

# 10829

Diag. Cht. Nos. 685 and 1243-2.

Form 504

U. S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

## DESCRIPTIVE REPORT

Type of Survey Planimetric  
Field No. Ph-5802 Office No. T-10829

### LOCALITY

State Florida  
General locality St. Johns River  
Locality Arlington Heights

1958-59

CHIEF OF PARTY  
J.P.Randall, Chief of Field Party  
A.L.Wardwell, Tampa District Office

### LIBRARY & ARCHIVES

DATE October 1961

USCOMM-DC 5087

10829

DESCRIPTIVE REPORT - DATA RECORD

T-10829

Project No. (II): **PH-5802**      Quadrangle Name (IV):

Field Office (II): **Jacksonville Florida**      Chief of Party: **James P. Randall**

Photogrammetric Office (III): **Tampa Florida**      Officer-in-Charge: **Arthur L. Wardwell**

Instructions dated (II) (III): **3 July 1958**      Copy filed in Division of  
Photogrammetry (IV)

Method of Compilation (III): **Stereoscopic Instrument (Kalsh Plotter)**

Manuscript Scale (III): **1:10,000**      Stereoscopic Plotting Instrument Scale (III): **1:5,000**

Scale Factor (III): **Pantographed to 1:10,000**

Date received in Washington Office (IV): **MAY 3 - 1958**      Date reported to Nautical Chart Branch (IV):

Applied to Chart No.      Date:      Date registered (IV): **1/18/61**

Publication Scale (IV):      Publication date (IV):

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

~~Mean sea level~~ concept 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): **MITCHELL 1926** ✓

Lat.: **30° 22' 24.465"** (753.4m)      Long.: **81° 34' 30.021"** (801.6m)      Adjusted  
~~Unadjusted~~

Plane Coordinates (IV):      State: **Florida**      Zone: **East** ✓

Y = **2,196,120.43 Ft.**      X = **318,669.67 Ft.**

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.



DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): Jerome E. Tolodziecki  
Joseph E. Wilson  
Oliver J. Weber  
Date: Oct. 1958  
Jan. 1959  
Jan. 1959

Planetable contouring by (II): Inapplicable  
Date:

Completion Surveys by (II): Inapplicable  
Date:

Mean High Water Location (III) (State date and method of location): Air photo compilation

Date of Photographs: 8 May 1958

Projection and Grids ruled by (IV): P. Dempsey (W.O.)  
Date: Aug. 1958

Projection and Grids checked by (IV): Shoup (W.O.)  
Date: Aug. 1958

Control plotted by (III): E. Pursel  
Date: Feb. 1959

Control checked by (III): E. Pursel  
Date: Feb. 1959

~~Radial Plot~~ or Stereoscopic  
Control extension by (III): Washington Office  
Date: Jan. 1959

Planimetry E. T. Ogilby  
Stereoscopic Instrument compilation (III):  
Date: July 1959

Contours Inapplicable  
Date:

Manuscript delineated by (III): E. T. Ogilby  
Date: July 1959

Photogrammetric Office Review <sup>of compilation</sup> by (III): I. I. Saperstein  
Date: Nov. 1959

Elevations on Manuscript  
checked by (II) (III): Inapplicable  
Date:

DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): Single-lens Wild "S"

Number	Date	Diapositives		Scale	Stage of Tide
		PHOTOGRAPHS (III)			
		Time			
58S2975 ✓	8 May 1958	10:21 ✓	1:25,000 ✓		0.7 ✓
58S2976 ✓	"	10:22 ✓	"		0.7 ✓
58S2977 ✓	"	10:22 ✓	"		1.2 ✓
58S2998 ✓	"	10:35 ✓	"		inapplicable
58S2999 ✓	"	10:35 ✓	"		0.6 ✓
58S3000 ✓	"	10:36 ✓	"		0.6 ✓

Predicted Tide (III)

Reference Station: Mayport

Subordinate Station: Jacksonville (Dredge Depot)

Subordinate Station: Jacksonville (R.R. Bridge)

Dame Point  
Phoenix Park (Cummers Mill)

Washington Office Review by (IV):

Final Drafting by (IV): R. E. Smith, Tampa District Office

" " Reviewed: W. H. Shearouse Tampa District Office

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III): 12.7 ✓

Shoreline (More than 200 meters to opposite shore) (III): 12.6 ✓

~~Shoreline (Less than 200 meters to opposite shore) (III):~~

Control Leveling - Miles (II): Inapplicable

Number of Triangulation Stations searched for (II): 16 ✓ Recovered: 12 ✓

Number of BMS searched for (II): 9 Recovered: 9 ✓

Number of Recoverable Photo Stations established (III): 2 \* ✓

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

Remarks: \* Not monumented

Ratio of Ranges	Mean Range	Spring Range
	4.5 ✓	5.3 ✓
0.44	2.0 ✓	2.3 ✓
0.33	1.5 ✓	1.7 ✓
0.27	2.0 ✓	2.3 ✓

Date: Sept. 1960

Date: March 1960

Date: Sept. 1960

Date: 18 Jan. 1961

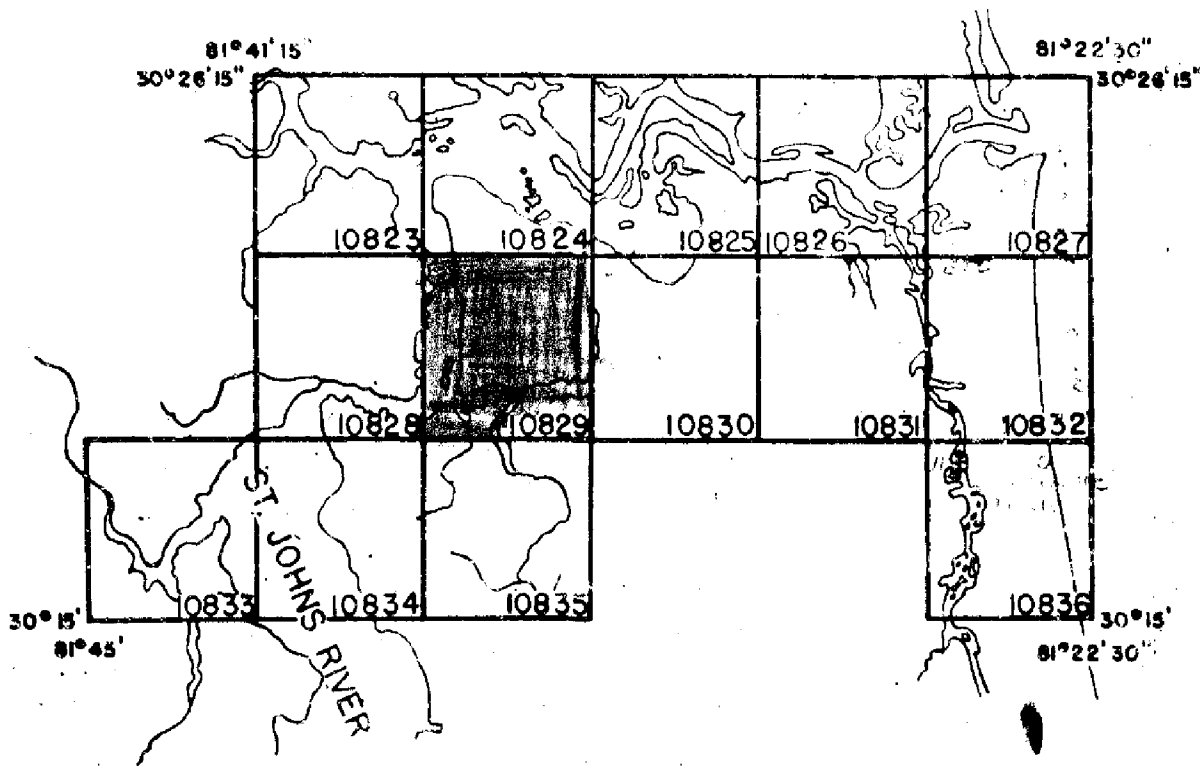
Identified: 7 ✓

Identified: 2 ✓

# PROJECT PH - 5802

## Planimetric Mapping

### Florida, St. Johns River



Official Mileage for Cost Accounts

Sheet No.	Area Sq. Mi.	Lin. Mi. Shoreline			
10823	11.9	16.7			
10824	8.0	23.4			
10825	11.9	34.1			
10826	14.3	27.1			
10827	6.4	15.8			
10828	13.5	9.2			
10829	12.7	12.6			
10830	12.7	3.8			
10831	15.6	10.1			
10832	11.1	8.2			
10833	10.3	21.5			
10834	8.0	7.6			
10835	15.6	6.3			
10836	13.7	8.2	Total	Area	Lin. M.
				164.7	205.2

**SUMMARY**

**To Accompany Planimetric Map Manuscripts  
T-10823 through T-10836**

Subject surveys represent Planimetric Mapping Project PH-5802. It consists of fourteen (14) T-sheets, which cover the northern portion of the St. Johns River - from the entrance on the Atlantic Coast to the city of Jacksonville - in the State of Florida.

T-10823 through T-10836 were compiled by stereoscopic instrument methods (Kelsh Plotter) in 1958-59 at the Tampa District Office. The compilations are based on single-lens photography of May 1958 and field inspection of 1958-59. Advanced shoreline information and control (compiled at the Washington Office by stereoplanigraph) was made available to support hydrographic surveys of 1958-59.

The submitted map manuscripts are the result of adequately scribed sheet and after minor corrections and improvements during Washington Office Review, suitable for direct reproduction of permanent file copy.

Crenar film positives at the compilation scale of 1:10,000 and the Descriptive Reports will be registered and filed in the Bureau Archives.

October 1960

FIELD INSPECTION REPORT

IS SUBMITTED WITH

T-10824



MAP T-10829

PROJECT NO. 5802

SCALE OF MAP 1:10000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\mu$ -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)	
Floral 1926	PC 36	NA 27	2 186 181.09	✓	668 949.3		666 349.3	✓	Plotted
			307 557.09	✓	95 843.6		93 743.6	✓	Purcell 27 Feb 59
Mitchell 1926	PC 9	NA 27	2 196 120.43	✓	671 478.8		669 378.8	✓	
			318 669.67	✓	99 230.7		97 130.7	✓	
Priggs 2 (use) 1926	PC 36	NA 27	2 189 710.99	✓	669 525.2		667 425.2	✓	
			307 100.06	✓	95 704.3		93 604.3	✓	
Bogelow (use) 1908	PC 40	NA 27	2 182 718.55	✓	667 394.0		665 293.9	✓	
			306 933.25	✓	95 653.4		93 553.4	✓	
Jay 1932	PC 4	NA 27	2 173 436.45	✓	664 564.7		662 464.8	✓	
			324 849.81	✓	101 114.4		99 014.4	✓	
Electra (use) 1926	PC 36	NA 27	2 192 980.59	✓	670 521.8		668 421.8	✓	
			303 432.79	✓	94 586.5		92 486.5	✓	
Arlington 1926	PC 36	NA 27	2 181 731.85	✓	667 093.2		664 993.2	✓	
			306 891.04	✓	95 640.6		93 540.6	✓	
Bank (use) 1908	PC 36	NA 27	2 195 298.93	✓	691 228.4		669 128.5	✓	
			305 853.10	✓	95 324.2		93 224.2	✓	
Harbor Line RM #30 1926	PC 41	NA 27	2 177 395.46	✓	665 771.4		663 671.5	✓	
			306 771.23	✓	95 604.0		93 504.1	✓	
Beacon #5 1926	PC 40	NA 27	2 190 688.75	✓	669 823.3		667 723.3	✓	
			307 692.44	✓	95 884.8		93 784.8	✓	
Matthews (use) 1926	PC 36	NA 27	2 177 616.68	✓	665 838.9		663 738.9	✓	
			306 757.52	✓	95 599.9		93 499.9	✓	
Pauline (use) 1908	PC 39	NA 27	2 197 141.31	✓	671 790.0		669 690.0	✓	
			317 991.24	✓	99 023.9		96 923.9	✓	

1 FT. = 3048006 METER

COMPUTED BY: F. Purcell

DATE 16 February, 1959

CHECKED BY: J. M. S.

DATE 2/19/59

COMM. DC. 57843

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COMPILATION REPORT - T-10829

PHOTOGRAMMETRIC PLOT REPORT

Stereoscopic bridge report submitted by the Washington Office is included in report for T-10827.

31. DELINEATION

The Kelsh Plotter was used for the compilation. The field inspection was adequate. The photographs were clear and no difficulty was encountered with their interpretation.

32. CONTROL

The primary and secondary control was adequate and placement was very good.

33. SUPPLEMENTAL DATA

None was used.

34. CONTOURS AND DRAINAGE

Contours are inapplicable.

Drainage that was difficult to see on the photographs was indicated by the field inspector. Some of the drainage in Strawberry Creek was changed from the field inspection by the compiler where it could definitely be seen under the Kelsh Plotter.

35. SHORELINE AND ALONGSHORE DETAILS

The field inspector indicated and labeled the shoreline and alongshore features on the photographs. They were compiled as noted.

36. OFFSHORE DETAILS

All offshore details as noted by the field inspection have been shown.

37. LANDMARKS AND AIDS

All landmarks and aids not previously located by triangulation were located by the Kelsh Plotter. Forms 567 are submitted with this report.

38. CONTROL FOR FUTURE SURVEYS

Two photo-stations were located by Kelsh Plotter. Being natural objects no Form 524 was submitted. The stations and descriptions are listed under Item 49.

39. JUNCTIONS

Junctions have been made with T-10824 to the north, T-10828 to the west, T-10830 to the east and T-10835 to the south.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

Comparison had been made with USGS quadrangle ARLINGTON 1:24,000 edition of 1950. Many man made changes have occurred including the development of new subdivisions and new bridges across the St. Johns and Arlington Rivers.

Comparison has been made with planimetric maps T-5667, T-5669, T-5670 surveyed to 1939 and T-5671 surveyed to 1934, all of 1:10,000 scale. The same differences were noted as referred to in the above.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison had been made with Chart 577 1:40,000 edition of 25 Feb. 1957 revised to 22 June 1959. The chart compares favorably with the manuscript and was evidently prepared from later surveys than that listed under Item 46.

A wreck shown on the chart at approximate Lat. 30°19.1' Long. 81°36.5' does not appear on the manuscript.

Bluffs shown on the chart at Empire Pt. and Floral Bluff were omitted from the manuscript as they were believed to be of insufficient importance to map, after examination under the Kelsh Plotter.

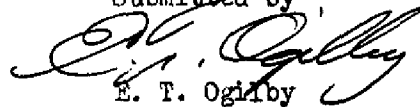
ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

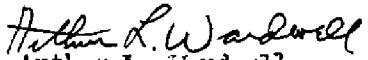
None

Submitted by



E. T. Ogilby  
Cartographer

Approved and Forwarded



Arthur L. Wardwell  
Chief of Party

48. GEOGRAPHIC NAME LIST

Arlington  
Arlington River

Clifton

Duval County

Eggleston Heights  
Empire Point

Floral Bluff  
Florida

Indian Mound

\*Jacksonville

Lake Lucina  
Little Fottsburg Creek

Mitchell Bluff

Newcastle Creek

Pauline Island  
Fottsburg Creek

Red Bay Branch

Silversmith Creek  
Southern Pond  
\*St Johns River  
\*Strawberry Creek

Woodland Acres

\* B.G.N. Decision

*George S. Bace*  
GEOGRAPHIC NAMES SECTION  
30 OCTOBER 1960

49. NOTES TO THE HYDROGRAPHER

Two (2) topographic stations were established.

SOUTHEAST APEX OF BRIDGE 1958

CHIMNEY, CENTER OF LARGE TWO STORY RED BRICK HOUSE 1958







PHOTOGRAMMETRIC OFFICE REVIEW OF ADVANCE MANUSCRIPT

T. 10829

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

4a Classification label unclassified

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy IIS 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) IIS 7. Photo hydro stations XX 8. Bench marks WHS  
9. Plotting of sextant fixes XX 10. Photogrammetric plot report W.O. 11. Detail points XX

ALONGSHORE AREAS

(Nautical Chart Data)

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

PHYSICAL FEATURES

20. Water features WHS 21. Natural ground cover WHS 22. Planetable contours XX 23. Stereoscopic instrument contours XX 24. Contours in general XX 25. Spot elevations XX 26. Other physical features WHS

CULTURAL FEATURES

27. Roads WHS 28. Buildings WHS 29. Railroads WHS 30. Other cultural features WHS

BOUNDARIES

31. Boundary lines XX 32. Public land lines XX

MISCELLANEOUS

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

40. William H. Shearouse Milton M. Slavner  
Reviewer Supervisor, Review Section or Unit  
WILLIAM H. SHEAROUSE MILTON M. SLAVNER

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:

Review Report of  
Planimetric Map Manuscripts T-10823 through T-10836  
October 1960

62. Comparison with Registered Topographic Surveys:

T-411	1:10,000	1853
T-550	1:10,000	1855
T-551	1:10,000	1855
T-552	1:10,000	1855-56
T-712	1:10,000	1858
T-713	1:10,000	1858
T-963	1:10,000	1864
T-965	1:10,000	1864
T-1232b	1:20,000	1871
T-1459a	1:20,000	1876-77
T-2027	1:50,000	1875
T-4068	1:20,000	1924
T-4084	1:20,000	1924
T-5235	1:10,000	1933
T-5664	1:10,000	1935
T-5665	1:10,000	1933-39
T-5666	1:10,000	1933-39
T-5667	1:10,000	1933-39
T-5669	1:10,000	1933-39
T-5670	1:10,000	1939
T-5671	1:10,000	1933
T-5672	1:10,000	1933
T-6376b	1:10,000	1934
T-6487a&b	1:10,000	1934
T-6488a&b	1:10,000	1934
T-11093	1:20,000	1957-58
T-11454	1:10,000	1951-54

Cultural and shoreline changes have been continuous and extensive. Considerable differences exist between topographic survey of 1951-54 and the land area of effected sheet of subject surveys. T-10823 through T-10836 are to supersede above-listed surveys of identical areas and detailing for nautical charting purposes.

63. Comparison with Maps of Other Agencies:

Trout River, Fla.,	1:24,000, 1948,	U.S. Geological Survey
Eastport, Fla.,	1:24,000, 1948,	" " "
Mayport, Fla.,	1:24,000, 1948,	" " "
Jacksonville, Fla.,	1:24,000, 1948,	" " "
Arlington, Fla.,	1:24,000, 1948,	" " "
Jacksonville Beach, Fla.,	1:24,000, 1948,	" " "

These topographic quadrangles seem inadequate in consideration of all the changes caused by growth and development of subject area.

64. Comparison with Contemporary Hydrographic Surveys:

H-8107	1:10,000	1954
H-8412 (plus add. work)	1:20,000	1958-59
H-8462	1:20,000	1958-59
H-8463	1:10,000	1958-59
H-8464	1:10,000	1959

Fort George Inlet as shown on H-8107 has been subjected to considerable changes - see T-10827 for shoreline of 1958-59. Advanced shoreline and control of subject surveys was furnished to aid in the construction of remaining hydrographic surveys (H-8412, 8462 through 8464) and in the comparison, no major differences were noted.

65. Comparison with Nautical Charts:

569	1:40,000	Revised to 12/8 1958
577	1:40,000	" " 12/21 1959
685	1:40,000	2nd Ed. 12/7 1959
1243	1:80,000	Revised to 2/22 1960

There are minor shoreline differences throughout. Considerable differences exist at Fort George Inlet and at the entrance of St. Johns River as depicted on Chart 569 (with inset of these features at scale 1:10,000). Charts 577 and 1243 are effected accordingly. The position of "BISAUPT CHANNEL DIRECTIONAL LIGHT" at the southwest corner of Hayport Basin - as shown on Chart 569 - should be corrected also from available information from 1958 and as indicated on T-10827.

Dome Point - Fulton Cutoff Light 40, 1958 at the mouth of Alligator Creek should be added to Chart 577 (see T-10825).

**66. Adequacy of Results and Future Surveys:**

Subject T-sheets (14) have been compiled according to instructions and meet the requirements of adequacy and accuracy. Future frequent surveys of subject area are recommended because of continuous growth and development.

Reviewed by:

*Josef J. Streifler*  
Josef J. Streifler

Approved:

*L. C. Landy*  
Chief, Review & Drafting Sec.  
Photogrammetry Division

*J. G. Wainwright* 10/16/61  
Chief, Nautical Charts Division

*L. F. Woodcock*  
Chief, Photogrammetry Division

*J. Bowie*  
Chief, Operations Division

