30(48) and is in the southern part of the project. It covers a portion of the Indian River and land area adjacent. The City of Titusville falls at the north limit of the map.

This is a graphic compilation project. The field operations preceding compilation included complete field inspection, the establishment of some additional horizontal control, and the delineation of contours on the photographs by planetable methods.

The manuscript was compiled at a scale of 1:20,000 and covers $7\frac{1}{2}'$ in latitude by $7\frac{1}{2}'$ in longitude. The entire map was field edited. The map is to be published by the Geological Survey at a scale of 1:24,000 as a standard topographic quadrangle. Items registered under T-9169 will include a cloth-mounted color print at a scale of 1:24,000 and a cloth-mounted lithographic print of the manuscript at a scale of 1:20,000 and the descriptive report.

FIELD INSPECTION REPORT
QUADRANGLE T-9169
N 28°30' - W 80°45' / 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 deviation noted in paragraph 16.

Field work was performed by the writer, James A. Clear, Jr., Engineering Aid, during the period 22 October 1948 to 28 February 1949.

1. DESCRIPTION OF THE AREA

This quadrangle is located in the northeast central portion of Brevard County, Florida. The incorporated town of Titusville and the unincorporated town of Indian River City lie within the limits of the quadrangle. Titusville is the county seat of Brevard County. *See item 69A*

In the extreme northeast corner of the quadrangle there is a small portion of the land area that lies east of the Indian River; the remainder of the land area lies west of Indian River. On the west side of Indian River, the Florida East Coast Railway and U. S. Highway No.1 traverse the entire length of the quadrangle.

A canal, located just south of Indian River City and running east and west through the quadrangle, breaks all contours with the exception of the five foot contour. At a divide in the canal, water drains east to the Indian River, and west to the St. Johns River.

The terrain rises from natural water level in Indian River to 73 feet at a point just west of U. S. Highway No.1. A prominent ridge, parallel to and 1.5 miles west of U. S. Highway No.1, extends the entire length of the quadrangle.

For the most part, the land area is comprised of sand dunes, ridges and depressions. The scattered existing vegetation is comprised of dense scrub oak, pine, palm, saw grass, and palmetto. The principal occupations are: commercial fishing, cultivation and shipment of citrus fruit, and tourist trade.

2. COMPLETENESS OF FIELD INSPECTION

The field inspection is believed to be complete and adequate.

Field inspection was performed on the following photographs: 48-J-458, 48-J-472(2 of 2), 48-J-473(2 of 2), 48-J-474(2 of 2), 48-J-475(2 of 2), 48-J-476(2 of 2), 48-J-486, 48-J-487, 48-J-570, 48-J-571, 48-J-598, 48-J-599 (1 of 2), 48-J-600, 48-J-682.

3. INTERPRETATION OF THE PHOTOGRAPHS

Detail in Titusville and along the west shore of Indian River was not very sharp and considerably more effort than normal was required for field inspection in these areas.

4. HORIZONTAL CONTROL

Sixteen (16) U.S.C. & G.S. stations were searched for, fourteen (14) were recovered and eight (8) identified.

Nine (9) U.S.E. stations were searched for, seven (7) were recovered, and three (3) identified.

Thirty-six (36) Florida State Geodetic Survey stations were searched for, eighteen (18) were recovered and nine (9) identified.

5. VERTICAL CONTROL

Six (6) U.S.C. & G.S. bench marks were searched for, five (5) were recovered and five (5) identified (approximately) on the contour photographs.

Three (3) U.S.E. bench marks were searched for, three (3) were recovered, and three (3) identified (approximately) on the contour photographs.

Seven (7) Florida State Geodetic Survey bench marks were searched for, seven (7) were recovered, and five (5) identified (approximately) on the contour photographs.

The U.S.E. bench marks are on the Indian River datum, and were not used to control fly levels.

The Florida Geodetic Survey bench marks are on the M.S.L. datum of 1929, and were used to control fly levels.

Approximately thirty-seven (37) miles of 4th order levels were run, and a total of sixty-one (61) temporary bench marks was established. The maximum error of closure was .48 of a foot. All errors of closure greater than .26 of a foot were prorated throughout the line.

6. CONTOURS AND DRAINAGE

All work was done as near the center portion of the photographs as possible to minimize distortion and large scale changes. The maximum vertical error of closure for planetable traverses was 0.5 of a foot. Contours were checked and shaped under stereoscope prior to final inking.

Attention is called to one particular area in the northeast corner of the quadrangle which lies east of Indian River. After careful field examination, the land area was found to be below five feet, and it was considered economically impractical to run planetable traverses in the area.

A junction has been made with quadrangle T-9172 to the south. Field contouring in quadrangle T-9167 was incomplete at time of this report.

Contouring was performed on the following photographs: 48-J-472(1 of 2), 48-J-473(1 of 2), 48-J-474(1 of 2), 48-J-475(1 of 2), 48-J-476(1 of 2), 48-J-484, 48-J-485, 48-J-486, 48-J-487, 48-J-570, 48-J-571, 48-J-598, 48-J-599(1 of 2), 48-J-600.

7. MEAN HIGH WATER LINE

Adequately labeled on the photographs. *See item 30.*

Shoreline inspection was performed on the following photographs: 48-J-458, 48-J-472(2 of 2), 48-J-473(2 of 2), 48-J-474(2 of 2), 48-J-475(2 of 2), 48-J-682, 48-J-683, 48-J-684.

8. LOW WATER LINE

In general the low water line along both shores of Indian River is parallel and very close to the mean high water line as the water is practically non-tidal. No attempt was made to show the low water line.

9. WHARVES AND SHORELINE STRUCTURES

All wharves and shoreline structures have been adequately labeled on the photographs.

10. DETAILS OFFSHORE FROM HIGH WATER LINE

It is believed all offshore detail has been adequately labeled on the field photographs.

11. LANDMARKS AND AIDS TO NAVIGATION *See items 13, 34, 56 and 68*

Three previously charted landmarks (triangulation) are submitted on Form 567.

Three lights and six daybeacons were located by theodolite cuts from triangulation and photo stations, and Forms 24A, 567, and M-2226-12 are submitted.

12. HYDROGRAPHIC CONTROL

No photo-hydro stations were required for this project.

13. LANDING FIELDS AND AERONAUTICAL AIDS

Two airports, the Titusville-Cocoa Airport and the Titusville Municipal Airport, are located within the quadrangle.

The useable limits of the Titusville Municipal Airport have been delineated on photograph 48-J-476. A heavy wire fence that surrounds the Titusville-Cocoa Airport has been delineated on photograph 48-J-684. *shown on manuscript.*

No monuments could be found around the boundaries of either airport. However, legal descriptions are submitted with the Special Report on Boundaries for the entire project by Lowell I. Bass, Engineering Aid.

Triangulation station, AERIAL BEACON NO.20, was identified on photograph 48-J-681. *Form 567 submitted.*

The airport beacon at the Titusville-Cocoa Airport is unoperative and unnumbered. The beacon was identified by the photogrammetric station method, and Form 524 is submitted.

14. ROAD CLASSIFICATION

All roads were classified according to Photogrammetry Instructions No.10, and Amendment dated 24 October 1947.

15. BRIDGES

Construction of a new concrete bridge, replacing the old wooden bridge at Titusville, across Indian River, had just been started at the time of photography. This bridge is now complete, and sufficient information for showing its location and shoreline changes in the area have been shown on field inspection photograph 48-J-682.

Field data was determined in accordance with Photogrammetry Instructions No.27, dated 7 September 1948, and is listed below:

Type of span	-	Swing
Navigable spans	-	2 center spans
Horizontal clearances:		
East Span	-	80.8 ft.
West Span	-	80.8 ft.
Vertical clearances above est. M.H.W.:		
East Span	-	8.1 ft.
West Span	-	8.1 ft.

These new bridge data were not listed in the U. S. Engineer "List of Bridges over Navigable Waters of the U. S.", revised to July 1, 1941; and has been reported, by letter, to the local District Engineer. *Copies of the letters attached to this report. EHR*

16. BUILDINGS AND STRUCTURES

Building inspection was in accordance with Photogrammetry Instructions No. 29, dated 1 October 1948, ~~except for deviation noted on field inspection photographs 48-J-476 and 48-J-682.~~

17. BOUNDARY MONUMENTS AND LINES

Five (5) section corners^{*} and two monuments along the north line of the Delespine Grant, were recovered, identified, and Form 524 submitted.
^{*} Form 524 for sect. corn. 32 T21S R35E was rescinded by Field Edit (Form 524). ^{ENR}

The centerline of a street has been indicated as a township line on photograph 48-J-682 and four section corners were pricked on photograph 48-J-486 from information furnished by Mr. Frank P. Schuster, County Surveyor. These points were pricked by comparing the field photographs with related planimetric detail on county photographs and land survey plats. Forms 524 are not submitted.

^{**} According to the Field Edit, these corners are not monumented. ^{ENR}

The recorded field notes and plat of the Re-survey of T22S, R35E, dated 1915-1916 is submitted with the field data. Another large plat of the Titusville Fruit and Farm Lands Co., is also submitted. Both plats are ^{See Item 698} believed to be self-explanatory and should aid in section line compilation.

A legal description of the city limits of Titusville is submitted with the Special Report on Boundaries for the entire project by Lowell I. Bass, Engineering Aid. Two monuments mentioned in the first sub-paragraph are on the city limits. In addition, a monument along the southernmost boundary was identified, and Form 524 submitted. Three other points on the city limits, according to Mr. J. D. Cushman, local surveyor, have been indicated on photograph 48-J-682.

Other boundaries will be found in the Special Report on Boundaries for the entire project. Filed in General Files, Div. of Photogrammetry.

18. GEOGRAPHIC NAMES ⁴¹⁴⁴

This is the subject of a Special Report on Geographic Names for the entire project by Lowell I. Bass, Engineering Aid.

Filed in Geographic Names Section, Div. of Charts.

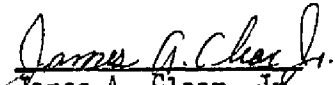
19. TOPOGRAPHIC STATIONS

^{standardization} ^{ENR}
 Two tape base monuments at the Titusville Airport were identified on photograph 48-J-681 as topographic stations, and Forms 524 submitted.

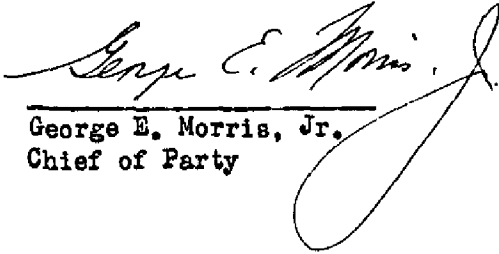
A magnetic station, located in the west part of Titusville, was identified on photograph 48-J-476, and Form 524 submitted.

(See last sub-paragraph under paragraph 13 concerning airport beacon).

Submitted
17 March 1949


James A. Clear, Jr.
Engineering Aid

Approved and forwarded
March 1949


George E. Morris, Jr.
Chief of Party

PHOTOGRAMMETRIC PLOT REPORT

The Descriptive Report on Main Radial Plot No. 1 of 2 for Ph-30(48)-Florida East Coast, covering sheets T-9169 thru T-9174, and dated 28 March 1949 is filed in the General Files, Division of Photogrammetry.

MAP T. 9169

PROJECT NO. Ph-30(48)

SCALE OF MAP 1: 20,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-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	
AIRPORT (USE)	G.P.	N.A.	28	37	15.683				482.8	(1364.3)		
1934	253	1927	80	49	49.090				1333.5	(296.4)		
AIRWAY BEACON No. 20 (NEAR TITUSVILLE)	"	"	28	37	07.760				238.9	(1608.2)		
1934	177		80	49	53.900				1464.2	(165.7)		
TITUSVILLE DIXIE	"	"	28	36	39.680				1221.5	(625.6)		
HOTEL CUPOLA 1940	567		80	48	23.417				636.2	(993.9)		
TITUSVILLE BRIDGE, HOUSE CHIMNEY 1940	"	"	28	37	16.501				508.0	(1339.1)		Station destroyed at time of field inspection
568			80	47	54.790				1488.4	(141.5)		
BASIN, 1940	"	"	28	37	16.764				516.1	(1331.0)		
557			80	48	31.036				843.1	(786.8)		
TITUSVILLE WHITE STACK, 1940	"	"	28	36	39.479				1215.4	(631.7)		
567			80	48	52.891				1436.7	(193.1)		
TITUSVILLE ELEMENTARY SCHOOL, PYRAMIDAL ROOF APEX, 1940	"	"	28	36	34.086				1049.3	(797.8)		
567			80	48	26.027				707.1	(923.0)		
TITUSVILLE WATER TANK, 1934	"	"	28	36	34.235				1053.9	(793.2)		
149			80	48	32.514				883.3	(746.7)		
TITUSVILLE BLACK TANK, 1940	"	"	28	36	20.647				635.6	(1211.5)		
567			80	48	38.363				1042.3	(587.9)		
TIT, 1940	"	"	28	36	15.366				473.0	(1374.1)		
553			80	45	36.241				984.6	(645.5)		
N.O. (USE) 1940	"	"	28	35	51.150				1574.7	(272.4)		
556			80	48	16.401				445.6	(1184.6)		
INDIAN RIVER NORTH LIGHT 95, 1940	"	"	28	35	28.679				882.9	(964.2)		
567			80	47	23.483				638.1	(992.3)		

1 FT. = 3048006 METER

COMPUTED BY: B.F. Lampton

DATE September 29, 1948

CHECKED BY: R.R. Wagner

DATE October 4, 1948

M. 2388-1

MAP T. 9169 PROJECT NO. Ph-30(48) SCALE OF MAP 1: 20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
NN (USE), 1940	G.P. 570	N.A. 1927	28	34	47.257		1454.8	(392.3)	
			80	47	56.056		1523.4	(107.2)	
WENT, 1940	G.P. 553	"	28	34	46.831		1441.7	(405.4)	
			80	47	56.461		1534.4	(96.2)	
N.M.N. (USE) 1940	552	"	28	33	24.224		745.7	(1101.3)	
			80	47	52.746		1433.7	(197.2)	
N M (USE), 1930	USE MIMS	"	28	32	39.97		1230.4	(616.6)	
			80	47	21.15		575.0	(1056.1)	
PRM-NL (USED), 1934	G.P. 178	"	28	32	07.871		242.3	(1604.7)	
			80	46	56.044		1523.7	(107.6)	
VEEDOL, 1934	G.P. 125	"	28	31	55.393		1705.2	(141.8)	
			80	46	53.271		1448.3	(182.9)	
N.J. (USE) 1940	"	"	28	30	18.239		561.5	(1285.6)	
			80	46	47.644		1295.7	(336.0)	
STRADLEY, 1940	552	"	28	30	10.450		321.7	(1525.3)	
			80	46	45.629		1240.9	(390.8)	
TITUSVILLE MUNICIPAL WATER TANK CENTER 1934	190	"	28	36	34.096		1049.6	(797.5)	
			80	48	32.516		883.4	(746.7)	
TITUSVILLE SE BASE, 1934	"	"	28	37	27.134		835.3	(1011.8)	
			80	49	23.157		629.0	(1000.8)	
J-25, 1934	FGS BREVARD	"	1,556,859.4		6,859.4 (3,140.6)		2090.7	(957.3)	
			558,420.0		8,420.0 (1,580.0)		2566.4	(481.6)	
J-27, 1934	"	"	1,554,104.4		4,104.4 (5,895.6)		1251.0	(1797.0)	
			561,637.5		1,637.5 (8,362.5)		499.1	(2548.9)	

1 FT. = 3048006 METER
COMPUTED BY B.F. Lampton

DATE September 29, 1948

CHECKED BY R.R. Wagner

DATE October 4, 1948

M-2388

MAP T-9169 PROJECT NO. Ph-30(48)

SCALE OF MAP 1: 20,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS	DATUM CORRECTION	N.A. 1927 - DATUM		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
						FORWARD	(BACK)	
J-28	1934	PGS BREVARD	1,550,802.3	802.3 (9,197.7)		244.5	(2803.5)	
			561,629.7	1,629.7 (8,370.3)		496.7	(2551.3)	
TS-22,	1934	"	1,535,368.74	5,368.74 (4,631.26)		1636.4	(1411.6)	
		5	557,963.35	7,963.35 (2,036.65)		2427.2	(1620.8)	
TS-16,	1934	"	1,556,284.0	6,284.0 (3,715.0)		1915.4	(1132.6)	
		5	560,493.3	493.3 (9,506.7)		150.4	(2897.6)	
J-33,	1934	"	1,535,283.98	5,283.98 (4,716.02)		1610.6	(1437.4)	
		3	561,104.07	1,104.07 (8,895.93)		336.5	(2711.5)	
J-40,	1934	"	1,535,242.97	5,242.97 (4,757.03)		1598.1	(1449.9)	
		3	564,763.82	4,763.82 (5,236.18)		1452.0	(1596.0)	
TS-35,	1934	PGS BREVARD	1,527,701.22	7,701.22 (2,298.78)		2347.3	(700.7)	
		5	569,758.11	9,758.11 (241.89)		2974.3	(73.7)	
J-42,	1934	"	1,529,291.63	9,291.63 (708.37)		2832.1	(215.9)	
		4	568,588.26	8,588.26 (1,411.74)		2617.7	(430.3)	
J-43	1934	"	1,526,769.40	6,769.40 (3,230.60)		2063.3	(984.7)	
		4	570,151.32	151.32 (9,848.68)		46.1	(3001.9)	
J-25A,	1934	"	1,556,344.3	6,344.3 (3,655.7)		1933.7	(1114.3)	
		3	559,303.0	9,303.0 (697.0)		2835.6	(212.4)	
J-41-A,	1934	"	1,530,481.45	481.45 (9,518.55)		146.7	(2901.3)	
		3	567,423.61	7,423.61 (2,576.39)		2262.7	(785.3)	
TS-15,	1934	"	1,556,377.5	6,377.5 (3,622.5)		1943.9	(1104.1)	sta not shown on manuscript
		5	559,203.6	9,203.6 (796.4)		2805.3	(242.7)	lack of space.
J-23,	1934	"	1,559,911.80	9,911.80 (88.20)		3021.1	(26.9)	
		2	556,626.63	6,626.63 (3,373.37)		2019.8	(1028.2)	

1 FT. = 3048006 METER
COMPUTED BY B.F. Lampton

DATE September 29, 1949

CHECKED BY R.R. Wagner

DATE October 4, 1948

M-2388

MAP T. 9169 PROJECT NO. Ph-30(48) SCALE OF MAP 1: 20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		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)
✓ J-24-2, 1934	FGS BREVARD 2	N.A. 1927	1,558,444.5 557,497.6	8,444.5 (1555.5)		2573.9 (474.1)			
SUB STA. J-34 1934	Comp.BFL RHW	"	1,535,387.80 552,674.25	5,387.80 (4612.20)		2285.3 (762.7)			
SUB STA. J-36 #2 1934	"	"	1,532,808.39 543,762.65	2,674.25 (7325.75)		1642.2 (1405.8)			
✓ J-34 1934	FGS BREVARD 3	"	1,535,342.97 554,798.16	2,808.39 (7191.61)		856.0 (2192.0)			
Note: Stations used in Radial Plot that falls out side limits of Project are as follows:									
AL-18, 1934	FGS ORANGE 2	"	1,527,662.63 494,292.64	3,762.65 (6237.35)		1146.9 (1901.1)			
AL-20, 1934	"	"	1,527,695.95 503,866.97	5,342.97 (4,657.03)		1628.5 (1419.5)			
J-36, 1934	FGS BREVARD 3	"	1,532,867.49 535,624.52	4,798.16 (5,201.84)		1462.5 (1585.5)			
TS-33, 1934	"	"	1,530,224.98 528,435.63						
AL-23, 1934	FGS ORANGE 3	"	1,530,236.99 521,358.03						
AL-22, 1934	FGS ORANGE 3	" 2	1,529,798.58 517,595.63						
AL-21, 1934	"	"	1,527,728.61 505,930.63						

1 FT. = 3048006 METER

COMPUTED BY: B.F. Lampton

DATE September 29, 1948

CHECKED BY: R.R. Wagner

DATE October 4, 1948

M-2388

MAP T. 9169	PROJECT NO. Ph-30(48)	SCALE OF MAP 1:20,000	SCALE FACTOR
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MAP T. 9169	PROJECT NO. Ph-30(48)	SCALE OF MAP 1:20,000	SCALE FACTOR
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MAP T. 9169	PROJECT NO. Ph-30(48)	SCALE OF MAP 1:20,000	SCALE FACTOR
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[illegible]

1 FT. = .3048006 METER

COMPUTED BY: E. H. Ramey

DATE 14 Sept. 1950

CHECKED BY:.....C. Theurer.....

DATE 14 Sept. 1950

T-9169

26 & 27. CONTROL AND RADIAL PLOT:

A special report on the main radial plot written by M.M. Slavney, Photogrammetric Engineer, was submitted to the Washington Office March 28, 1949, *Covers T-9169 through T-9174 and is filed in General Files, Division of Photogrammetry.*

28. DELINEATION:

The photographs were clear and of very good scale, with the exception of 48J-476, which was tilted.

The field inspection was adequate for an accurate delineation of the manuscript with the exceptions noted on the discrepancy overlay.

Additional detail points were cut in radially to insure an accurate delineation of the manuscript.

W. W. Dawsey delineated the southeast part of the quadrangle which lies south of the drainage canal, the shoal areas, shallow areas, and all geographic names.

29. SUPPLEMENTAL DATA:

1. Resurvey plat T22S, R35E, dated 1916.
2. Photostatic copy of map showing property lines and Section Corner positions of Titusville-Cocoa Municipal Airport, in boundary report.

For disposition of these maps see Item 37E, F. See Item 69B

30. MEAN HIGH-WATER LINE:

The mean high-water line was delineated according to the field inspector's notes. However, the compiler is doubtful, after a careful examination of the photographs under the stereoscope, if the apparent shoreline is the edge of low grass, immediately offshore, on the west side of Indian River. A definite shoreline was shown instead, and a grass in water symbol was placed offshore. This should be investigated by the field editor.

31. LOW WATER AND SHOAL LINES:

See Descriptive Report, Item 8.

Shoal areas were shown on the manuscript wherever they could be seen clearly on the photographs. These areas parallel the Intra-coastal Waterway and are actually spoil deposits and below the water at all times.

32. DETAILS OFFSHORE FROM THE HIGH-WATER LINE:

A wreck, shown on chart 844 at approximate latitude $28^{\circ} 48.2'$ longitude $80^{\circ} 48.2'$ was not recovered by the field inspector and should be investigated by the hydrographic party or field editor if wreck is above mean high-water. *37.1' EHR*
See item 67

33. WHARVES AND SHORELINE STRUCTURES:

All wharves and shoreline structures have been delineated on the map manuscript according to the field inspector's notes.

34. LANDMARKS AND AIDS TO NAVIGATION:

A. See Descriptive Report Item 11.

Charts 844 and 1245 shows a landmark, charted as "Tower" at Indian River City, at approximate latitude $28^{\circ} 33.4'$, longitude $80^{\circ} 47.9'$ which was not recovered by field inspector. The field editor should recommend this landmark for charting or deletion.
See item 56

B. The position of Indian River North Light 95 was previously established by triangulation in 1940. Two theodolite cuts taken to this light confirm its plotted position. The third cut, which was doubtful, fell off the station presumably because the azimuth station was only 50 meters from the instrument station and the station to be cut in was more than two and a half miles away. The field editor should check the position of this station and Form 526 submitted. Angles from station "NK (USE) 1931," used as an instrument station to cut in Indian River North Lights 107 and 115 were discarded, as "NK" plotted position could not be held in the main radial plot.
See items 56 and 68 B

The theodolite cuts from stations "NJ(USE) 1931" and "STRADLEY 1940" used as instrument station to cut in Indian River North Lights 107 and 115 were penciled on the sheet, but should be used with caution by the field editor, as the azimuth station was very near the instrument station.

Indian River North Lights 107 and 115 were formerly triangulation stations established in 1940. Lt. 107 was reported lost in 1941, and the Intra Coastal Waterway Light List for 1948 shows that Lt. 115 was rebuilt in 1943. Form 526 should be submitted for Lt. 115, however.

The Titusville Yacht Basin daybeacons, on the northern part of the sheet, were cut in from the angles shown on the list of directions submitted by the field inspector. *See item 67.*

35. HYDROGRAPHIC CONTROL:

Not applicable

36. LANDING FIELDS AND AERONAUTICAL AIDS:

See Descriptive Report Item 13.

37. BOUNDARY MONUMENTS AND LINES:

See Item 69A

A. City Boundary of Titusville:

This boundary was delineated on the manuscript from the legal description and with the aid of boundary monuments recovered by the field inspector.

B. Boundary of Brevard County Farm and Home:

This boundary was shown on the re-survey plat of T22S R35E, dated 1916, but was omitted from the manuscript until further investigation by the field editor. *See item 57*

C. Airport Boundaries:

See Descriptive Report, Item 13.

D. Section Corners and Lines:

All section corners recovered were cut in radially if pricked direct or by the photo point method.

Section lines were drawn by W.W. Dawsey, with the aid of recovered section corners, the General Land Office Plats and the re-survey plat of T22S R35E.

E. Northern Boundary of Delespine Grant:

This line was drawn with the aid of recovered monuments and the re-survey plat of T22S R35E.

See Item 69 D

F. Section corners shown on the photo-static copy of a map showing property lines, the area of which was going to be used for an airport (now the Titusville-Cocoa Municipal Airport) have plane coordinate positions. This map is bound in the project boundary report. These corners were disposed of as follows: *Filed in General Files, Div. of Photogrammetry*

$\frac{33}{3}$ | $\frac{34}{2}$ and $\frac{34}{2}$ | $\frac{35}{2}$ T22S, T23S R35E were plotted very close to the field inspector's recovered position.

$\frac{3}{10}$ | $\frac{2}{11}$ and $\frac{2}{11}$ | $\frac{1}{12}$ T23S R35E. The "Y" coordinates of these stations are believed correct, but the "X" coordinates are believed to be in error. These corners were plotted and found to be in error up to 220 meters from known detail, shown on photostatic copy of map and matching detail on manuscript. Field editor should make an attempt to locate a corner in this area. *See Item 69 C*

G. A section line ozalid print has been prepared for the field editor to check. Discrepancies have been noted on this print.

Precinct lines have been shown on this ozalid print.

Section and precinct lines will be inked on the map manuscript after field edit verification.

38. GEOGRAPHIC NAMES: 814 ✓

All geographic names have been applied to the map manuscript.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

See item 62

There are no topographic quadrangles available in this office for comparison.

A comparison was made with Planimetric Map 4531 that falls within the northern $2\frac{1}{2}$ minutes of the quadrangle.

The shoreline is in fairly good agreement except around the Titusville Yacht Basin. The new bridge across the Indian River at Titusville created considerable changes in the shoreline from that shown on the planimetric map.

Some new roads have been added and much of the marsh area has been drained by ditches since date of compilation of planimetric map.

45. COMPARISON WITH NAUTICAL CHARTS:

See also items 32 and 65

A comparison was made with Chart 844 bearing a print date of June 6, 1948 and Chart 1245 bearing a print date of March 15, 1948. On both charts the shoreline is in good agreement considering the scale.

See item 34A of this report relative to a landmark charted as "Tower".

The mouth of the drainage canal shown on both charts at approximate latitude $28^{\circ} 32.5'$ longitude $80^{\circ} 47.2'$, actually falls on that point of land northwest of the presently charted mouth, at approximate latitude $28^{\circ} 32.7'$ longitude $80^{\circ} 47.3'$; Moreover, the actual canal begins about one mile from the shore and from this point east is more or less a meandering stream.

A new bridge across the Indian River at Titusville has been built since correction dates of charts.

Additional streets have been added at Indian River City.

Additional ditches are shown on the manuscript between Titusville and Indian River City.

Marsh areas, shown on Chart 1245, have now been mapped as intermittent ponds or cleared areas due to construction of drainage ditches.

The map compilation should supersede the charted information.

Respectfully submitted,

Irving I. Saperstein
Irving I. Saperstein
Cartographic Aid

Approved and Forwarded:

Ross A. Gilmore
Ross A. Gilmore 8/15/49
Chief of Party.

FIELD EDIT REPORT T-9169

51. METHODS

Field edit was accomplished by traversing, via truck, all passable roads, 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, sextant and tape methods were used to make corrections and additions not shown on the photographs. Corrections, additions and deletions have been noted on the field edit sheet.

On the field edit sheet, red ink was used for corrections and additions in planimetry, violet ink for contours, green ink for deletions. Black ink was used for all work on the photographs.

The reviewer's questions are answered on the discrepancy prints whenever possible. All work shown on the photographs is properly referenced on the discrepancy print.

Field edit information appears on the following photographs: 48J-473, 474, 484, ⁴⁸⁶485, 571, 681, 682 and 684.

52. ADEQUACY OF COMPILATION

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

53. MAP ACCURACY

The horizontal position of the map detail appeared good. The contouring in three small areas was corrected. With these corrections added, the topographic expression of the quadrangle is good.

54. RECOMMENDATIONS

None.

55. EXAMINATION OF PROOF COPY

It is believed that Frank P. Schuster, Brevard County Engineer, Titusville, Florida, is best qualified to examine a proof copy of this quadrangle.

56. LANDMARKS AND AIDS TO NAVIGATION

Forms 524 and 567 are submitted for a previously charted landmark, "TOWER".

Two lights, Nos. 107 and 115, and a slatted pile were located by planetable on the field edit sheet. Form 567 is submitted. Light 115 was formerly a triangulation station established in 1940. The Intracoastal Waterway Light List for 1948 indicates that Light 115 was rebuilt in 1943. According to planetable fix, which was a strong fix, Light 115 is not in the same position as in 1940. Form 526 is submitted.

See item 68B

57. BOUNDARY MONUMENTS AND SECTION LINES

See items 37 and 69

The official boundary limits for the Brevard County Farm and Home have been indicated on the field edit sheet. (Note: The data for this boundary was obtained from the Tax Assessor's Office in Titusville, Fla.)

Information in regards to one point on line of the north boundary of the Delespine Grant has been noted on the section line discrepancy print. This data was obtained from Frank P. Schuster, Brevard County Engineer, Titusville, Florida.

~~Seven~~ ^{Six *ENR*} additional ~~boundary~~ ^{Section *ENR*} monuments were recovered and identified on the photographs. Forms 524 are submitted.

58. GEOGRAPHIC NAMES

In answer to the reviewer's question concerning "Bird Lake", this area continues to be called Bird Lake even though drainage ditches have been cut to drain it, and in extremely dry seasons it becomes dry.

Fox Lake as shown on the manuscript is correct; authority for same: Frank P. Schuster, Brevard County Engineer, Titusville, Florida, resident 16 years; C.L. Graham, Deputy Circuit Court Clerk, Brevard County, Titusville, Florida, resident 35 years; M.J. Edwards, Tax Assessor, Brevard County, Titusville, Florida, resident 40 years.

Approved and Forwarded:

Ross A. Gilmore

Ross A. Gilmore, 1/11/50
Chief of Party.

James E. Hundley
James E. Hundley
Cartographer (Photo.)
December 2, 1949

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS/OR LANDMARKS FOR CHARTS

STRIKE OUT ONE

TO BE CHARTED
T0/B0/D0/L0/E0

Titusville, Florida

2 March 1949

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

The positions given have been checked after listing by

Stanley J. Hathorn
Cartographer (Photo)

George E. Morris, Jr.
George E. Morris, Jr. Chief of Party.
Lieut. Comdr.

STATE FLORIDA

STATE FLORIDA		Lieut. Comdr.											
CHARTING NAME	DESCRIPTION	POSITION				DATUM	METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	OFFSHORE CHART	CHARTS AFFECTED		
		LATITUDE		LONGITUDE									
		°	'	D. M. METERS	°	'	D. P. METERS						
LOW TANK	black, metal, 85' high. (Titusville Black Water Tank)	28	36	655.6	80	48	1042.3	NA	triang.	1940	X	X	844 1245
STACK	white, metal, 75' high. (Titusville White Stack)	28	36	1215.4	80	48	1436.9	"	"	"	X	X	844 1245
HIGH TANK	silver, metal, 100' high. (Titusville, Mun. W.T., Center)	28	36	1049.6	80	48	883.4	"	"	1934	X	X	844 1245

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation if redetermined shall be reported on this form. The data should be considered for the charts of the area and not be

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS OR CHARTS

TO BE CHARTED
~~TO BE DELETED~~

STRIKE OUT ONE

Titusville, Florida

2 March

19 49

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

The positions given have been checked after listing by ~~Irving I. Sangerstein~~
Tampa Photogrammetric Office

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

STATE	FLORIDA	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION			DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	OFFSHORE CHART	CHARTS AFFECTED
					LATITUDE		LONGITUDE						
					°	'	D. M. METERS						
		INDIAN RIVER NORTH LIGHT 95			28 35		80 47		I. A.	1927	X		8444
		INDIAN RIVER NORTH LIGHT 107			28 32		80 46		"	"	X		8444
		INDIAN RIVER NORTH LIGHT 115			28 30		80 45		"	"	X		8444
		INDIAN RIVER NORTH LIGHT 120			28 37	238.9	80 49	1464.2	"	Triang.	1934	X	1245
		TITUSVILLE YACHT BASIN			28 37	901	80 48	530	"	ad. Plot	1949	X	8444
		"	"	3	28 37	740	80 48	669	"	"	"	X	8444
		"	"	4	28 37	781	80 48	700	"	"	"	X	8444
		"	"	5	28 37	584	80 48	800	"	"	"	X	8444
		"	"	6	28 37	620	80 48	831	"	"	"	X	8444
Note: Structure descriptions as listed in the 1948 Light List for Intracoastal Waterway adequate for above aids.													

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not be

U. S. COAST AND GEODETIC SURVEY

"PHOTOGRAMMETRIC REVIEW SECTION"

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

~~TO BE CHARTERED~~ STRIKE OUT ONE
~~TO BE DELETED~~

Titusville, Florida **November 4, 1949**

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

The positions given have been checked after listing by

I. I. Saperstein

Zemlya Fotografometricheskoe

Port A. Kilmore

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

PHOTODUPLICATION REVIEW SECTION
U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED ~~DO NOT EXCEED~~ STRIKE OUT ONE

Titusville, Fla. November 4, 1949

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

The positions given have been checked after listing by I. I. Saperstein

Ross A. Gilmore
Lieut. Comdr.

Chief of Party.

STATE	FLORIDA	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION						METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
					LATITUDE		LONGITUDE		DATUM							
					°	'	D. M. METERS	°		'						
		LA. 107	Black Sq. daymark with yellow border on pile structure.		28 32	1271	80 46	310	NA-1927	Planetable 7-9169	Oct. 1949	X			1245	
		LA. 115	Black Sq. daymark with yellow border, on pile structure.		28 30	1283	80 45	1264	"	"	"	X			"	
		Slatted pile	Single pile, slatted signal at top.		28 32	1331	80 46	322	"	"	"	X			"	

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

Tiptonville, Tenn.

November 4, 1961

The positions given have been checked after listing by

ROSS A. GILBERT
Lieut. Colonel

Chief of Party,

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

STRIKE OUT ONE

Washington, D. C. 10 August, 1950

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

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

Forwth H. Ramsey

The positions given have been checked after listing by Everett . 3/22/47

S. V. Griffith

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

T-9169 33
(Ph-30)

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

POST-OFFICE ADDRESS: P. O. Box 127
Titusville, Florida

16 March 1949

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

To: District Engineer
Jacksonville District
Corps of Engineers
P. O. Box 4970
Jacksonville 1, Florida

Subject: Navigable Clearances of new Titusville Bridge

The new concrete bridge at Titusville was carefully measured on 28 February 1949 for nautical chart purposes, and the required information is listed below:

Type of Span - Swing
Navigable Spans - 2 center spans
Horizontal Clearances:
East Span - 80.8 ft.
West Span - 80.8 ft.

Vertical Clearances above estimated MHW:
- East Span - 8.1 ft.
West Span - 8.1 ft.

The above information is not listed in the current "List of Bridges Over the Navigable Waters of the U. S.", and your concurrence is requested prior to final submission by this office for charting.

George E. Morris, Jr.
Lt. Comdr. USC&GS
Chief of Party

SJH/c
cc: The Director

Copy

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
OFFICE OF THE DISTRICT ENGINEER
JACKSONVILLE DISTRICT
575 RIVERSIDE AVENUE
JACKSONVILLE 1, FLORIDA

1 April 1949

Department of Commerce
U. S. Coast and Geodetic Survey
P. O. Box 127
Titusville, Florida

Gentlemen:

Reference is made to your letter dated 16 March 1949 and to reply by this office on 23 March 1949, in regard to clearances of the new highway bridge across Indian River in Titusville, Florida.

The vertical clearance at the bridge has been determined by this office, based on the datum plane customarily used by the Department of the Army. This clearance was found to be 10 feet above mean low water at the swing pier fender, and 15 feet above that datum at the rest pier fender. The horizontal clearances of 80.8 feet stated in your letter of 16 March 1949 agree substantially with the horizontal clearances as determined by this office.

FOR THE DISTRICT ENGINEER:

Sincerely yours,

/s/J. E. VEALE
Lt Colonel, Corps of Engineers
Executive Officer

Endorsement

Letter from field office to District Engineer dated 16 March reported clearances as shown in Field Inspection Report for Quad-range T-9169, Project Ph-30(48), and letter from District Engineer dated 23 March acknowledged receipt of field office letter dated 16 March.

George E. Morris, Jr.
Lt. Comdr. U.S.C. & G.S.
Chief of Party

Copy

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

P. O. Box 127
Titusville, Florida

POST OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:
22 April 1949

To: The Director
U. S. Coast and Geodetic Survey
Washington 25, D. C.

Subject: Navigable Clearances of new Titusville Bridge

Reference: Letter to District Engineer, Jacksonville District, dated 16
March 1949

Enclosed are copies of two letters from the District Engineer, dated 23 March and 1 April 1949, that are self-explanatory.

After receipt of letter dated 1 April, the minimum vertical clearance for both closed spans was checked by fourth-order leveling methods from nearby bench mark NDM-3(USNS) and found to be 9.8 ft. above MSL for each span.

Copies of this letter and letter from District Engineer dated 1 April are being forwarded to the Tampa Photogrammetric Office for inclusion in the Field Inspection Report for Quadrangle T-9169, Project Ph-30(48).

George M. Morris, Jr.
Lt. Comdr. U. S. C. & G. S.
Chief of Party

SJM/e
cc: Tampa Photogrammetric Office

GEOGRAPHIC NAMES

Survey No. T-9169

7 1/2' quad. East Coast Fla.

1 Name on Survey

	A	B	C	D	E	F	G	H	K	
Florida									USGB	1
Brevard County										2
<u>Intracoastal Waterway</u>									USGB	3
Indian River										4
Florida East Coast										5
U.S. No. 1										6
State No. 50 Cheney Highway					(not Chenny)					7
State No. 405										8
State No. 402					(From Titusville across bridge to Merritt Island) <i>eastward. ENR</i>					9
State No. 406 (?)					(East-west in Titusville: 405 branches from it to southward)					10
Bellwood										11
Burns Hammock										12
Titusville-Cocoa Municipal Airport										13
Addison Point										14
Bird Lake (?)					(Names Report by Bass shows it west of Addison Point on canal about long. 51')					15
Indian River City										16
Blue Hole					(in traffic circle on No. 50)					17
Brevard County Farm and Home										18
Whispering Hills Golf Estates					(new municipality inc. in 1949)					19
Delespine Grant										20
Fox Lake (?)					(Not in Names Report by Bass nor is any lake shown on County Highway map)					21
South Lake										22
Titusville										23
Titusville Yacht Basin										24
Titusville Municipal Airport										25
Sand Point										26
Bridge (?)					(Bass reported that name of old wooden structure was Walker Bridge, but that some other name probably would be chosen for new bridge)					27

GEOGRAPHIC NAMES

Survey No. T-9169

2	Name on Survey	<div> <div>On Chart No.</div> <div>On previous survey No.</div> <div>On U. S. quadrangle Maps</div> <div>From local information</div> <div>On local Maps</div> <div>P. O. Guide or Map</div> <div>Rand McNally Atlas</div> <div>U. S. Light List</div> </div>										
		A	B	C	D	E	F	G	H	K		
	<u>Merritt Island</u>										1	
	<u>Gator Creek</u>										2	
	<u>Catfish Creek</u>										3	
	<u>Brock Creek</u>										4	
	<u>Brock Flats</u>										5	
											6	
											7	
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Names underlined in red
are approved. 9-7-49

L. Heck

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Review Report of
Topographic Map T-9169
13 September 1950

62. Comparison with Registered Topographic Surveys.-

T-1422	1:20,000	1875-76
T-1435	"	1876
T-4531	"	1928
T-6823	1:10,000	1941
T-6824	"	1941

T-9169 is to supersede these prior surveys for nautical charting purposes.

63. Comparison with Maps of Other Agencies.- None

64. Comparison with Contemporary Hydrographic Surveys.- None

65. Comparison with Nautical Charts.-

1245	1:80,000	48-6/21
844	1:40,000	48-3/15

See item 45 and 67. The construction of the new bridge and the removal of a sunken wreck are the chief items affecting nautical charting.

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

67. Details Offshore from the Mean-high-water-line.-The sunken wreck referred to under item 32 no longer exists. This information was reported on the field edit sheet, filed in General Files, Division of Photogrammetry.

68. Landmarks and Aids to Navigation.-

- A. The positions of the six daybeacons, referred to under item 11, were compared with the positions given on Hydrographic Survey No. 6727, scale 1:10,000, dated 1941 and were found to agree.
- B. The position of Indian River North Light 115 obtained by the field editor (item 56) appeared in error relative to the position for the adjacent channel which was positioned by radial plot methods during this review. It was noted that the field inspector observed directions to this light by theodolite from triangulation stations "Stradley, 1940" and "N.J.(USE), 1940" using the opposite one of these stations for an initial direction in each

case. This is a distance of approximately 800 ft. which should give directions, if computed, of higher precision than the field editor's planetable directions (contrary to the compiler's statement under item 34B). Thus, the directions from stations "Stradley, 1940" and "N.J.(USE), 1940", were used in conjunction with two planetable directions by the field editor to arrive at a new strong fix. This new position more closely agrees with the radially plotted position of the channel. Also the direction from "N.J.(USE), 1940" to "Indian River North Light 107" was computed as above and found to intersect the planetable position by the field editor, thus giving a check on directions from "N.J.(USE) 1940". Form 567 has been submitted for the new position.

69. Boundaries and Section Lines.-

- A. A new municipality, incorporated in 1949 and known as "Whispering Hills Golf Estates", was added to the manuscript during this review in accordance with descriptions submitted in the Boundary Report Supplement for project Ph-30 (48), filed in the General Files, Division of Photogrammetry.
- B. Townships T-22S, R34E and T-22S, R35E have been subdivided by the General Land Office prior to surveying the Delespine Grant. Evidently some surveys within Delespine Grant are referenced to these section monuments, i.e. the corporate limits of the City of Titusville. A resurvey of T-22S, R35E was made in 1916 by L. R. Paxton, Brevard County Engineer, copy of which is filed in the General Files, Division of Photogrammetry. This resurvey matches the lines of culture on the map, but it does not agree with the original General Land Office survey. Therefore, it was concluded that the resurvey does not depict the true section lines, and consequently all lines within the Delespine Grant were omitted from this map. However, all recovered monuments were retained because they might be of possible future value.

Section monuments $\frac{4}{3}$, $\frac{9}{10}$, $\frac{33}{34}$ and $\frac{34}{35}$
 $\frac{9}{10}$ $\frac{16}{15}$

Page 3
T-9169

in T-22S, R35E are in agreement with the original plot. The reliability of the three monuments at the approximate position of 12/7, T-22S, R34 & 35E and monument on 13/18 the manuscript at 8, T-22S, R35E could not be ascertained.
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- C. According to the General Land Office plats, townships T-23S, R34 & 35E have not been subdivided.
- D. The northern boundary of the Delespine Grant was repositioned during this review by holding to the two recovered monuments and using this line in conjunction with the General Land Office plats to extend the line westward. This procedure checked throughout.

Reviewed by:

Everett H. Ramey
Everett H. Ramey

APPROVED

S. V. Giffin 6/19/52
Chief, Review/Section
Div. of Photogrammetry

H. C. Munster
Chief, Nautical Chart Branch
Division of Charts

O. S. Reading
Chief, Div. of Photogrammetry

Carl O. Heston
Chief, Div. of Coastal Surveys

HISTORY OF HYDROGRAPHIC INFORMATION

T-9169, Florida

Hydrography was applied to the manuscript of this quadrangle in accordance with Division of Photogrammetry request of 21 September 1950, and with general specifications of 18 May 1949.

The depths are in feet at mean low water and originate with the following surveys and charts:

USC&GS Hydrographic Surveys

H-6727 (1941) 1:10,000

H-6664 (1941) 1:10,000

USC&GS Nautical Chart

844 (1949) 1:40,000

Bottom contours are shown at 6 feet.

The hydrography was compiled by R. E. Elkins and checked by G. F. Jordan.

R. E. Elkins

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