

# THE FLORIDA SURVEYOR

December 2023

Volume XXXI, Issue 11

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Balancing Demands

Unconquered Florida Seminoles

Captain James Hook







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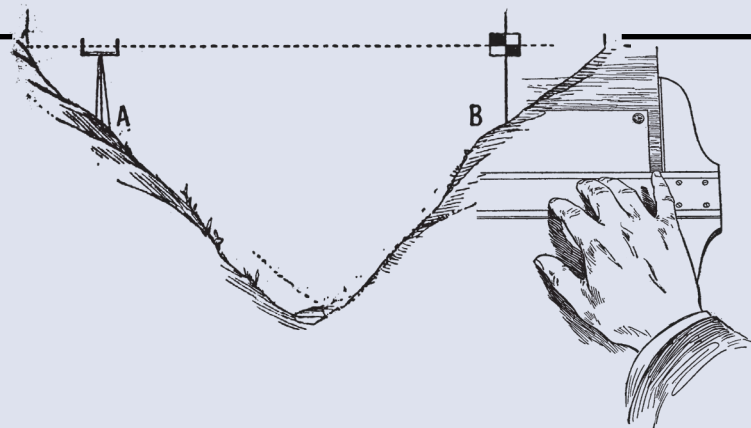
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THE FLORIDA SURVEYOR is the official publication of the Florida Surveying and Mapping Society, also known as FSMS. It is published monthly for the purpose of communicating with the professional surveying community and related professions who are members of FSMS. Our award winning publication informs members eleven months out of the year about national, state, and district events and accomplishments, as well as articles relevant to the surveying profession. In addition, continuing educational courses are also available.



# PRESIDENT'S Message

November 11<sup>th</sup>, 2023



First of all, ***Merry Christmas***. I hope you and your family have a wonderful time together celebrating the birth of Jesus.

I would like to thank those that have joined FSMS in 2023 and encourage you to [renew your membership](#) and participate at your local chapter in 2024. In addition, I'd like to congratulate the Collier-Lee, Indian River, Manasota, Northwest FL and Ridge Chapters for their successful fundraising events. We appreciate and thank all of the sponsors and participants because it is your support that keeps these events fun and exciting. Also when renewing, for those interested we encourage you to join Geospatial Users Group (\$25 fee to join) and the Young Surveyors Network for members 39 and under (\$10 fee to join).

Currently, FSMS has a recruitment bonus program for current members that bring in new members. The Recruitment Bonus will be a Conference Packet One Registration (*includes 1 Wed. BBQ Ticket, 1 Fri. Exhibitor's Luncheon Ticket, 1 Fri. Recognition Banquet, & 6 Saturday Seminar CECs*) along with a 2 Night Stay at the DoubleTree by Hilton Hotel Orlando at SeaWorld. In order to participate, whenever a new member fills out their membership form, they must add your name when asked if they were referred by a current member. 6 Points will be awarded for each new Full Member, Government Surveyor, and Sustaining Firm, while 1 Point will be awarded for each new Associate, Affiliate, and Student Member. A New Member is defined as any individual who has not ever been a member or has not been a member of FSMS for the past two years. Whichever member has the most points accumulated between November 15, 2023, and March 31, 2024 will be deemed the winner and their name will be announced in the April 2024 edition of *The Florida Surveyor*.



**President**  
**Howard Ehmke**  
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# PRESIDENT'S Message

The Strategic Planning session is set for April 11<sup>th</sup> (full day) & 12<sup>th</sup> (half day), 2024 in Gainesville, Florida. We'll be posting more specifics in January. In the meantime, if you have anything you would like us to consider at the session please send your responses to our Executive Director Rebecca Porter, at [director@fsms.org](mailto:director@fsms.org).

Lastly, there is always an opportunity to get more involved by donating to the PAC ([Click Here](#)), FSMS Scholarships ([Click Here](#)), and/or the Disaster Relief Fund ([Click Here](#)).

Thank you.

Respectfully submitted.  
Howard J. Ehmke II



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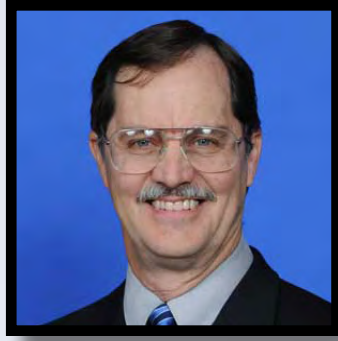


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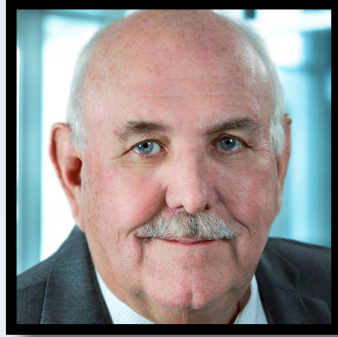


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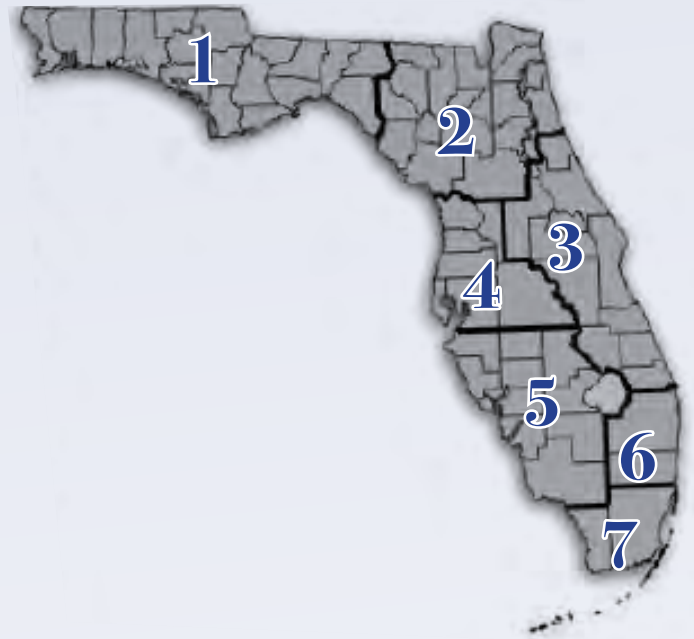
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# 2023-24 Committees

## Standing Committees

Nominating Committee	Rick Pryce
Membership Committee	Nick DiGruttolo
Finance Committee	Bon Dewitt
Executive Committee	Howard Ehmke
Education Committee	Greg Prather
Annual Meeting Committee	Allen Nobles
Legal Committee	Jack Breed
Strategic Planning Committee	Rick Pryce
Ethics Committee	Shane Christy
Legislative Committee	Jack Breed
Surveying & Mapping Council	Randy Tompkins
Constitution & Resolution Advisory Committee	Eric Stuart

## Special Committees

Equipment Theft	Manny Vera, Jr.
Awards Committee	Lou Campanile, Jr.
UF Alumni Recruiting Committee	Russell Hyatt
Professional Practice Committee	Lou Campanile, Jr.
Workforce Development Committee	Allen Nobles

## Liaisons

CST Program	Alex Jenkins
FDACS BPSM	Don Elder
Surveyors in Government	Richard Allen
Academic Advisory UF	Justin Thomas
FES	Lou Campanile, Jr.

## Practice Sections

Geospatial Users Group	Earl Soeder
Young Surveyors Network	Melissa A. Padilla Cintron, SIT



## A Bullseye of Fun at the Florida Surveying and Mapping Society Ridge Chapter Ax-Throwing Fundraiser!



### Ax-Caliber in Lakeland Hosts a Whirlwind of Excitement with Over 40 Participants

Lakeland, FL - In a surprising twist to the usual surveying and mapping activities, the Florida Surveying and Mapping Society Ridge Chapter recently organized a fundraiser that had participants hitting the bullseye – quite literally! The unconventional event took place at Ax-Caliber in Lakeland on November 17th, 2023, and proved to be a roaring success with over 40 enthusiastic participants.

The night was filled with laughter, camaraderie, and a healthy dose of competitive spirit as surveyors and mappers put down their maps and picked up axes. The venue, Ax-Caliber, provided the perfect setting for a unique and thrilling experience, complete with expert instructors to guide the participants through the finer points of ax-throwing.

"It's not every day you see surveyors and mappers trading in their precision instruments for axes, but tonight's event showcased a different kind of accuracy – one of hitting a target dead center with a sharp axe. It's all in good fun, and the funds raised will go towards supporting the local Ridge Chapter in promotion and protecting of the surveying profession, making it a win-win for everyone involved," said event organizer, Sherry Kirkland of 30 South Surveying and Mapping.

The event kicked off with a brief safety demonstration, ensuring that participants were well-versed in the art of ax-throwing. Once everyone had their bearings, the throwing lanes came alive with cheers and groans as axes soared through the air, attempting to hit the elusive bullseye.





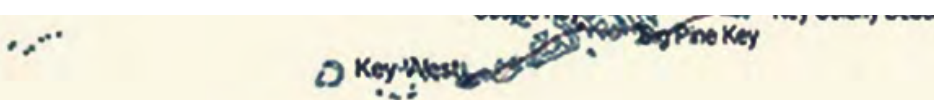
Between throws, participants enjoyed delicious snacks and beverages, adding a social flair to the affair. The atmosphere was electric, with the clatter of axes hitting the target providing a rhythmic backdrop to the evening's festivities.

As the event came to a close, winners were crowned, and smiles were abundant. Congratulations are in order for Chris Cullins (first place), Joey Kirkland (second place), and Zoie Cronin (third place). The Florida Surveying and Mapping Society Ridge Chapter Ax-Throwing Fundraiser not only showcased the adventurous side of surveyors and mappers but also brought the community together for a night of unconventional fun, all while contributing to a worthy cause.

Who knew that surveying and mapping could be this thrilling? One thing is for certain – the Ridge Chapter's Ax-Throwing Fundraiser has earned its place in the record books as a unique and unforgettable event in Lakeland. Here's to more bullseyes and fundraising success in the years to come!

# round the State

Chapter President Kenneth Glass hits the bullseye.







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*Karol Hernandez  
with UF Geomatics*





1<sup>st</sup> Place Winner Chris Cullins with Chapter Treasurer Sherry Kirkland.



2<sup>nd</sup> Place Winner Joey Kirkland with Chapter Treasurer Sherry Kirkland.



3<sup>rd</sup> Place Winner Zoie Cronin with Chapter Treasurer Sherry Kirkland.







**Collier-Lee Chapter's 3<sup>rd</sup> Annual Clay Tournament:**  
 We would like to thank all of our sponsors for our 3rd Annual Clay Tournament!! We couldn't do it without you!! We will have some happy holiday families this year!!





Malone









Malone  
Sunrise  
Beach  
Fort Saint  
Palach



**Northwest FL Chapter  
Charity Sporting  
Clay Shoot:  
Thank You to all of the  
Participants & Sponsors!**







## Northwest FL Chapter Christmas Party!

From L to R: Jeremiah Slaymaker (2011-2012 FSMS Past President & Current Chapter President) with his wife, Janet. Melissa Seitzinger, Kevin Mears, Pam & Allen Nobles (Vice President), and Chad Thurner (Current Northwest FL Director).





# 2023 SCHOLARSHIPS

*Congratulations*



Jiping Cao  
University of Florida



Brianna Parsons  
Florida Atlantic University



Lemuel Roberts  
Florida Atlantic University



Douglas Stoner  
University of Florida

# 2023 SCHOLARSHIPS

*Congratulations*



Congratulations to the recipients of the 2023 FSMS Broward Chapter Scholarships!

Your dedication and outstanding achievements have truly set you apart.

- Ethan Jiping Cao (UF)
- Brianna Parsons (FAU)
- Lemuel Roberts (FAU)
- Douglas Stoner (UF)

Wishing each of you continued success in your academic pursuits and future endeavors. The FSMS Broward Chapter is proud to support and celebrate your achievements.

This event is presented and coordinated by the officers of the FSMS Broward Chapter: Benjamin Hoyle, Scott McLaughlin, Earl Soeder, Maria Barboza, Edward Jones, Joseph Mangino, and Dr. Youssef Omar Kaddoura.

# 2023 SCHOLARSHIPS

*Congratulations*





# MAP CONTEST

## Congratulations to the Winners



**1st**  
Nithish Manikkavasagam  
Florida Atlantic University



**2nd**  
Orlando Gonzalez  
University of Florida



**3rd**  
Giulliana Tiravanti Beoutis  
Broward College

*Thank You!*  
to our sponsors



Exciting News!  
Thrilled to announce the winners of the GIS Day - MAP CONTEST!

The generosity of our sponsors (Biscayne Engineering Company, Inc., Bowman Consulting, Caulfield & Wheeler, Inc. (CWI), CTS Engineering, Inc., KEITH and DRMP) allowed the event to be a phenomenal success.

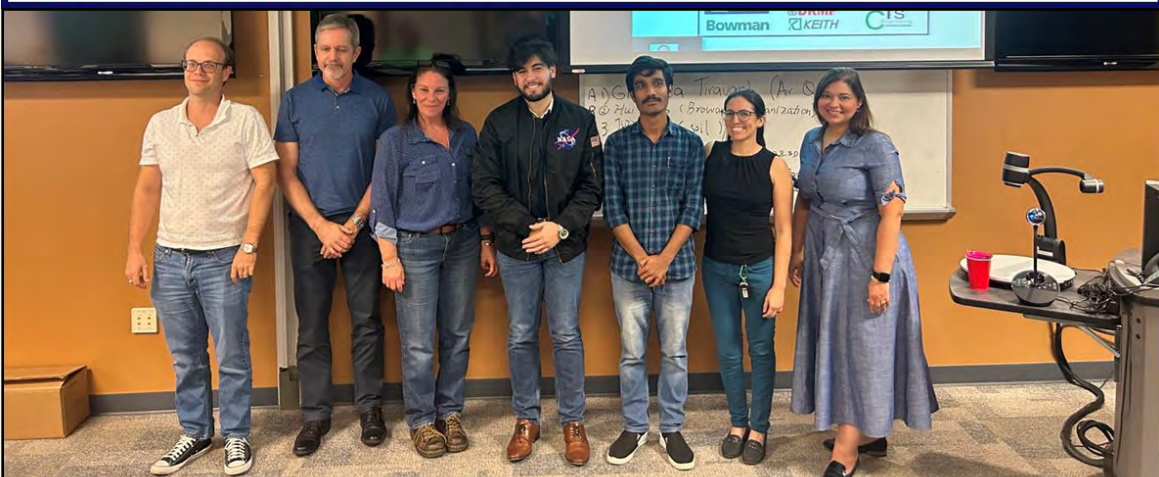
1. FIRST PLACE: Nithish Manikkavasagam (FAU)
2. SECOND PLACE: Orlando A. Gonzalez (UF)
3. THIRD PLACE: Giulliana Tiravanti Beoutis (Broward College)

A huge congratulations to each winner!

Your maps not only captivated us but also inspired the geospatial community.

Special thanks to everyone who participated.

Thank you all for being a part of GIS Day - MAP CONTEST. A big round of applause to the FSMS Broward Chapter Officers for their tireless efforts: —Benjamin Hoyle, Scott McLaughlin, Earl Soeder, Maria Barboza, Edward Jones, Joseph Mangino, and Dr. Youssef Omar Kaddoura.







# Surveyors in Government

December 2023

This month, I am writing to you to address a few items of note instead of writing about one topic per se. The first item of note is to inform you of the legislation for House Bill (H.B.) 267 and now three related bills, two senate and one house. As of last week, you currently have the following: HB 267, HB 665, Senate Bill (S.B.) 684, and SB 812. With so many related bills, you can see the power this legislation has behind it and how soon they have been introduced. This was all presented before the new year. Most legislation is typically introduced after the new year.

The screenshot shows the Florida Senate website interface. At the top, there is a navigation bar with the Florida Senate logo and the text "THE FLORIDA SENATE". Below this is a search bar and a menu with options like Home, Senators, Committees, Session, Laws, Media, About, Offices, Reference, and Tracker. The main content area is titled "HB 267: Residential Building Permits" and includes a description of the bill, its effective date (7/1/2024), and a list of related bills and actions. A "Bill History" table is visible at the bottom of the screenshot.

DATE	CHAMBER	ACTION
10/24/2023	House	• Filed
11/2/2023	House	• Referred to Regulatory Reform & Economic Development Subcommittee • Referred to Local Administration, Federal Affairs & Special Districts Subcommittee • Referred to Commerce Committee • Now in Regulatory Reform & Economic Development Subcommittee
12/6/2023	House	• PCS added to Regulatory Reform & Economic Development Subcommittee agenda

## HB 267: Residential Building Permits

**GENERAL BILL** by Esposito

Residential Building Permits; Requires governing bodies to create program to expedite process for issuing residential building permits; provides









## Surveyors in Government

59 Section 1. Section 177.073, Florida Statutes, is created  
60 to read:

61 177.073 Expedited approval of residential building permits  
62 before a final plat is recorded.-

63 (1) As used in this section, the term:

64 (a) "Final plat" means the final tracing, map, or site  
65 plan presented by the subdivider to a governing body for final  
66 approval, and, upon approval by the appropriate governing body,  
67 is submitted to the clerk of the circuit court for recording.

68 (b) "Local building official" has the same meaning as in  
69 s. 553.791(1).

70 (c) "Plans" means any building plans, construction plans,  
71 engineering plans, or site plans, or their functional  
72 equivalent, submitted by an applicant for a building permit.

73 (d) "Preliminary plat" means a map or delineated  
74 representation of the subdivision of lands that is a complete  
75 and exact representation of the residential subdivision and





## Surveyors in Government

76 contains any additional information needed to be in compliance  
77 with the requirements of this chapter.

78 (2) (a) By August 15, 2024, a governing body that has  
79 30,000 residents or more shall create a program to expedite the  
80 process for issuing building permits for residential  
81 subdivisions in accordance with the Florida Building Code and  
82 this section before a final plat is recorded with the clerk of  
83 the circuit court.

84 (b) A governing body that has a program in place before  
85 July 1, 2024, to expedite the building permit process, need only  
86 update their program to approve an applicant's request to issue  
87 up to 50 percent of the building permits for the residential  
88 subdivision in order to comply with this section.

89 (3) A governing body shall create:

90 (a) A two-step application process that includes the  
91 adoption of a preliminary plat and a final plat in order to  
92 expedite the issuance of building permits under this section.

93 The governing body shall maximize its administrative processes  
94 to expedite the review and approval of applications, plats, and  
95 plans submitted under this section.

96 (b) A master building permit process consistent with s.  
97 553.794(3) for applicants seeking multiple building permits for  
98 planned residential subdivisions.

99 (4) An applicant may use a private provider consistent  
100 with s. 553.791 to review a preliminary plat and building permit





## Surveyors in Government

101 for each residential building or structure.

102 (5) A governing body may work with appropriate local  
103 government agencies to issue an address and a temporary parcel  
104 identification number for lot lines and lot sizes based on the  
105 metes and bounds of the plat contained in the application.

106 (6) If an applicant requests a certain number or  
107 percentage of building permits in his or her application, the  
108 governing body must issue the number or percentage requested in  
109 accordance with the Florida Building Code, provided the  
110 residential buildings or structures are unoccupied and all of  
111 the following conditions are met:

112 (a) The governing body has approved a preliminary plat for  
113 each residential building or structure.

114 (b) The applicant provides proof to the governing body  
115 that the applicant has given a copy of the approved preliminary  
116 plat, along with the approved plans, to the relevant electric,  
117 water, and wastewater utilities.

118 (c) The applicant holds a valid performance bond for up to  
119 120 percent of the necessary utilities, roads, and stormwater  
120 improvements that have not been completed upon submission of the  
121 application under this section.

122 (7)(a) An applicant may contract to sell, but may not  
123 transfer ownership of, a residential structure or building  
124 located in the residential subdivision until the final plat is  
125 approved by the governing body and recorded in the public





## Surveyors in Government

126 records by the clerk of the circuit court.

127 (b) An applicant may not obtain a final certificate of  
128 occupancy with respect to each residential structure or building  
129 for which a building permit is issued until the final plat is  
130 approved by the governing body and recorded in the public  
131 records by the clerk of the circuit court.

132 (c) An applicant must indemnify and hold harmless the  
133 governing body and its agents and employees from damages  
134 accruing and directly related to the issuance of a building  
135 permit for a residential building or structure located in the  
136 residential subdivision before the approval and recording of the  
137 final plat by the governing body. This includes damage resulting  
138 from fire, flood, construction defects, and bodily injury.

139 (8) For purposes of this section, an applicant has a  
140 vested right in a preliminary plat that has been approved by a  
141 governing body if all of the following conditions are met:

142 (a) The applicant relies in good faith on the approved  
143 preliminary plat.

144 (b) The applicant substantially changes his or her  
145 position, including making improvements pursuant to s.  
146 177.301(9), or incurs other obligations and expenses.

147 (c) Any change by the governing body would constitute an  
148 inequitable interference in the approved preliminary plat.

149 (9) After a governing body creates the program required  
150 under this section, the local building official shall send by





## Surveyors in Government

151 certified mail, return receipt requested, to the Department of  
152 Business and Professional Regulation a signed, certified letter  
153 indicating that the program has been established. The letter  
154 must contain a brief explanation of the program, including how  
155 the program expedites the process of issuing building permits  
156 for residential subdivisions before the final plat is recorded.

157 Section 2. Subsection (16) of section 553.79, Florida  
158 Statutes, is amended to read:

159 553.79 Permits; applications; issuance; inspections.-

160 ~~(16) Except as provided in paragraph (c), a building~~

The sections above only pertain to the language proposed to be added to F.S. 177 Part I. The bill language continues to propose changes to Chapter 553, which is building construction standards and specifically, permits. The intent of the bill is because many feel there is an extensive housing shortage throughout the state. I am sure we each have our own opinions on the availability of adequate housing and the migration of populations coming from outside of Florida. We can also argue that the acquisition of real estate by investors is a substantial issue and part of the problem we are seeing. Those issues are big ones, but the problem is for local governments. This will be a big issue for those agencies that have never had to deal with development moving concurrently with the regulatory review of a plat. In the City of Orlando, we have been working with a hold-harmless agreement process that has allowed for development to occur while the plat is being reviewed, as long as there is a bond in place and an agreement that indemnifies the City from responsibility of development issues that may arise. These items are at the sole expense of the developer.

Does that mean these issues have not created problems for the City of Orlando, no, they have created issues. We have had houses that have been built within platted roadways. We have a number of continual issues where





## Surveyors in Government

improvements are outside of the easements they were platted to contain or private improvements that were constructed into the easement or right-of-way. That is why we have an as-built survey and boundary survey requirement that are part of our closeout process, and we would recommend anyone proposing their program to address this bill to do something similar to ensure their public interests are covered and that the public is protected as much as they can be.

On another note, I would like to take the time to write about the ability to find staff. We, as most government agencies, have been struggling to find staff to fill vacancies and to grow staff, where development is demanding more in terms of reviewing projects and other regulatory permitting requirements. With our agency, we are examining items for private development, and our Capital Improvements side has several large-scale projects that are ongoing and in the pipeline, which are demanding more of our services. This demand has increased the need to find adequate staff. We have had some success in hiring seasonal employees because we cannot hire staff who do not meet the requirements of the position and can allow for employee training so they can apply for permanent jobs that have benefits. I am currently working with our Human Resources Department to create a trainee program. Hopefully, we can hire permanent employees who lack the certifications or requirements for the current positions to train them to enter the current vacancies. In government, there is some difficulty in having specified positions, especially with the City being unionized for 95% percent of the positions in the Survey Section. It becomes challenging to create a position that has benefits and does not align with existing jobs in the organization. We continually support the National Society of Professional Surveyors Certified Survey Technician Program, but it is becoming extremely challenging to find those who already have the certification and allow those who do not to be hired by the City as they say if it is a requirement for the position, then we should not hire those who do not have it for any vacancies. The issue with this is that I never would have been hired by the City, as I did not have the certification when I started with the City. I have stated this, but it is a change in positioning from a different H.R. team than when I was hired, and we had both certified and uncertified positions. I would like to know what other agencies have done to





## Surveyors in Government

cultivate staff or to attract new employees to fill vacancies.

Lastly, I would like to take a moment to recognize the efforts of all the volunteers of FSMS and FSMS Staff for the hard work and dedication they put towards our profession to make it as good as it can be. We are stronger together, more informed, more educated. The quality level of the education and provided material, in my eyes, continues to grow; kudos to you, Sam, and all of the education volunteers. There are too many to list. The board leadership is focused on the betterment of the profession, engaging members, growing membership, and continuing involvement in the community and throughout the state. FSMS staff has participated in events from the FIG Working Week, Virtual Chapter Meetings, and wherever they are asked to step in and do so with effort. We have seen increased material in the Florida Surveyor by staff and contributors, and those are really great articles. The article placement is nice. Kudos to you, Justin, and to all of the contributors! Thank you for all that you do as well, Rebecca; you are ready to jump in on every call. I hear you in every virtual chapter meeting, and you are ready to be there to represent the society at a given notice. Everyone is stepping up their game, and it benefits us all! Kudos to you all, and I hope we continue to up the ante when it comes to volunteering and participating within our profession as it takes us all!!

Thank you for taking the time to read this article!

Sincerely,

Richard Allen,  
City Surveyor for the City of Orlando  
FSMS Surveyors in Government Liaison  
407.246.2788 (O)  
[Richard.Allen@orlando.gov](mailto:Richard.Allen@orlando.gov)



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Jim Bennett Board Member of the Year Award  
**Robert “Bob” Johnson**

Life Members of the Year Award  
**Dianne Collins & John Liptak**

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**Don Elder**

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Young Surveyor of the Year Award  
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**Florida Atlantic University (FAU)**

Perry C. McGriff Outstanding Civic Contribution Award  
**Richard Allen**

Steven Woods Exceptional Service Award  
**Lou Campanile, Jr.**

Honorary Member Award  
**Regenia Lee Cherry**

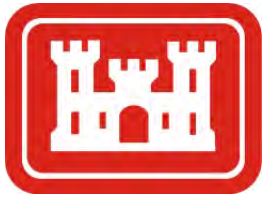
Chapter President of the Year Award  
**Brion D. Yancy**

Small Chapter of the Year Award  
**Indian River**

Large Chapter of the Year Award  
**Broward**







## CHAPTER THREE

# Balancing Demands: Implementing the Central and Southern Florida Flood Control Project, 1949-1960

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The inclusion of the C&SF Project in the Flood Control Act of 1948 was the first step in the implementation of a water management program in South Florida. Throughout the 1950s, the state of Florida, the newly created Central and Southern Florida Flood Control District (FCD), and the U.S. Army Corps of Engineers worked together to construct and operate the project works. The Corps and the FCD attempted to coordinate the project with interested federal, state, and local agencies, but by the end of the 1950s, it was clear that these entities all had different views as to how water should be distributed in South Florida. Agriculturists wanted water for their crops, while rapidly growing urban interests demanded water as well. Everglades National Park and FWS officials, meanwhile, claimed that the Corps needed to provide them with enough water to preserve plants, fish, and wildlife in the Everglades and other areas. By the end of the 1950s, the collision of these different demands seemed inevitable.

In order for work to commence on the C&SF Project in the late 1940s, the state of Florida needed to raise around \$3.25 million, its share of the construction cost of the first phase, as well as acquire the necessary lands and rights-of-way. Unfortunately, the federal law mandating these responsibilities (the Flood Control Act of 1948) was passed nine months before the state legislature was scheduled to meet, meaning that no action could be taken to fulfill these duties in 1948. In preparation for the 1949 legislative session, Governor Millard Caldwell established a committee to investigate what tax revenues could support the flood control plan, while other officials explored the creation of a new state agency to cooperate with the Corps in project implementation. The Okeechobee Flood Control District and the Everglades Drainage District (EDD) still existed, but the EDD did not have authority to operate for flood control and the Okeechobee district had jurisdiction over a limited area. According to Lamar Johnson, engineer for the EDD, several individuals, including himself, drafted bills to establish a local cooperating agency. The EDD also kept in close contact with the Corps during this period, receiving and clarifying information pertaining to local cooperation, and compiling engineering data in preparation for the beginning of construction.<sup>1</sup>

In April 1949, the Florida state legislature convened, passing three bills that pertained to state involvement in the C&SF Project. The first established the FCD as the major local agency to coordinate with the Corps on the project, replacing the Okeechobee Flood Control District. The second provided for the abolishment of the EDD after it had paid off its bonds, giving its responsibilities to the FCD. The third was the state's General Appropriations Act, which included \$3.25 million as the local share of the cost of the C&SF Project.<sup>2</sup>

The legislation authorizing the FCD established a five-member, non-salaried board, appointed by the governor for three-year overlapping terms, as the district's governing body. This board would have "full responsibility for the District's activities and interests."<sup>3</sup> One member of the board would become the executive director, who would serve with the executive







staff, which included the heads of seven different divisions within the district: land, operation and maintenance, finance, engineering, public information and research, administration, and legal. Soon after the legislature created the FCD, the five appointed board members – Dave Turner, Fred Bartleson, Joe S. Earman, N. J. Hayes, and Lawrence Rogers – organized the district officially, designating Turner as executive director. The board also established its headquarters at West Palm Beach. As created, the FCD encompassed all or part of 17 counties in Central and South Florida, totaling 15,570 square miles. Its major responsibilities, according to a 1955 publication, was “cooperative participation in the advancement of studies design and construction” of the C&SF Project, as well as land acquisition, water control, and regulation once the system was developed.<sup>4</sup>

At a subsequent meeting attended by numerous state officials and legislators, W. Turner Wallis, appointed as chief engineer of the district, expounded on the FCD’s functions. Essentially, he said, the FCD was “a cooperative agency between the State and the Federal Government and local interests in projects concerned with water conservation, flood and water control, and allied problems.” John C. Stephens, a research project supervisor with the Soil Conservation Service of the U.S. Department of Agriculture, explained how the FCD coordinated with these interests. According to Stephens, the FCD held regular meetings with Corps engineers during the planning stages of C&SF project works, providing “basic data on economic, social, and physical factors essential to project development.” The FCD received these data by “maintain[ing] close liaison with all agencies – Federal, State, and local – having an interest in problems of water conservation and control and natural resource developments.”<sup>5</sup> These included the U.S. Department of Agriculture, the U.S. Geological Survey, the FWS, the Florida Geological Survey, the Florida Game and Fresh Water Fish Commission, and the State Board of Conservation, among others. The FCD also held meetings with land action groups, county commissioners, subdrainage districts, and landowners in order to understand what local interests wanted from the project, and then presented these views to the Corps. After the Corps made its final construction plans, the FCD reviewed the proposals before they were sent out to bid, and then it worked to obtain necessary property and rights-of-way for construction.<sup>6</sup>

In order to perform these functions, the FCD needed money from the state, including the funds necessary to cover the state’s required contribution to the total cost of the project, and the financing to purchase lands and to provide operation and maintenance once the project was completed. The state legislature had created a flood control account in its general revenue fund, and had agreed to make occasional appropriations to the account, including the initial \$3.25 million required for construction. Other charges, such as for right-of-way purchases and for operation and maintenance, would come from an ad valorem tax on all real and personal property in the FCD, whereby the amount paid would depend on the value of the property. This meant that landowners in Dade, Broward, and Palm Beach counties would be responsible for 95 percent of the total tax.<sup>7</sup>

Using the money provided by the state, as well as the federal appropriation, the Corps began its construction of the C&SF Project. According to the FCD, there were several major components to be completed in the first phase of the program. First, the Corps would build a levee from northwest Palm Beach County to the south of Dade County along the east coast, thereby preventing flooding from the Everglades to the coastal communities. Second, the Corps



would modify control facilities and levees around Lake Okeechobee in order to create more water storage, and it would increase the discharge capacity from the lake in order to prevent flooding. Third, the Corps would create three water conservation areas in Palm Beach, Broward and Dade counties for water storage. Fourth, the Corps would construct canals, levees, and pumping stations to protect 700,000 acres of agriculture south of Lake Okeechobee in Palm Beach, Hendry, and Glades counties, known as the Everglades Agricultural Area (EAA). Fifth, the Corps would build canals and water control structures to handle drainage in Dade, Broward, Palm Beach, Martin, and St. Lucie counties.<sup>8</sup>

As this construction began, Corps representatives freely admitted that the C&SF Project as proposed in House Document 643 needed revising. Oscar Rawls, a spokesman for the Jacksonville District, informed state and local officials that because it had to produce a plan quickly, the Corps “in many instances” did not complete extensive studies of regional needs and instead relied on hasty estimates in its proposal. According to Rawls, the proposal was merely a quick report “stating the problems and in a preliminary sort of [way] an estimate of what the solution should be.” The Jacksonville District thus had only “a plan that they would use for the basic frame work [*sic*] on which further and more complete planning would take place.”<sup>9</sup> W. Turner Wallis, an engineer with the FCD, was even more blunt, stating that House Document 643 was “a hastily assembled document based on hydrological and agronomic data that even the most optimistic admitted was far from adequate.”<sup>10</sup> More studies of the needs of Central and South Florida were necessary, and in many ways, the Corps and other federal and state agencies learned about these needs as they went throughout the 1950s.


Regardless of the inadequacies, the Corps began construction, and the FCD commenced its responsibilities. One of the first tasks the FCD faced was the acquisition of lands to be used as water conservation areas. As a preliminary step, the district made a restudy of how large the areas should be, using the “knowledge and experience of engineers familiar with the hydrology of the Everglades.”<sup>11</sup> It recommended reductions in the three conservation areas proposed by the Corps in House Document 643 in order to keep valuable agricultural land and tracts held in trust for the Seminole Indians free from flooding. Smaller areas would also curb seepage rates, a problem because of the permeability of the limestone underlying the land. The FCD suggested that Water Conservation Area No. 1, originally proposed as 175,315 acres in the vicinity of Loxahatchee Marsh in Palm Beach County and supplied with water from the West Palm Beach and Hillsboro canals, be trimmed by 21,299 acres, while Conservation Area No. 2 in Broward County (containing water from the Hillsboro and North New River canals) be reduced from 142,259 acres to 135,187 acres. The largest decrease would occur in Conservation Area No. 3 in Dade and Broward counties (supplied by the North New River and Miami canals), which would be reduced from 671,411 acres to 563,724 acres. Over 130,000 total acres would be cut from the three areas, a 13.8 percent reduction.<sup>12</sup>

Despite the large acreage involved, the Corps agreed to the FCD’s suggestions, and in the early 1950s, the FCD purchased land for the water conservation areas. According to Lamar Johnson, who had been appointed assistant engineer of the FCD, “the landowners’ generally did not accept the appraised value of the lands,” meaning that “most of the lands were acquired by condemnation.”<sup>13</sup> However, some landowners insisted that they be allowed to retain their possessions because the possibility existed that they contained oil and gas. To appease these



54-ld

LEGEND

-  EXISTING PROJECT WORK
-  SPILLWAY
-  PUMPING STATION
-  CULVERT
-  LEVEE
-  LEVEE WITH HIGHWAY ON CROWN
-  CANAL
-  INDIAN RESERVATION



Map of WCAs 1, 2, and 3. (Source: U.S. Army Corps of Engineers, Jacksonville District.)



owners, the FCD acquired only flowage rights to the private land that it could not condemn, amounting to approximately 10 percent of the conservation areas. Although the FCD did not have full possession of this land, the flowage rights still allowed it “to flood the surface of the lands at any time and to any degree necessary.”<sup>14</sup> The land acquisition program for the conservation areas continued until its completion in 1954, upon which the FCD had purchased approximately 860,000 acres.

Yet in its land acquisition efforts, the FCD ran into some trouble with the Seminole Indians. As explained earlier, the state of Florida had moved the Seminole reservation out of the proposed boundaries of Everglades National Park in 1935. The new location of the reservation, however, infringed on the area where the Corps and the FCD wanted to build Conservation Area No. 3. In 1950, the Corps proposed to construct L-28, a north-and-south levee that would help impound water in Conservation Area No. 3, three miles east of the Hendry-Broward county line. The Seminole objected to this plan because the levee would bisect their reservation and cause more than half of their grazing and hunting lands to be used for water impoundment, making them virtually worthless. After Corps and Bureau of Indian Affairs officials convinced the Seminole that alignment would not harm them, alleging that land to the west of the alignment could not be used for agriculture anyway, the Indians retracted their objections, allowing the levee’s construction. Confirming Seminole fears, however, 16,000 acres east of the levee became part of Conservation Area No. 3, although the Indians could still use 12,000 acres to the west for grazing.<sup>15</sup>

As the FCD acquired land for the water conservation areas, it negotiated with both the FWS and the Florida Game and Fresh Water Fish Commission for the management of the areas. As early as 1946, the EDD had proposed that the FWS assume control over the conservation area in the vicinity of the Loxahatchee Marsh in order to provide a migratory bird refuge on the Atlantic and Mississippi flyways. The FWS agreed to the program, and when the area was finally created

as Conservation Area No. 1 in 1950, the Service purchased a 50-year lease from the FCD. After some consultations, the Corps approved the lease as long as the FWS’s management did not “interfere with the regulation and operation of conservation area 1 by the Corps of Engineers.”<sup>16</sup> Thereafter, the FWS operated Conservation Area No. 1 as the Loxahatchee National Wildlife Refuge.



**The Loxahatchee National Wildlife Refuge. (Source: South Florida Water Management District.)**



Yet tensions sometimes existed between the Corps and the FWS over Loxahatchee management. In 1952, for example, Roy Wood, the Service's regional supervisor complained that the Corps had organized an inspection trip of the C&SF Project for the House Public Works Committee, but had not included any FWS representatives in the planning or on the tour even though the FWS managed Conservation Area No. 1. This snub, Wood claimed, "clearly reveals the Corps of Engineers' mode of operation in the promotion of its program and perhaps the attitude which generally prevails in the Corps relative to active participation of other agencies in their affairs."<sup>17</sup> The Corps' oversight was probably more unintentional than deliberate, but Wood's complaint resonated with those who believed that the Corps did not regard fish and wildlife concerns as important as other parts of the C&SF Project.

In January 1952, the Florida Game and Fresh Water Fish Commission accepted responsibility over the other two water conservation areas, which were then designated as the Everglades Wildlife Management Area. According to the terms of the license agreement between Florida Game and the FCD, the commission would operate the areas "to attain the basic objectives of preservation, protection and propagation of wildlife and fish," as well as for recreational benefits. Measures would include developing wildlife environments and habitat, planting crops and plants "to increase the carrying capacity of the area for wildlife," and allowing controlled public hunting and fishing. However, the agreement clearly stated that the operation of the conservation areas for wildlife and fish objectives could not conflict with flood control and water retention.<sup>18</sup>

In addition to establishing the water conservation areas, the FCD and the Corps also investigated what other measures needed prioritization. One of the initial examinations was of the necessity of flood control work in the Kissimmee River Valley, located north of Lake Okeechobee. The Corps had performed survey work on the Kissimmee River, which flowed from Lake Tohopekaliga just south of Orlando into Lake Okeechobee, as early as 1901, receiving authorization under the River and Harbor Act of 13 June 1902 to maintain a channel in the river from 30 to 60 feet wide and three feet deep at ordinary low water from the town of Kissimmee to Fort Bassenger, a distance of about 100 miles. In the 1920s and 1930s, congressmen requested that the Corps investigate further improvements on the Kissimmee, including flood control, in order to make the land more suitable for ranching, but no action was taken.<sup>19</sup> When the Corps proposed Kissimmee River flood control as part of the C&SF plan, many Kissimmee Valley residents believed that they would finally receive the protection they desired. However, the Kissimmee plans were pushed aside in order to provide flood relief for the coastal communities and for the agricultural region south of Lake Okeechobee.

To alleviate the growing concerns of local citizens, the FCD held one of its first meetings in the town of Kissimmee.<sup>20</sup> At this gathering, Oscar Rawls of the Jacksonville District related that levees, improved channels, and impounding reservoirs were the three main ways to control floods in a valley. In the Kissimmee Basin, improved channels would be the most effective way, providing 90 percent of the flood relief. But since Kissimmee work was not part of the C&SF Project's first phase, the Corps could not act until Congress appropriated the necessary funds. According to U.S. Senator Claude Pepper, who also attended the meeting, "when the money will be available is a political problem rather than an engineering one." He promised the people that the Kissimmee region would be "taken care of in the course of the program," and counseled



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patience.<sup>21</sup> Kissimmee residents continued to clamor for flood control work, especially after more flooding in the latter part of 1949, but Chief of Engineers Major General Lewis A. Pick reported again that, although “the flood situation in the Kissimmee Valley is even more serious than that revealed by the flood of 1947,” the Corps could do nothing until Congress appropriated the necessary money.<sup>22</sup>

As concerns with the Kissimmee River Basin grew, the Corps investigated the feasibility of authorizing other phases of the C&SF Project. In November 1952, the Corps, the FCD, and the state of Florida held a conference to discuss the project’s progress. In this meeting, the parties determined that the first phase of the program should be modified in order to complete an outer perimeter levee around the EAA and to begin work in the Kissimmee River and Upper St. Johns basins.<sup>23</sup> Before the Corps could get congressional



**Flooding from the Kissimmee River in the town of Kissimmee.  
(Source: South Florida Water Management District.)**

authorization for this work, monetary problems developed. In the summer of 1953, Florida’s two U.S. senators, Spessard Holland and George A. Smathers, criticized the Corps for delays in its construction schedule for the C&SF Project. Holland reported that the Corps had an unexpended balance for the 1953 fiscal year of over \$6.5 million. Holland had been able to get additional amounts appropriated for the 1954 fiscal year, but he claimed that his job was more difficult because of “the slow handling of the program by the U.S. Engineers.”<sup>24</sup> Smathers agreed, stating that “whatever victory we achieve in the legislative halls will be of little value unless the Corps of Engineers gets on the ball, and performs in a more satisfactory manner than has been the case in the past few years.”<sup>25</sup>

Colonel H. W. Schull, Jr., District Engineer for the Jacksonville District, defended the Corps, explaining that the problems derived from “the system of appropriation and justification used on this project.” Because the Corps could construct only works “approved by the Bureau of the Budget and defended before the Appropriations Committee,” Schull said, it sometimes had to let funds lie until such approval had been obtained. The District Engineer explained further that the Corps was developing a system with the Bureau of the Budget “which will allow the construction agency more flexibility and which will still be acceptable to appropriations committees.”<sup>26</sup> Instead of condemning the Corps, Congress should be proud of the effort the Jacksonville District had made to ensure that appropriations were judiciously and efficiently used. At the same time, however, Chief of Engineers Major General S. D. Sturgis, Jr., told Holland and Smathers that a lack of planning in the early stages of the project caused the delays



because the Corps faced “many new problems” as construction continued. He pledged that more expert hydraulic engineers would be assigned to the project in order to “develop a backlog of plans.”<sup>27</sup>

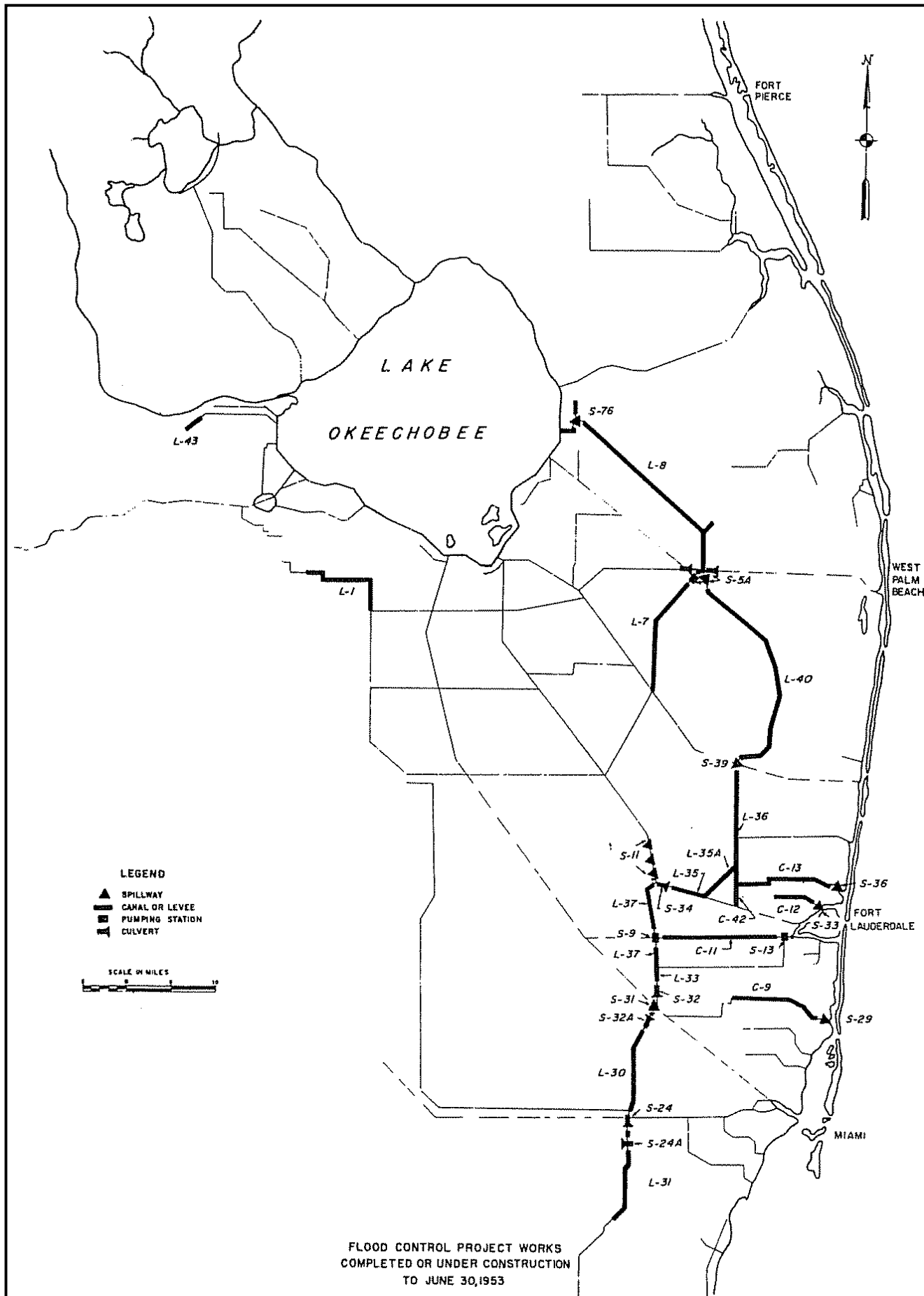
The problems with construction delays and the desire to modify the first phase of the C&SF Project led Smathers to ask Charles D. Curran, a senior specialist in engineering and public works, to make a study of the entire project and how it was progressing. Curran explained that, since 1947, the Corps had made additional examinations of the project area and determined that “the original plans were not completely adequate.” It had thus made some “major design changes.” Because of these alterations, Curran reported, the estimated cost of the first phase had risen from \$70 million as originally authorized to \$116 million. Addressing the delays in project expenditures, Curran stated that “the fault does not seem to lie in any one place or be the result of any one situation.” He did admit that the bureaucracy surrounding appropriations caused problems, but he saw no solution. “It appears that the Central and Southern Florida Flood Control Project must progress somewhat slowly for reasons reflecting no discredit on the merits of the project itself,” he concluded.<sup>28</sup>

Curran’s report, which Smathers disseminated to interested parties, coupled with talks that the Corps was already holding with the Bureau of the Budget, convinced Congress in 1954 to authorize the entire C&SF Project, rather than continuing to allow the Corps to work in only approved phases. The Flood Control Act of 1954 provided the necessary permission. According to the legislation, Congress would determine how much local interests would pay for aspects of the project beyond the first phase “based on recommendations to be submitted at the earliest practicable date by the Chief of Engineers, through the Bureau of the Budget.”<sup>29</sup> When those studies were completed in 1956, they determined that local interests would be responsible for 39.8 percent of the total cost of the entire project.<sup>30</sup>

The passage of the 1954 Flood Control Act meant that the Corps could now proceed with all aspects of construction. Some delays continued – Conservation Areas No. 2 and 3, for example, were not completed until the mid-1960s – but, for the most part, the Corps moved construction along expeditiously. In addition, new areas were gradually added to the C&SF Project as studies indicated the necessity of their inclusion. Thus, in 1958, Congress authorized work on 64 square miles in Hendry County west of the EAA and the water conservation areas, and in 1960, the Nicodemus Slough in Glades County was added to the project. Areas in south and southwest Dade County were included in the 1960s, as was Martin County in 1968.<sup>31</sup>

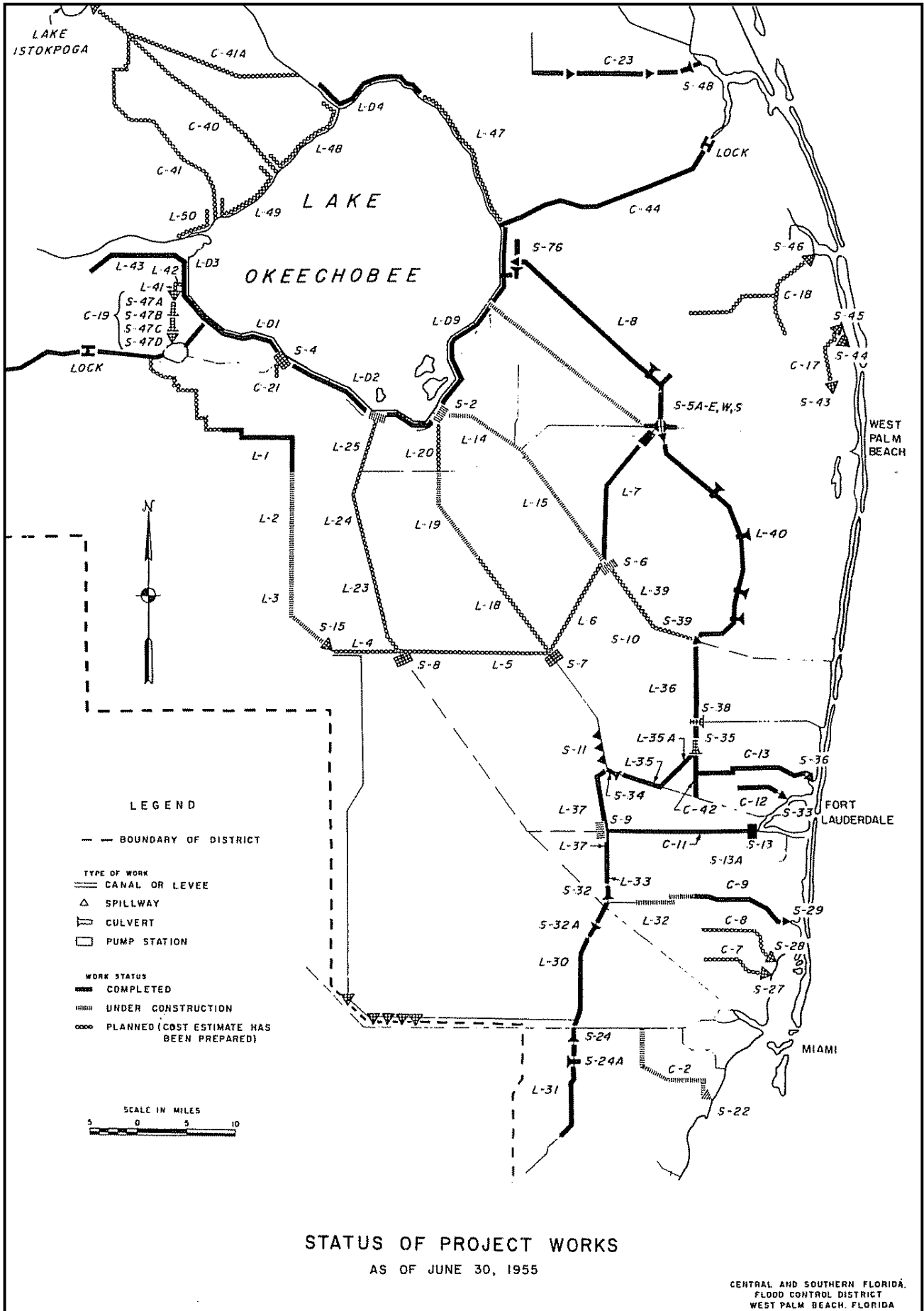
But as the work progressed, criticism and complaints about the C&SF Project began to develop. One of the key points was the effect of flood and water control on plants and wildlife within Everglades National Park. In 1949, Congress had authorized the secretary of the interior to obtain the rest of the acreage established as a minimum boundary for the park in 1944, thereby increasing the amount of park land to approximately 1,220,000 acres.<sup>32</sup> To manage this area, Park Superintendent Daniel Beard had a permanent staff of 20 people, seven of whom were in the field. This meant that each ranger had to patrol around 180,000 acres, which, according to chief ranger Earl M. Semingsen, was “too much to supervise and protect the way you’d like to see it done.”<sup>33</sup> In addition to the problems of safeguarding the flora and fauna, personnel also had the task of figuring out just how the C&SF Project would impact the park, although officials held that the Corps should bear the responsibility of making these studies. Based on its own





C&SF Project status, 1953. (Source: U.S. Army Corps of Engineers, Jacksonville District.)





C&SF Project status, 1955. (Source: U.S. Army Corps of Engineers, Jacksonville District.)



observations and on studies made by the U.S. Geological Survey, the NPS was convinced that a large water supply was critical, especially after more than 32 grass and forest fires exploded in the area in 1950.<sup>34</sup>

In order to maintain contact with the Corps about park needs, the NPS executed an agreement with the Jacksonville District “to discuss the project on the field level.”<sup>35</sup> C. Raymond Vinten, coordinating superintendent of the Southeastern National Monuments in St. Augustine, Florida, was designated as the NPS representative. But in August 1949, NPS Region One Director Thomas J. Allen complained that the Corps had produced “no information whatsoever.” Hearing about Corps proposals to improve the Caloosahatchee River, to construct a levee on the western side of the water conservation areas, and to build a levee south of Tamiami Trail, Allen worried that such construction would block necessary water from entering Everglades National Park. He emphasized to the Corps that the park “can be even more seriously affected by lack of water than it can be by an excess of water.” Although the Corps had made general statements in House Document 643 about supplying water to the Everglades, Allen believed that this was not enough. “The water we need for dry periods,” he stated, “involves the very life of the park through the maintenance of bird, animal, plant, and reptile life without interruption.”<sup>36</sup> Park officials desired something more than general statements to convince them that the park would receive adequate water from the north and from the east.

District Engineer Colonel R. W. Pearson responded to Allen’s complaints by insisting that the Corps had no new information to share. “This office is fully aware of the importance of proper supply and control of water for Everglades National Park,” Pearson explained, agreeing to arrange conferences and “every possible degree of liaison and cooperation” with park officials once the Jacksonville District began developing detailed plans. He also attempted to alleviate Allen’s fears by explaining that water storage in the water conservation areas would allow the Corps to release the resource “when needed most,” thereby creating “a regimen of flow . . . which in effect would tend to reduce the peaks and increase the valleys of the present natural flood hydrograph.” Such conditions would be “far more desirable for the park area than the present experiences of too much or too little water.” Finally, Pearson explained that the levees that concerned Allen were not designed to keep water out of the park, but to retain water in the Everglades. “It is regretted that your office has felt that it has not been properly informed,” he wrote, but it was merely a misunderstanding. It was the Corps’ “earnest desire . . . to work in close cooperation with your organization in all matters of mutual concern.”<sup>37</sup> Allen thanked Pearson for his letter, explaining that it “clarifies the point that you are aware of the needs” of Everglades National Park.<sup>38</sup>

Less than a year later, however, such conciliatory attitudes had changed. After the NPS requested that the Corps make detailed hydrological studies to determine the water needs of Everglades National Park, Pearson issued a rather stilted reply. Referring to the park as a “local interest,” he stated that it had the responsibility of informing the Corps what its water needs were, and not the other way around. “Special investigations and studies related to the detailed determinations of requirements of local interest for water supply or other purposes . . . are not considered to be within the responsibilities or authorized functions of the Corps of Engineers,” he declared. Pearson further explained that even though language in House Document 643 referred to restoring park water supplies to “natural conditions,” that was not the purpose of the



project. “Under natural conditions, the area was subjected to droughts, fires, and floods,” he asserted, “none of which would tend to make the area attractive as a park area.” Instead, the Corps would operate the project to provide “a regulated water supply,” thereby promoting “optimum, or at least improved, conditions for growth of native vegetation.” In addition, Pearson said, it was entirely possible that in some drought years, not enough water would be available from the conservation areas and Lake Okeechobee to serve all water needs. “In such cases,” he continued, “Everglades National Park will compete with agricultural areas and urban centers for water supply” according to “an orderly plan and a recognized authority.”<sup>39</sup>

Allen was uneasy with Pearson’s letter, believing that the colonel’s comments were “somewhat at variance with former official statements in the matter.” Especially troubling was Pearson’s reference to the park as a “local interest.” The park was “a national project authorized by the United States Congress,” he protested, “and cannot be disregarded in the planning by your organization of the flood control works.” Allen also considered it well within Corps authority to ensure that the park received a proper supply of water since “any damage which will occur to Everglades National Park originates within, and only within, the limits of your project.” Allen did not specifically address Pearson’s claim about park competition with agricultural and municipal interests for water, but he did express hope that the C&SF Project could “guarantee the park an amount of water comparable to the ‘normal’ run-off and still attain its many conservation objectives.” Based on measurements conducted at 23 discharge points along the Tamiami Trail, and following the recommendations of an FCD study, Allen insisted that 300,000 acre feet of water annually was “a very reasonable minimum annual flow for the park to expect the flood control project to provide under managed conditions.”<sup>40</sup> Thus, by the summer of 1950, the NPS and the Corps had already drawn their lines in terms of water supply to Everglades National Park.



**Everglades National Park in the 1950s. (Source: The Florida Memory Project, State Library and Archives of Florida.)**

Although the Corps did not agree to perform a hydrological study of the needs of the park,<sup>41</sup> Lamar Johnson, the FCD engineer, assumed that function, having a “smoldering urge” to “analyze the park’s water problem.”<sup>42</sup> In 1950, the FCD published Johnson’s report, which detailed the water resources of the park both in the pre-drainage and drainage eras. According to



# Unconquered Florida Seminoles



the report, a lack of records made it “impossible” to reconstruct accurately water flow into the Everglades before drainage, but Johnson still made an attempt, using rainfall and evaporation data and descriptions of the area before extensive drainage efforts began. He estimated that before drainage, the discharge into the region past the Tamiami Trail was “2,315,000 acre-feet in an average year; 10,744,000 acre-feet in a wet year; and negligible runoff into the Park during a dry year.” In order to determine the amount of flow during the drainage era, Johnson used data obtained by the U.S. Geological Survey for the years 1940 to 1947, which contained “approximately normal years, a period of successive dry years and the wettest year of record.” He concluded that “during successive average years a runoff of approximately 300,000 acre-feet could be expected for supply to the Park under existing conditions.” Clearly, “water in primeval quantities cannot be made available,” but 300,000 acre-feet as an annual minimum could “restore the former ecological balance of the Park – at least to a reasonable degree.”<sup>43</sup>

Johnson also disagreed with Pearson’s contention that “natural conditions” were not desirable for the park. “There is little doubt that the decision to approach primeval conditions, as nearly as possible, is the proper objective,” he stated. Individuals in South Florida wanted the park “because they liked the flora and fauna as it is, or has been,” Johnson continued, and “they will not be pleased by some brackish, bastard offspring sired by a fresh water deficiency.”<sup>44</sup> To restore the balance between salt and fresh water in the park, Johnson proposed that some structures, such as knee-high overflow dikes, be placed within the park. He later recollected that the NPS “reacted with horror” to this suggestion because it did not want to “interfere with nature by doing something artificial.”<sup>45</sup> But Johnson could see no other solution, especially because “the wish and purpose of the majority of the people” was to use water for agriculture and municipal water supplies, not to maintain Everglades National Park. “The aesthetic appeal of the Park can never be as strong in the people as the demands of home and livelihood,” Johnson claimed. “The manatee and the orchid mean something to most people in an abstract way, but the former cannot line their purse nor the latter fill their empty bellies.” Regardless, Johnson recommended that “complete hydrological data” be gathered within the park since little information existed about “the influence of water on the gross ecology.” The ultimate goal, he insisted, was to ensure that “one drop of water . . . preserve what two drops of water created.”<sup>46</sup>

For the rest of the 1950s, the issue over water supply to Everglades National Park simmered on the NPS’s backburner. One of the problems was that although NPS authorities believed that the park needed a certain amount of water, they were unsure how much this was, Johnson’s conclusions notwithstanding. The superintendent of the park informed his superiors in 1957 that the Corps continued to request that park officials determine how much water they wanted, but park leaders knew only that they wanted “more water, but not too much.”<sup>47</sup> Developing a definite figure was crucial in order to ensure that the C&SF Project supplied enough water to the park.

To obtain more specific figures, the NPS hired Johnson, who by now had left the FCD and was a private consultant, to conduct another study of park water needs in 1958. In many ways, Johnson’s conclusions were no different from his 1950 determinations. He again estimated that a normal average flow into the Everglades before drainage was around 2.5 million acre-feet, although he did not believe that it was possible to provide water in that amount to the park. Instead, he stressed the importance of restoring the balance between salt and fresh water through



control structures within park boundaries. Because there was more information in 1958 about how the water conservation areas would be operated, Johnson determined that the C&SF Project could provide “more water to the park in an average rainfall year than the old Everglades channel



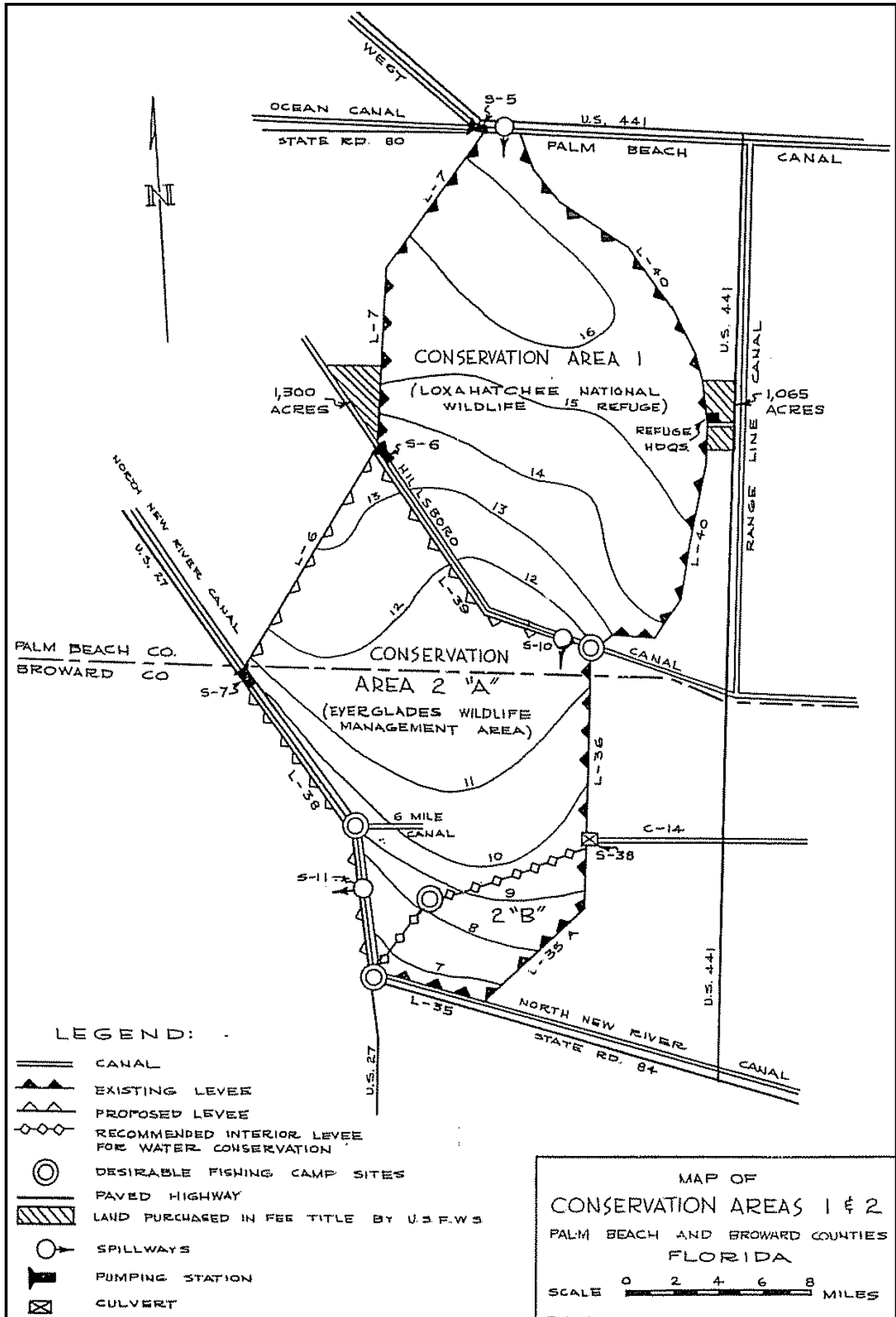
Map of Everglades National Park showing Shark River Slough. (Source: The Florida Memory Project, State Library and Archives of Florida.)

system had,” although any supply from the conservation areas would have to be supplemented from other sources.<sup>48</sup>

Therefore, he recommended that the NPS contact the Corps about diverting the runoff from a 745 square mile area in Collier and Hendry counties to the Shark River Slough within the park. Based on Johnson’s conclusions, the NPS informed the Corps that the “optimum Park requirements” were “two or more million acre feet,” including at least 150,000 acre-feet entering Shark River Slough each month in the spring.<sup>49</sup> More studies were necessary, however, to determine the minimum amount that the park needed. Yet the NPS did not heed many of Johnson’s other suggestions; instead, Johnson recalled, park officials merely sat “like a fledgling egret on its nest, mouth open and squawking, waiting to be fed.”<sup>50</sup>

While the NPS attempted to understand how much water it would receive from the C&SF Project and how this would affect plant and wildlife within Everglades National Park, the FWS and the Corps wrangled about how much water the water conservation areas could store. The Corps originally planned to maintain a constant level of 17 feet in Conservation Area No. 1 and 15.9 feet in Conservation Area No. 2. Engineering studies conducted in the 1950s, however, indicated that such stable levels were not “engineeringly feasible.”<sup>51</sup> For one thing, a level of 15.9 feet in Conservation Area No. 2 would lead to seepage at rates that would prevent the maintenance of necessary levels for fish and wildlife. For another, engineers held that water as high as 15.9 feet would destroy vegetation and be susceptible to hurricane wind tides that could breach the levees and flood east coast communities. Therefore, the Corps proposed in 1956 to maintain seasonal levels between 12.5 and 15 feet in Conservation Area No. 1 and between 10.1 and 13.0 feet in Conservation Area No. 2.<sup>52</sup>

When the FWS studied the problem, it decided that the proposed water levels would adversely affect fish and wildlife in the water conservation areas to the point of making any benefits negligible. The FWS therefore recommended a seasonal water level of between 14 and 17 feet for Conservation Area No. 1, which would “provide adequate water depths for waterfowl, frogs and other wildlife and greatly increase fishing and other recreational use.”<sup>53</sup> It also suggested that Conservation Area No. 2 be split into two pools (2A and 2B) by an interior levee in order to eliminate seepage loss, and that the level in Area 2A (the northwest portion) be



Conservation Area Nos. 1 and 2, 1958. (Source: U.S. Army Corps of Engineers, Jacksonville District.)



maintained between 12 and 14.5 feet. Because of high seepage in Area 2B (which consisted of highly permeable soils over the Biscayne Aquifer), the FWS recommended that no high stage be maintained in 2B. No suggestions were made at that time for Conservation Area No. 3, which had yet to be completed, but it too was eventually partitioned into two sections (3A and 3B) to control seepage.<sup>54</sup>

Even though the Corps agreed to these changes, some of its leadership counseled the FWS to remember that it was only one of the interests involved in the overall water control program. Project works had to consist of “the most feasible plan of improvement, in accordance with the desires of all local interests” in order to be constructed.<sup>55</sup> The Corps would willingly work to minimize fish and wildlife damages, but could only do so in ways that would not affect primary project purposes. Likewise, B. F. Hyde, Jr., executive director of the FCD, insisted that the FCD’s policy was “to preserve or enhance natural resources values wherever such is possible consistent with accomplishment of it’s [*sic*] prime responsibility,” namely “water control in the interest of all public needs and values.” According to Hyde, the FCD tried to preserve fish and wildlife “to the maximum possible degree consistent with full consideration of all resources involved and recognition of limitations inherent to the Federal Flood Control Project.”<sup>56</sup>

Such statements only confirmed a growing belief that the Corps and the FCD placed agricultural and urban interests above those of fish and wildlife.<sup>57</sup> One of the reasons for this perception was that agriculture and urban growth expanded considerably throughout the 1950s, increasing demands on water. Agricultural production escalated as the Corps built levees, canals, and pumping stations around the EAA in the 1950s, thereby walling it off from floodwaters and allowing needed irrigation in times of drought. More ranching occurred as well, in part because the Everglades Experiment Station indicated that St. Augustine grass, previously used only for lawns, was a nutritious forage well-suited for the Everglades. Sugar cane also maintained its place in the Everglades, although its largest boom would occur in the early 1960s. In addition, vegetable production continued in the EAA, mainly for winter markets.<sup>58</sup>

Meanwhile, urban populations, especially in Dade County, expanded considerably in the 1950s, as did the number of tourists to the region. Even though Americans had regarded Florida as a sun-drenched, desirable area since the 1920s, it was not until the post-World War II era that people began moving to the state in great numbers. Senior citizens migrated to St. Petersburg, Lake Worth, and Miami Beach in the 1940s, while Miami became noted in the 1940s and 1950s as “a winter playground for New Yorkers and a summer escape for Cubans.”<sup>59</sup> By 1950, Dade County was the host of several interesting attractions, including college football’s Orange Bowl, the Latin Quarter and Hialeah Race Track, Key Biscayne, and Brickell Avenue. In 1950, Miami had a population of 250,000 (the largest city in the state), and it only increased as the decade continued.

But as the population of Dade County skyrocketed, and as more and more tourists frequented the region, Dade County officials claimed that the Corps placed agricultural interests above urban needs. Therefore, Dade County officials asked W. Turner Wallis, a consulting engineer in Tallahassee formerly with the FCD, to prepare a report on water control in the area. Upon completing his examination, Wallis criticized the C&SF Project and the Corps for not heeding concerns voiced by representatives of Dade County. The county accounted for almost half of the population included in the project area and paid around two-thirds of the FCD’s ad valorem tax,



**Miami Beach, 1955. (Source: The Florida Memory Project, State Library and Archives of Florida.)**

Wallis claimed, yet it had trouble getting the Corps to revise its plans as included in House Document 643. “Well over 50 percent of the total benefits claimed for the Central and Southern Florida Flood Control Project are based on land to be reclaimed for agricultural purposes,” Wallis complained.<sup>60</sup> But the urban character of Dade County precluded it from obtaining any of these benefits; instead, county residents wanted more efforts to limit saltwater intrusion, an increased water supply for urban areas in the county, and recreation. Unfortunately, Wallis asserted, “the original project did not offer adequate measures in any of these three areas.”<sup>61</sup> He called for the uniting of all interested parties in Dade County to pressure the Corps to address these concerns, thereby justifying the county’s investment of millions of dollars in the C&SF Project. He also recommended that a better plan be devised for Dade County to address its ever-increasing water needs and that the county work more closely with the FCD to ensure that its needs were being met.

Wallis’s report seemed to work; in 1960, Chief of Engineers Lieutenant General E. C. Itschner made a tour of Dade County and concluded that the Corps needed to build outlet structures through the Tamiami Trail and construct a diagonal levee northeastward from the Tamiami Trail through Conservation Area No. 3. Itschner also recommended the relocation of L-31N, a north-south levee south of the Tamiami Trail, farther west to the border of Everglades National Park in order to facilitate agriculture in that area.<sup>62</sup>



Despite Itschner's proposals, it was increasingly apparent that the county's needs for water would conflict with the requirements of other interested parties, including Everglades National Park. At a conference between the NPS, the FWS, the Florida Game and Freshwater Fish Commission, the FCD, and the Jacksonville District, representatives from the Corps noted that "sufficient water is not available to supply all demands, and methods to conserve water will have to be developed."<sup>63</sup> As growth continued in South Florida in the 1960s, the question of how water should be distributed would be hotly contested – especially by the NPS.

By the end of the 1950s, the Corps had made great strides in the construction of the C&SF Project. The FCD noted in 1960 that "128 miles of channels and canals have been dug, or improved, 300 miles of levees have been constructed and six pumping stations are serving the multiple purposes of flood control and water conservation."<sup>64</sup> The construction had occurred mainly along the east coast and Lake Okeechobee, creating both the EAA south of the lake and the water conservation areas between the EAA and the east coast. The FCD estimated that 60 percent of the levees surrounding the conservation areas were complete, 75 percent of the east coast levees were finished, and almost all of the levees surrounding the EAA were done.

But as this construction occurred, discontent emerged. Everglades National Park officials grew increasingly wary about the Corps' seeming lack of concern for water supply to the park, especially as Corps and FCD representatives insisted that fish and wildlife benefits were secondary to flood control and water supply. The growth of agricultural and urban interests in South Florida worsened the situation by elevating demands on water, and urban interests themselves complained about the Corps' operation of the project. By the end of the 1950s, various entities had drawn clear lines as to how they believed water should be managed in South Florida, and the purposes for which it should be used. Conflicts between these different interests seemed unavoidable as the 1960s dawned.

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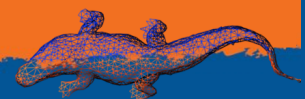
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## Chapter Three Endnotes

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<sup>1</sup> Johnson, *Beyond the Fourth Generation*, 160-161; Lamar Johnson, Engineer, to Hon. Spessard L. Holland of Florida, July 17, 1948, File Flood Control Permanent (July-December 1948), Box 287, Holland Papers.

<sup>2</sup> Johnson, *Beyond the Fourth Generation*, 161; Jno R. Beacham, Chairman, Committee on Drainage and Water Conservation and Chairman, Committee on Drainage and Water Control, to Colonel Willis E. Teale, Corps of Engineers, April 8, 1949, File 1110-2-1150a (C&SF) Proj Genl—Flood Control (Jan 49-April 49), Box 8, Accession No. 077-01-0023, RG 77, FRC.

<sup>3</sup> Minutes, 14 July 1949, Volume 1 of Governing Board of Central and Southern Florida Flood Control District Minutes, Box 27, South Florida Water Management District administrative records, West Palm Beach, Florida [hereafter referred to as SFWMDAR].

<sup>4</sup> Quotation in Central and Southern Florida Flood Control District, *Facts About F.C.D.* (West Palm Beach, Fla.: Central and Southern Florida Flood Control District, 1955), 3, 7, 9; see also Minutes, 14 July 1949.

<sup>5</sup> John C. Stephens, “The Cooperative Water Control Program for Central and Southern Florida,” paper presented at the Annual Winter Meeting of the American Society of Agricultural Engineers, 17 December 1958, in Library, Jacksonville District, U.S. Army Corps of Engineers, Jacksonville, Florida.

<sup>6</sup> Stephens, “The Cooperative Water Control Program for Central and Southern Florida.”

<sup>7</sup> Johnson, *Beyond the Fourth Generation*, 161-163.

<sup>8</sup> Central and Southern Florida Flood Control District, *Ten Years of Progress: 1949-1959* (West Palm Beach, Fla.: Central and Southern Florida Flood Control District, 1959), n.p.

<sup>9</sup> “Round Table discussion on the drainage and flood control program for Central and Southern Florida, held at the annual convention of the Florida Wildlife Federation, November 3rd, at Daytona Beach, Florida,” n.d., Folder COOP Drainage Wetlands—Florida, Box 1, Entry 57A0179, Atlanta Regional Office, Office of River Basin Studies, Wetlands, 1944-1956, RG 22, Records of the U.S. Fish and Wildlife Service, National Archives and Records Administration Southeast Region, Atlanta, Georgia [hereafter referred to as NARA-SE].

<sup>10</sup> W. Turner Wallis, “The Interests of Dade County in relation to the Cooperative Water Control Program for Central and Southern Florida,” copy in South Florida Water Management District Reference Center, West Palm Beach, Florida.

<sup>11</sup> The Engineering Department of Central and Southern Florida Flood Control District, “Review of the Plan of Flood Control for Central and Southern Florida in connection with the proposed development of the Everglades area and the operation of the conservation areas,” November 1949, 1, copy in South Florida Water Management District Reference Center, West Palm Beach, Florida.

<sup>12</sup> The Engineering Department of Central and Southern Florida Flood Control District, “Review of the Plan of Flood Control,” 5-12.

<sup>13</sup> Johnson, *Beyond the Fourth Generation*, 181-182.

<sup>14</sup> Quotation in Stanley J. Niego, Attorney, to Annette Star Lustgarten, Assistant General Counsel, April 7, 1981, File Conservation Areas 1, 2, 3, 1970-1986, Box 02193, SFWMDAR; see also Game and Fresh Water Fish Commission to Hon. Richard W. Erwin, Attorney General, 30 March 1960, File E.C.A. High Water and Deer Herds, 1959-1974, Box 1, Series [S] 1719, Game and Fresh Water Fish Commission Everglades Conservation Files, 1958-1982, Florida State Archives, Tallahassee, Florida [hereafter referred to as FSA].

<sup>15</sup> Harry A. Kersey, Jr., “The East Big Cypress Case, 1948-1987: Environmental Politics, Law, and Florida Seminole Tribal Sovereignty,” *The Florida Historical Quarterly* 69 (April 1991): 459-466.

<sup>16</sup> Quotation in R. W. Pearson, Colonel, Corps of Engineers, District Engineer, to The Division Engineer, 30 January 1951, File 1110-2-1150a (C&SF) Proj Genl—Flood Control (Jan 51-June 51), Box 7, Accession No. 077-



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01-0023, RG 77, FRC; see also Frank Pace, Jr., Secretary of the Army, to The Honorable The Secretary of the Interior, 29 May 1951, *ibid.*; Johnson, *Beyond the Fourth Generation*, 182-183.

<sup>17</sup> Roy Wood, Regional Supervisor, to Regional Director, 28 November 1952, File RB Coop US Corps Engineers (General), Box 3, Entry 57A0179, RG 22, NARA-SE.

<sup>18</sup> “Cooperative and License Agreement Between the Central and Southern Florida Flood Control District and the Game and Fresh Water Fish Commission,” 18 January 1952, File GOV 2-16-03 WV 91 6160 DOT/Miccosukee Mediation, Box 19707, SFWMDAR.

<sup>19</sup> See Office, District Engineer, Jacksonville, Fla., to the Chief of Engineers, U.S. Army, 1 October 1929, File 1110-2-1150a (Kissimmee River) Project General—Flood Control 1924, Box 2, Accession No. 077-02-0048, RG 77, FRC; B. C. Dunn, Lt. Col., Corps of Engineers, District Engineer, to Hon. J. Mark Wilcox, House of Representatives, 10 January 1935, *ibid.*

<sup>20</sup> The FCD’s governing board had decided soon after its formation to hold meetings “in different sections of the District in order to permit the people of the various areas involved to become better acquainted with the Board and its work.” W. Turner Wallis, Secretary, to District Engineer, Jacksonville District, 17 September 1949, File 1110-2-1150a (C&SF) Proj—Genl—Flood Control (Aug 49-Oct 49), Box 8, Accession No. 077-01-0023, RG 77, FRC.

<sup>21</sup> Minutes, 3 September 1949, Volume 1 of Governing Board of Central and Southern Florida Flood Control District Minutes, Box 27, SFWMDAR.

<sup>22</sup> Lewis A. Pick, Major General, Chief of Engineers, to Honorable Spessard L. Holland, 25 October 1949, File 1110-2-1150a (C&SF) Proj—Genl—Flood Control (Aug 49-Oct 49), Box 8, Accession No. 077-01-0023, RG 77, FRC. The Chief of Engineers usually carries the rank of Lieutenant General (which Pick eventually assumed), but because Pick was only appointed Chief of Engineers in March 1949, his promotion was probably either not yet approved or delayed.

<sup>23</sup> C. H. Chorpening, Brigadier General, USA, Assistant Chief of Engineers for Civil Works, to The Division Engineer, South Atlantic Division, 10 December 1952, File 1110-2-1150a (C&SF) Proj Genl—Flood Control (Aug 52-Dec 52), Box 8, Accession No. 077-01-0023, RG 77, FRC.

<sup>24</sup> As cited in “Florida Senators Charge Flood Control Job Delayed,” *St. Petersburg Times*, 24 June 1953.

<sup>25</sup> As cited in “Florida Senators Charge Flood Control Job Delayed,” *St. Petersburg Times*, 24 June 1953.

<sup>26</sup> Quotations in H. W. Schull, Jr., Colonel, Corps of Engineers, District Engineer, to Honorable George A. Smathers, United States Senate, 5 July 1953, File 1110-2-1150a (C&SF) Proj Genl—Flood Control (July 1953-Nov 1953), Box 8, Accession No. 077-01-0023, RG 77, FRC; see also Schull to Honorable Spessard L. Holland, United States Senate, 5 July 1953, *ibid.*

<sup>27</sup> “Speed Assured on S. Florida Flood Project,” *Miami Daily News*, 24 June 1953, clipping in File 1110-2-1150a (C&SF) Proj Genl—Flood Control (July 1953-Nov 1953), Box 8, Accession No. 077-01-0023, RG 77, FRC. As with Pick, Sturgis eventually was promoted to Lieutenant General, but at this time – only three months from the time he became Chief of Engineers – he was still listed as Major General.

<sup>28</sup> As quoted in *A Study of the Central and Southern Florida Flood Control Project* (Washington, D.C.: The Library of Congress, 1953), 6-7, 15-18, 42-46, copy in Library, Jacksonville District, U.S. Army Corps of Engineers, Jacksonville, Florida.

<sup>29</sup> Act of 3 September 1954 (68 Stat. 1248).

<sup>30</sup> Corps of Engineers, U.S. Army, Office of the District Engineer, Jacksonville, Fla., *Central and Southern Florida Project: Special Report on Local Cooperation in the Part of the Project Authorized by the Flood Control Act of 1954* (Jacksonville, Fla.: Corps of Engineers, U.S. Army, 1956), ii.

<sup>31</sup> Buker, *Sun, Sand and Water*, 107-108.

<sup>32</sup> Act of 10 October 1949 (63 Stat. 733).

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<sup>33</sup> As quoted in Carl L. Biemiller, “The Water Wilderness – The Everglades,” *Holiday* 10 (November 1951): 117.

<sup>34</sup> Thomas J. Allen, Regional Director, to District Engineer, 19 July 1950, File 1110-2-1150a (C&SF) Proj Genl—Flood Control (May 50-Aug 50), Box 9, Accession No. 077-01-0023, RG 77, FRC. See also Keith Wheeler, “Florida’s Never-Never Land,” *Science Digest* 29 (May 1951): 29-30.

<sup>35</sup> Thomas J. Allen, Regional Director, to District Engineer, Jacksonville District, Corps of Engineers, 16 August 1949, File 1110-2-1150a (C&SF) Proj—Genl—Flood Control (Aug 49-Oct 49), Box 8, Accession No. 077-01-0023, RG 77, FRC.

<sup>36</sup> Allen to District Engineer, 16 August 1949.

<sup>37</sup> R. W. Pearson, Colonel, Corps of Engineers, to Director, Region One, 26 August 1949, File 1110-2-1150a (C&SF) Proj—Genl—Flood Control (Aug 49-Oct 49), Box 8, Accession No. 077-01-0023, RG 77, FRC.

<sup>38</sup> Allen to District Engineer, Jacksonville District, 1 September 1949, File 1110-2-1150a (C&SF) Proj—Genl—Flood Control (Aug 49-Oct 49), Box 8, Accession No. 077-01-0023, RG 77, FRC.

<sup>39</sup> R. W. Pearson, Colonel, Corps of Engineers, District Engineer, to Regional Director, U.S. Department of the Interior, National Park Service, 30 June 1950, File 1110-2-1150a (C&SF) Proj Genl—Flood Control (May 50-Aug 50), Box 9, Accession No. 077-01-0023, RG 77, FRC.

<sup>40</sup> Allen to District Engineer, 19 July 1950.

<sup>41</sup> Interestingly, in September 1951, Harold A. Scott, Chief of the Planning and Reports Branch of the Jacksonville District, presented a paper about water distribution from the C&SF Project. Using hydrologic studies completed by the Corps, he extensively discussed how much water would be available for agricultural and municipal areas and how it would be distributed. However, even though Everglades National Park was listed as a “major water-demand area,” there was no discussion of how much water it would need or how it would get it. See Scott, “Distribution of Water in the Central and Southern Florida Project,” 26 September 1951, 2, South Florida Water Management District Reference Center, West Palm Beach, Florida.

<sup>42</sup> Johnson, *Beyond the Fourth Generation*, 208-209.

<sup>43</sup> All quotations in Engineering Department, FCD, “A Report on Water Resources of Everglades National Park, Florida,” 22 May 1950, 5-7, 10-11, South Florida Water Management District Reference Center, West Palm Beach, Florida.

<sup>44</sup> Engineering Department, FCD, “A Report on Water Resources of Everglades National Park, Florida,” 11.

<sup>45</sup> Johnson, *Beyond the Fourth Generation*, 209; see also Engineering Department, FCD, “A Report on Water Resources of Everglades National Park, Florida,” 12.

<sup>46</sup> All quotations in Engineering Department, FCD, “A Report on Water Resources of Everglades National Park, Florida,” 13, 16.

<sup>47</sup> Superintendent, Everglades National Park, to Regional Director, Region One, 26 November 1957, EVER 22965, Central Records, Everglades National Park Archives, Everglades National Park, Homestead, Florida [hereafter referred to as CR-ENPA].

<sup>48</sup> Johnson, *Beyond the Fourth Generation*, 209-211. A copy of Johnson’s report was not available, but Johnson summarized his conclusions in *Beyond the Fourth Generation*. For NPS comments on the report, see Acting Supervisory Engineer to Superintendent, Everglades National Park, 19 September 1958, EVER 22965, CR-ENPA; Chief, Water Resources Section, to Regional Director, Region One, 9 September 1958, *ibid.*; Superintendent, Everglades National Park, to Regional Director, Region One, 21 October 1958, *ibid.*

<sup>49</sup> Warren F. Hamilton, Superintendent, to Col. Paul D. Troxler, Chief, U.S. Corps of Engineers, Jacksonville, Florida, 29 December 1958, EVER 22965, CR-ENPA.



### Chapter Three Endnotes (continued)

<sup>50</sup> Johnson, *Beyond the Fourth Generation*, 211.

<sup>51</sup> United States Department of the Interior, Bureau of Sport Fisheries and Wildlife, Region 4, *A Fish and Wildlife Report for Inclusion in the Corps of Engineers' General Design Memorandum, Part 1: Agricultural and Conservation Areas, Supplement 27—Plan of Regulation for Conservation Area #2, Central and Southern Florida Flood Control Project* (Vero Beach, Fla.: Branch of River Basins, 1958), 8-9.

<sup>52</sup> Bureau of Sport Fisheries and Wildlife, Region 4, *A Fish and Wildlife Report for Inclusion in the Corps of Engineers' General Design Memorandum, Part 1*, 8-9.

<sup>53</sup> Bureau of Sport Fisheries and Wildlife, Region 4, *A Fish and Wildlife Report for Inclusion in the Corps of Engineers' General Design Memorandum, Part 1*, 13.

<sup>54</sup> Bureau of Sport Fisheries and Wildlife, Region 4, *A Fish and Wildlife Report for Inclusion in the Corps of Engineers' General Design Memorandum, Part 1*, 17. The partitions of both Conservation Area No. 2 and No. 3 were largely completed in the 1960s. See Light and Dineen, "Water Control in the Everglades," 63-65.

<sup>55</sup> See Paul D. Troxler, District Engineer, to Regional Director, U.S. Fish and Wildlife Service, 3 October 1957, File 1110-2-1150a (C&SF) Kissimmee River Valley Study (Study for Navigation) Jan 1957-Dec 1957, Box 11, Accession No. 077-01-0023, RG 77, FRC.

<sup>56</sup> B. F. Hyde, Jr., Executive Director, to Mr. Walter A. Gresh, Regional Director, 7 October 1957, File 1110-2-1150a (C&SF) Kissimmee River Valley Study (Study for Navigation) Jan 1957-Dec 1957, Box 11, Accession No. 077-01-0023, RG 77, FRC.

<sup>57</sup> See, for example, undated newspaper clipping in File 1110-2-1150a (C&SF) Proj Genl—Flood Control (June 56-Dec 56), Box 7, Accession No. 077-01-0023, RG 77, FRC.

<sup>58</sup> G. H. Snyder and J. M. Davidson, "Everglades Agriculture: Past, Present, and Future," in *Everglades: The Ecosystem and Its Restoration*, 100-103.

<sup>59</sup> Gary R. Mormino, "Sunbelt Dreams and Altered States: A Social and Cultural History of Florida, 1950-2000," *The Florida Historical Quarterly* 81 (Summer 2002): 4, 6, 14.

<sup>60</sup> W. Turner Wallis, "The Interests of Dade County in relation to the Cooperative Water Control Program for Central and Southern Florida," copy in South Florida Water Management District Reference Center, West Palm Beach, Florida.

<sup>61</sup> Quotation in Wallis, "The Interests of Dade County in relation to the Cooperative Water Control Program for Central and Southern Florida"; see also "Dade County Water-Control Report," 35-36, attachment to Marion E. Boriss, Director of Public Works, to Honorable O. W. Campbell, County Manager, 28 November 1958, copy in South Florida Water Management District Reference Center, West Palm Beach, Florida.

<sup>62</sup> E. C. Itschner, Chief of Engineers, to Honorable A. S. Herlong, Jr., 26 April 1960, File 1110-2-1150a (C&SF) Dade County 1955-April 1960, Box 4, Accession No. 077-96-0038, RG 77, FRC.

<sup>63</sup> "Conference on Conservation Area No. 3, Jacksonville, Florida, 14 April 1960," File 1110-2-1150a (C&SF) Conservation Areas Jan 60-June 60, Box 15, Accession No. 077-96-0038, RG 77, FRC.

<sup>64</sup> Central and Southern Florida Flood Control District, *Ten Years of Progress*, n.p.; see also Light and Dineen, "Water Control in the Everglades," 60-63.

## **CST – What it is and Who it Benefits**

*By Alex Jenkins, CST IV*

The Certified Survey Technician (CST) Program is described by the National Society of Professional Surveys as “a comprehensive national certification program for survey technicians, and is sponsored by the [National Society of Professional Surveyors](#). The Certified Survey Technician Board administers the program, which is intended to gauge technical capabilities and general knowledge of workplace safety and procedures.” This program is designed to enable technicians to display their abilities through four levels of examinations that, when passed, results in certification. While these certifications do not allow technicians to sign or seal surveys, it does come with many benefits to technicians, employers, and our industry as a whole.

There are many benefits for the technician who gets a CST certification. Obviously, this could include higher pay but there are other benefits as well. The CST program can help propel a technician’s career by showing their qualifications when applying for new positions. It opens the door for opportunities that may not have been available without certifications. For example, the City of Orlando requires all technicians to be certified. When asked why the CST is important for technicians, Richard Allen, PSM - the Surveyor for the City of Orlando, stated, “The City of Orlando has been a proponent of the Certified Survey Technician program since near its inception that was adopted by my predecessor, Joseph Stokes, Jr. the former City Surveyor, who made the program a requirement for all City survey staff. The CST program has been good for ensuring qualified staff are hired that have experience that is desired for positions open for recruitment.”

Some technicians start with the CST Program and end up developing the desire to continue personal growth. For some technicians, they never plan on or want to continue their education past the high school level, instead going straight into the workforce after graduation. This is the path that I took until I began obtaining CST certifications. The CST Program shows some participants that they can grow and accomplish more than they originally thought possible. Many skills needed to study and pass the CST Program are the same skills needed to complete some form of post-high school education. A fear or lack of confidence can many times be broken just working through the CST Program, thus opening the door to other educational opportunities. Edwin Munoz, PSM – Survey Land Development Director at Southeastern Surveying and Mapping Corp. (SSMC) in Orlando is a proponent of the CST Program. He says, “The CST program is very beneficial, especially for those technicians, office or field, who are interested in not only growing in their career fields, but also in learning and



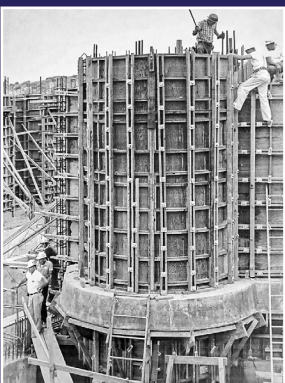


utilizing survey knowledge. I would recommend all surveyors, no matter position, to pursue some level of CST certification.”

Employers with CST certified technicians on staff reap rewards from the program as well. They not only can use the certifications in their marketing pursuits but can also use the program as an opportunity to incentivize staff and create requirements for certain positions within the organization. This, in turn, can help create structure and present a clear path for advancement within a company. With today’s workforce, career

growth is accelerated due to the demand for resources within our industry. Not all resources, however, are created equally. The CST Program helps ensure that the hiring and promoting of staff is done with confidence and that the resources are well trained and ready to take on their responsibilities head-on.

For the surveying industry as a whole, the CST Program serves many great purposes. It gives technicians a way to show their skills and knowledge and helps employers manage and incentivize their workforce, and use the certifications to show the company’s qualifications when pursuing some opportunities. Many companies, like SSMC, have created a CST Study Program that teaches different aspects of surveying and promotes the CST Certification process. A training program like this can create growth within the company and within the industry as a whole, as this gives us all an avenue to share our knowledge and experience with others and learn about other practices being utilized within our industry. If you are interested in setting up a training program or getting certified, feel free to reach out to me at [ajenkins@southeasternsurveying.com](mailto:ajenkins@southeasternsurveying.com).



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# Olde Maps and the Stories Behind Them

By: Richard D. Pryce, RLS/PSM | VP Survey & GIS | Craven Thompson & Associates, Inc.

For the conclusion of this series, I want to take you on a journey with a man, not just any man, but fascinating person, and very prolific and gifted Surveyor & Mapper, although most don't know him as that. But because of his work, his background, his mathematical knowledge and his skills with scientific surveying instruments in the 1700's, he became is one of the most recognized and famous persons of his time and his work transformed our knowledge of the World we live in.

I became more aware of him back in 2018 when several countries celebrated the 250<sup>th</sup> anniversary of his work, his adventures, and the surveys, maps, and charts he created. Some of his surveys were so accurate that they can be compared to modern surveys.

I've gone into the depth of this man's background leading up to his prominence and fame so please bear with me as I believe it's important.

Due to the amount of work this man did, and not to lose you halfway through I've cut it down considerably

He was born in 1728 and was killed during his third and final voyage/journey of discovery in 1779.

Let me introduce you to:

## Captain James Cook





To illustrate to you just how famous he was:

*In the third edition of the Encyclopædia Britannica (Edinburgh, 1797), the entry for Captain James Cook runs to thirty-nine, two-column pages. The renowned English scientist Sir Isaac Newton weakly challenges Cook's coverage with a treatment totaling sixteen pages. Christopher Columbus merits only three; Queen Elizabeth I, Sir Francis Drake, and Sir Walter Raleigh each receive about two; Ferdinand Magellan, two paragraphs, if one includes the Magellan Strait. So great was eighteenth-century British interest in, and approbation of, the native navigator that the author of the encyclopedia article could irrefutably claim: "[I]t must be evident that the intentions of Captain Cook were in the highest degree benevolent; and if at any time the people were the sufferers, it must have been through their own fault" (vol. 5, p. 420). In the succeeding decades and centuries, a more balanced approach to the mythic status of Cook has evolved, one that grants him his humanity, still marvels at his charting skills and seamanship, and both contextualizes and judges his encounters with Pacific Ocean societies.*

### **His Background:**

With hindsight, historians can mark many significant pieces that fell into place in the early years of Cook's life. There is no diminishment of his accomplishments in noting that he was fortunate to be at the right place—historic places—at the right time with the right people. Cook was the second of eight children born to a Scottish farm laborer and his locally born wife in agricultural Yorkshire, England, and his most likely vocation was to be a farmer also. He attended a village school and showed enough promise, however, that his parents felt he might learn a trade, so they apprenticed him, at the age of sixteen (1745), to a dry goods merchant, William Sanderson, in the seaside village of Staithes.

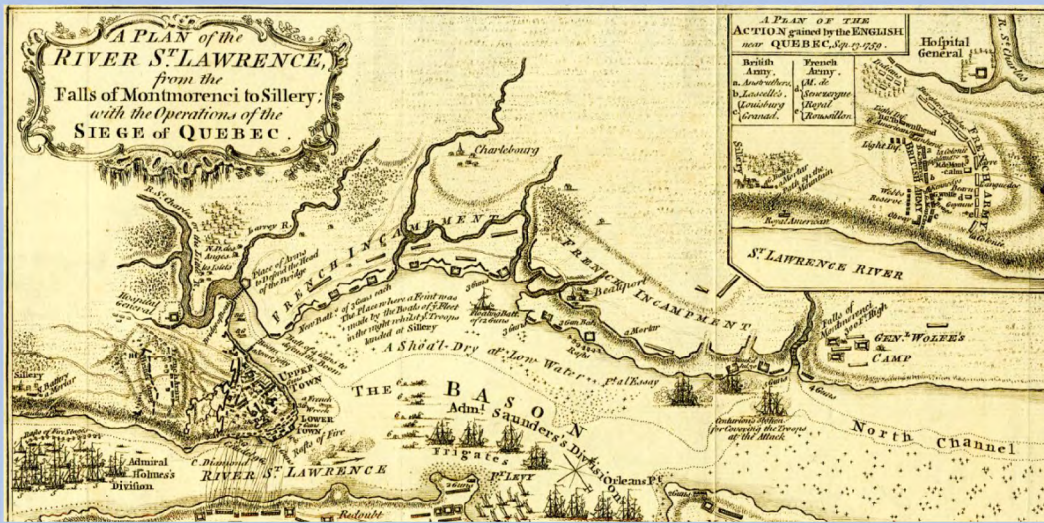
**The lure of the sea** was just beyond the shop window, and the talk was fish, fishing, and foreign places. Cook managed the position for about eighteen months before an incident took place, related by his biographers, that changed the direction of his life forever. (More recent research suggests that this is an apocryphal tale.) A customer had paid for something with a shiny South Sea shilling, minted during George I's reign for the South Sea Company, and Cook, intrigued by the thing, had replaced it with one of his own. Sanderson, however, not seeing the coin in the till, accused Cook of stealing it, which, of course, he fervently denied; his boss finally accepted his explanation. However, Cook soon asked to be relieved from his indenture because he wanted to go to sea. (The coin would be a harbinger of Cook's own voyages to the South Sea.)

Sanderson was essential in making this happen: he arranged with his friend John Walker, a shipowner and master mariner in Whitby, to take Cook on as an apprentice seaman for three years. At that time London residents were using a million tons of coal each year, and the Whitby shipping trade supplied this need. Cook began his sea career on the *Freelove*, a type of ship that was designed to carry coal—flat-bottomed, capacious, and built to withstand adverse North Sea weather—called a cat. (Endeavour, Cook's vessel for the first circumnavigation, was a similar kind of ship, also built in Whitby.) **During his apprenticeship, Cook studied algebra, geometry, trigonometry, navigation, surveying and astronomy.** He worked on a number of collier ships, passed his examinations, and rose in rank from apprentice to seaman to mate. In 1755, Walker offered the now experienced twenty-six-year-old Cook his own ship but, surprisingly, was turned down: **Cook wanted to enter the Royal Navy**, though it meant starting at the bottom. Regretful, Walker, like Sanderson, recognized Cook's special qualities and provided him with a glowing letter of recommendation.

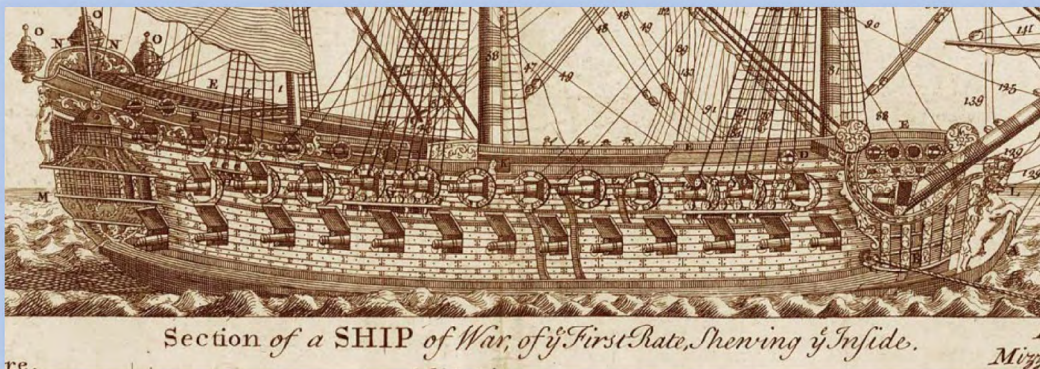
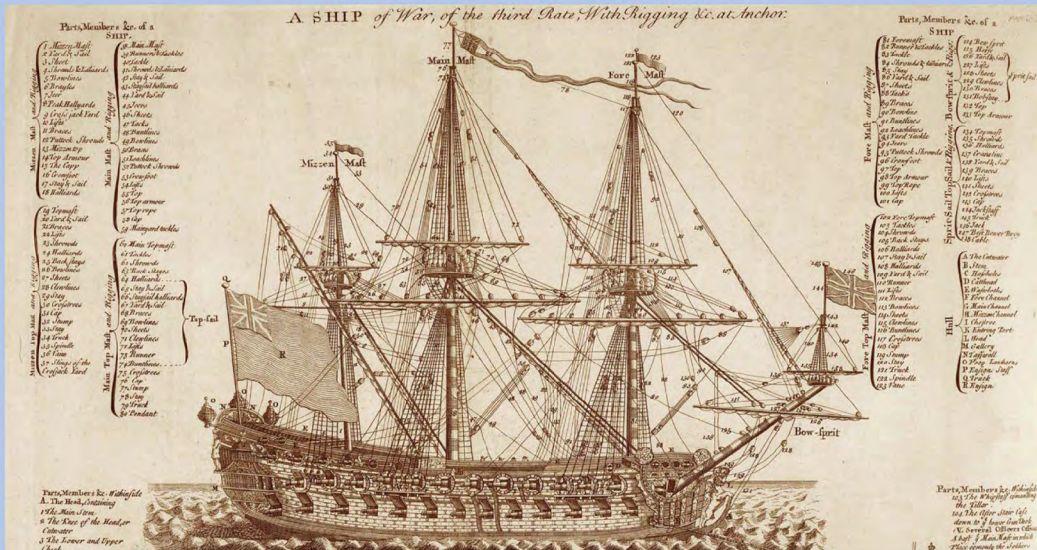
**On June 17, 1755**, ranked as an able-bodied seaman, Cook reported for naval service at Wapping, part of the dock lands of East London, on the River Thames. During the Seven Years' War between England and France, Cook served on several ships, including the *HMS Eagle* under Sir Hugh Palliser (1722–1796), who became another keen supporter of the seaman and his talents. **He gave Cook opportunities for special instruction in navigation and charting;** Cook was promoted to full master rank within two years. **In the St. Lawrence River in Canada in the winter and early spring of 1758–1759, he undertook with others a detailed navigational survey that was critical in the successful September landing of the British troops under General James Wolfe that defeated the French at Quebec City.** The resulting chart, "A New Chart of the River St. Lawrence: From the Island of Anticosti to the Falls of Richelieu: With All the Islands, Rocks, Shoals, and Soundings, also Particular Directions for Navigating the River with Safety; Taken by the Order of Charles Saunders, Esqr. Vice-Admiral of the Blue, and Commander in Chief of His Majesty's Ships in the Expedition against Quebec in 1759,"\* published in London in 1760 in twelve sheets, measuring (in total) seven feet by three feet, **signaled Cook's arrival as a superb surveyor.**



Map showing the Siege of Quebec from the French, Cook worked on this chart with others before the “Seven Years War”



Cook during his Royal Navy days worked British Royal Navy War Ship see details:

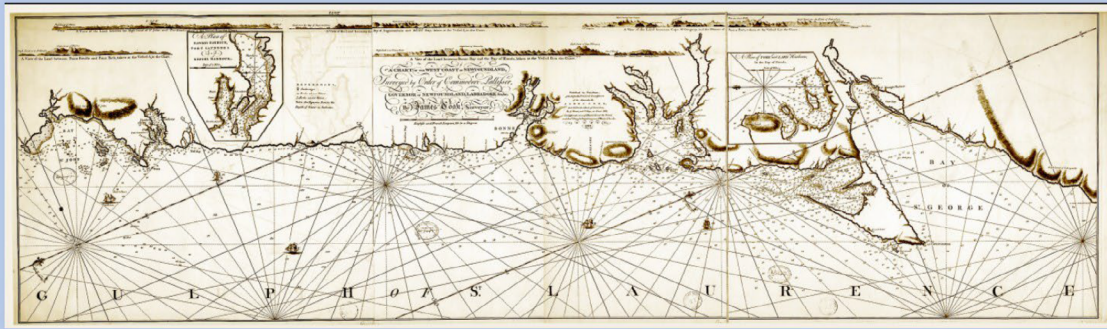








## Cook Map of West Coast of Newfoundland



Besides all of the maps and surveys he did during his early years and his years in the Royal Navy is what brought his attention to the King of England and the Voyages that made him infamous to the world.

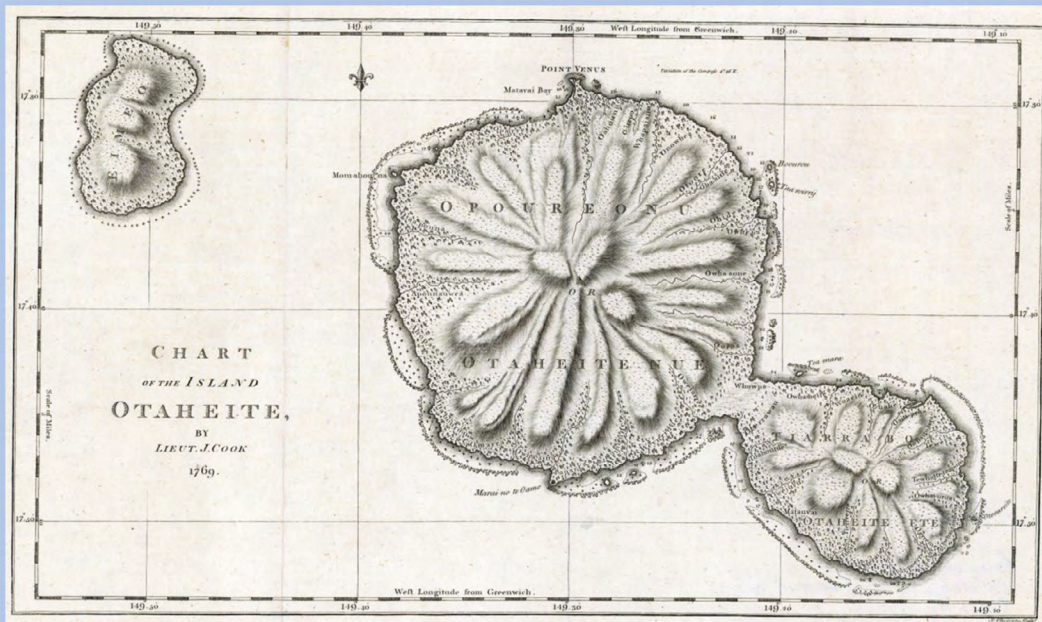
## *His Three Famous Voyages of Discovery*

1. **First Voyage 1768-1771** he embarked on a secret mission to uncharted territories with a group of scientist and scientific instruments. His stated mission was to travel to “Otaheite” (Tahiti) which had been discovered only two years earlier, survey and map the island chain for Great Britain, and to get there by a certain date to observe and document the Transit of Venus across the Sun with Survey instruments. **His secret mission** was to search for another continent that had been hinted at other explorers to the west of Tahiti. If found he was to survey and map it for Britain.





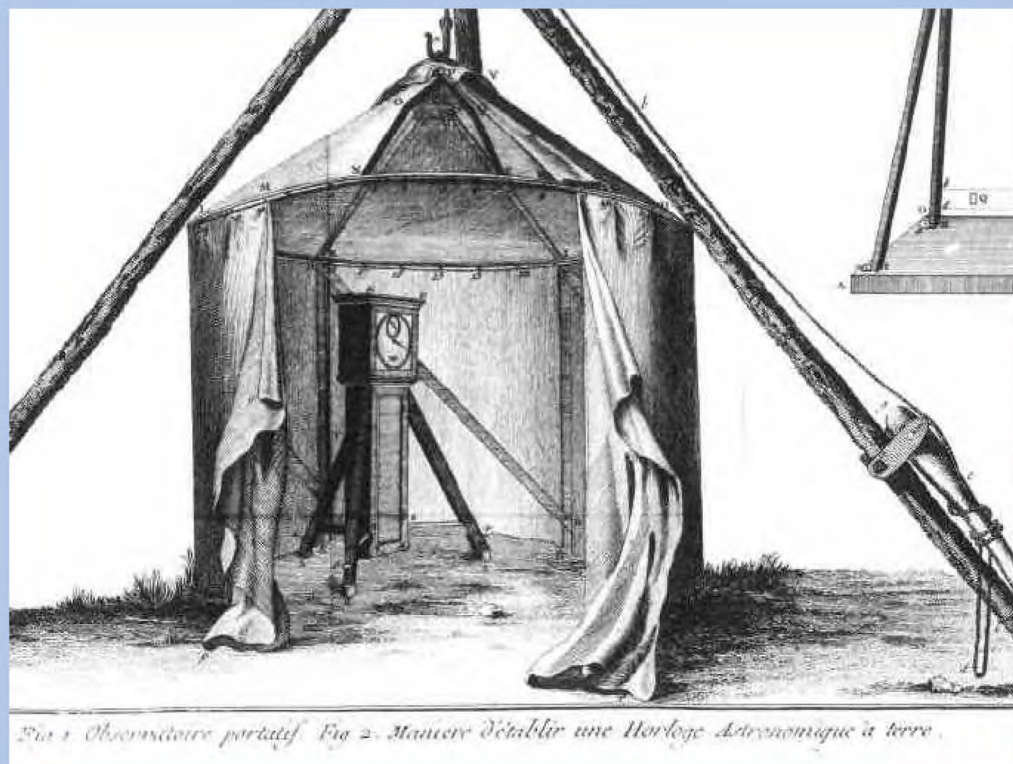
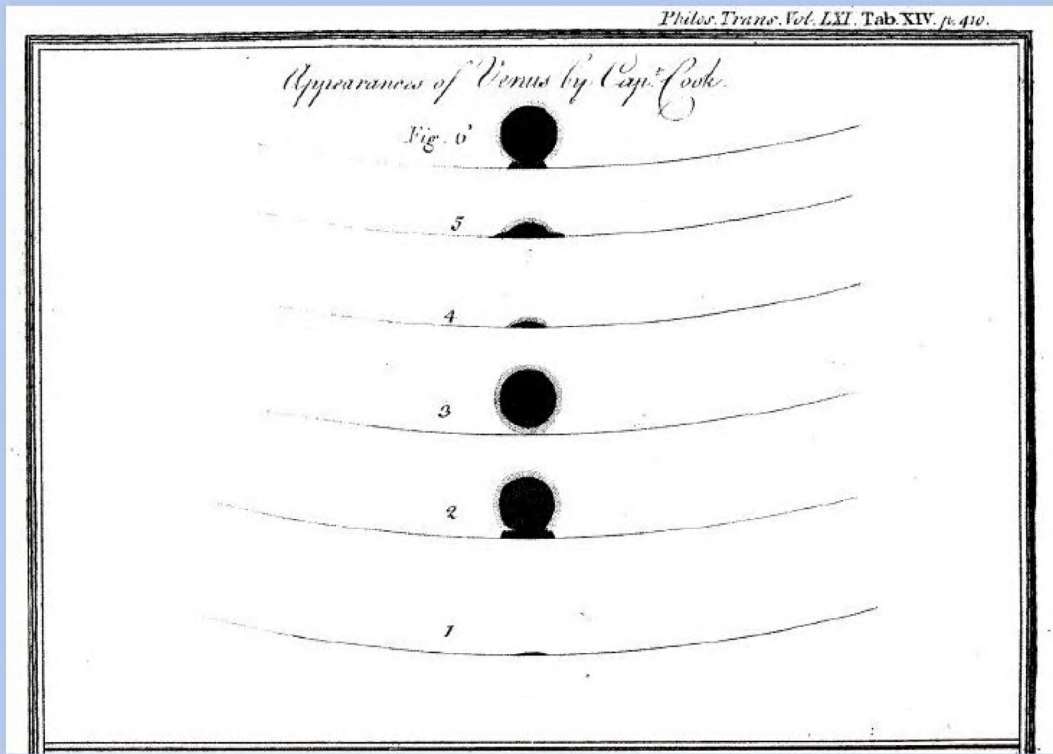
Cooks map of "Otaheite" showing Point Venus at the northern tip where he did the observations



Modern Aerial Map of Tahiti from Space via NASA reflects the accuracy of Cooks work

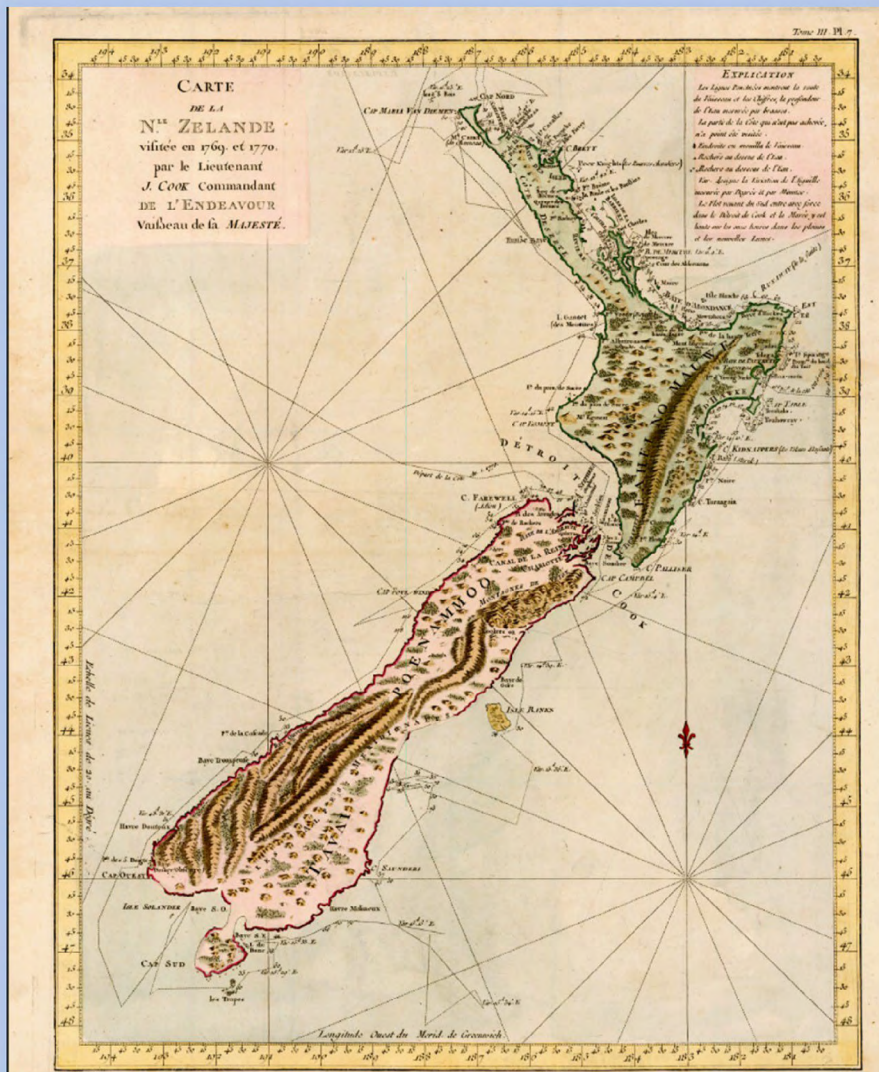
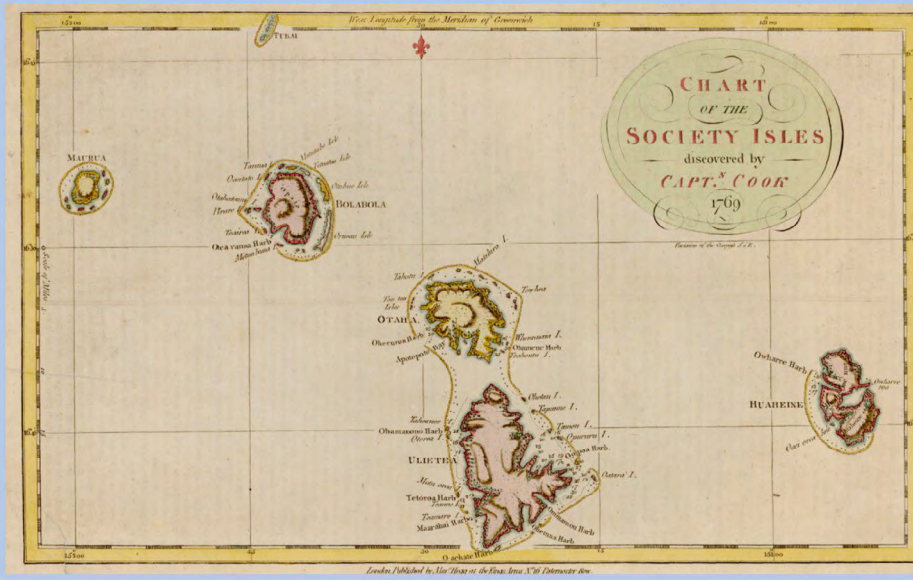


Cook's observance of the Transit of Venus across the Sun at "Venus Point" on the Island of Otaheite (Tahiti)





His first Voyage continued westerly where he discovered and mapped the Society Islands, New Zealand and “New Holland” (Australia)





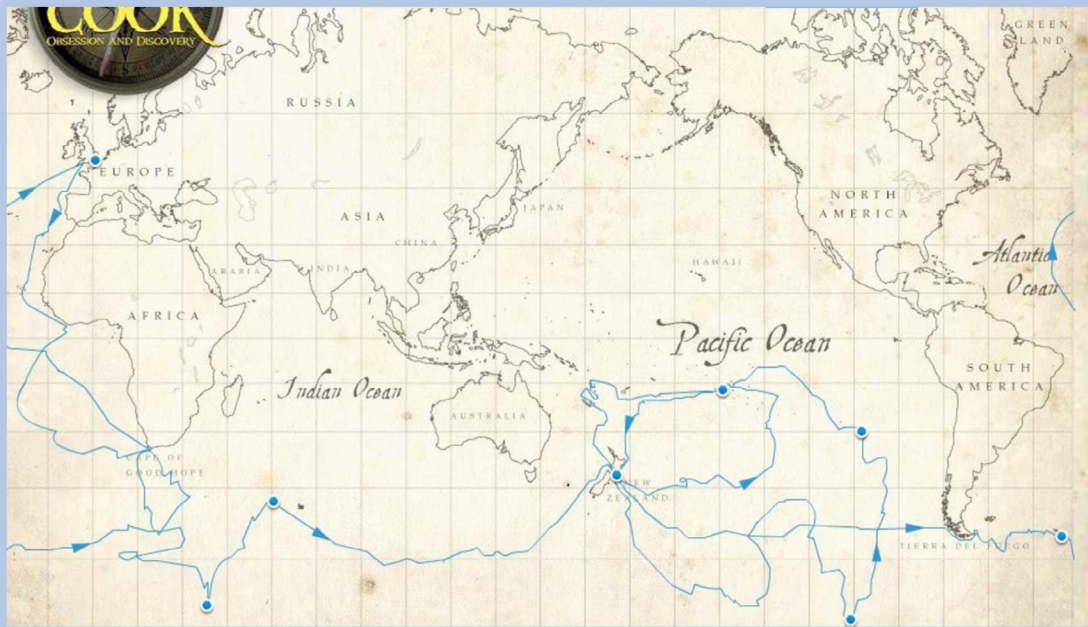




**Second Voyage 1772-1775** he set on a search for the massive continent that all of the Scientists of the time were sure existed. In January of 1773 he took his ship “Resolution” south into the Antarctic Circle, being the first ship ever to have done so, testing his ship and crew to the limits. After two years of search for a southern Continent of Antarctica he determines that if it is there no one would want to live there due to the extreme temperatures.

- Expedition Two ships (Resolution and Adventure), 193 men
- Charge (by the Royal Society and the British Admiralty): To search for the Southern Continent and to test a version of the John Harrison chronometer for longitude determinations.
- Accomplishments: Sailed further south than any previous mariner (71°10' S) and discovered South Georgia Island and the South Sandwich Islands.

## Map of the Second Voyage





## Cooks Chart of the Southern Hemisphere



**Third Voyage 1776-1780** his most ambitious voyage, the quest for a “Northwest Passage”

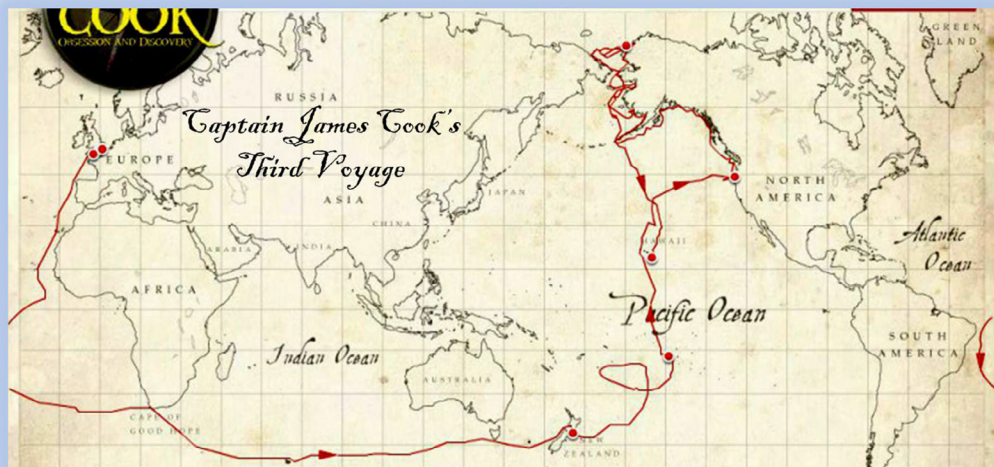
- Expedition (1776–1780): Two ships (Resolution and Discovery), 182 men
- Charge (by the British Admiralty): To search for a Northwest Passage from the western coast of North America
- Accomplishments: Discovered the Hawaiian Islands, was the first to chart Alaska’s southern coastline, and reached farther north than any previous Pacific mariner (70°44’ N)
- The Northwest Passage—a northern navigable route linking the Atlantic and Pacific Oceans, hence a shorter path to the riches of the East Indies by avoiding the two capes (Horn and Good Hope)—had been an off-and-on obsession of the British government and



merchant community for several hundred years, dating back to the multiple voyages of John Cabot (d. 1498), Sir Martin Frobisher (ca. 1535–1594), and John Davis (1550?–1605). In 1775, **the government offered a prize of £20,000 for its discovery, to be shared among the crew of the successful ship.**

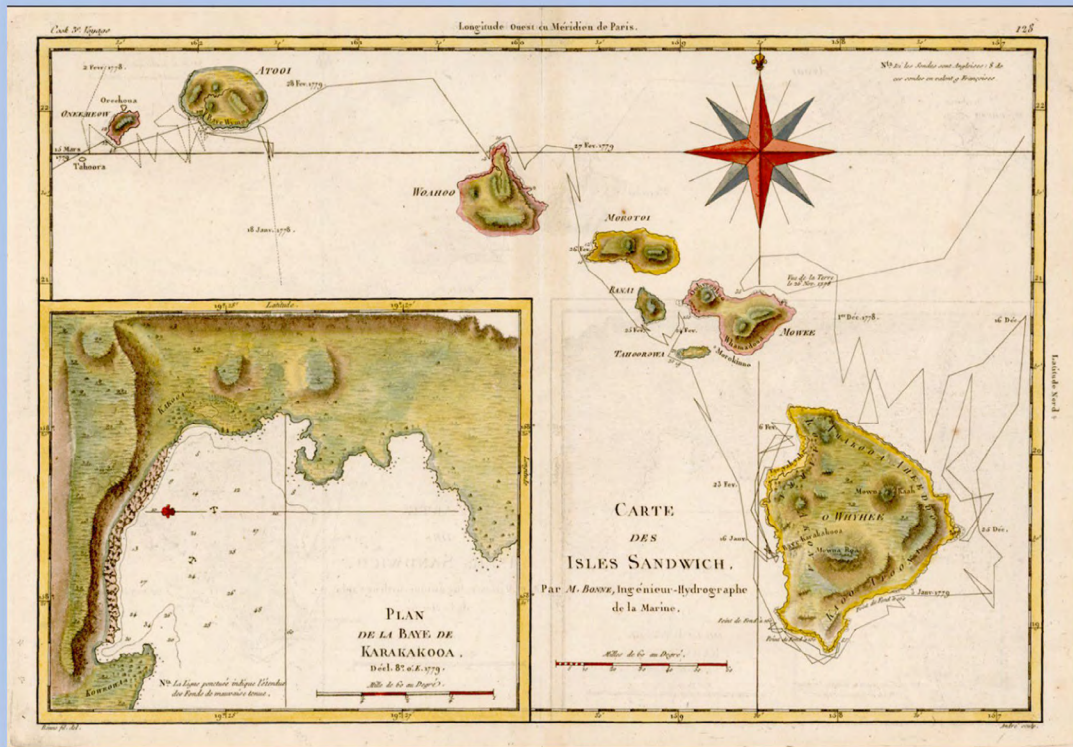
- Within months after his return from his second voyage, Cook was party, only in an advisory role, to the Admiralty's confidential plans to send a two-ship expedition to search for such a passage from the northern Pacific. (He had been offered an attractive sinecure at the Royal Hospital at Greenwich.) **But the attraction of the sea was too strong,** and during a meeting on January 9, 1776, ostensibly arranged to select the officers for the new expedition, **Cook suddenly stood and, after a dramatic pause, declared that he would lead the project if his companions—Sir Hugh Palliser, Philip Stephens, and John Montagu, earl of Sandwich, the three most important men of the Royal Navy (comptroller, secretary, and first lord of the Admiralty)—agreed. Cheers rang out. How could they reject the offer of such a worthy volunteer?**
- During the interminable delays in departing, Cook worked tirelessly on his second-voyage narrative (fortunately, Hawkesworth had died) and sat for a number of portraits (the one by Nathaniel Dance is considered the best likeness). Since arriving back, the navigator had been promoted to post-captain, a commission handed to him personally by King George III; was made a fellow of the Royal Society and contributed an article on the health of seamen to its journal, *Philosophical Transactions*, for which he would win the prize medal for best contribution of the year; and enjoyed the London social scene with such figures as Sir John Pringle, president of the Royal Society, and James Boswell. On the home front, Cook added another son, Hugh (named after friend and patron Palliser), in May; the other surviving children, James and Nathaniel (infant George had been born and died in 1772), were following the career of their father by entering the Portsmouth Naval Academy.

## Map of Third Voyage

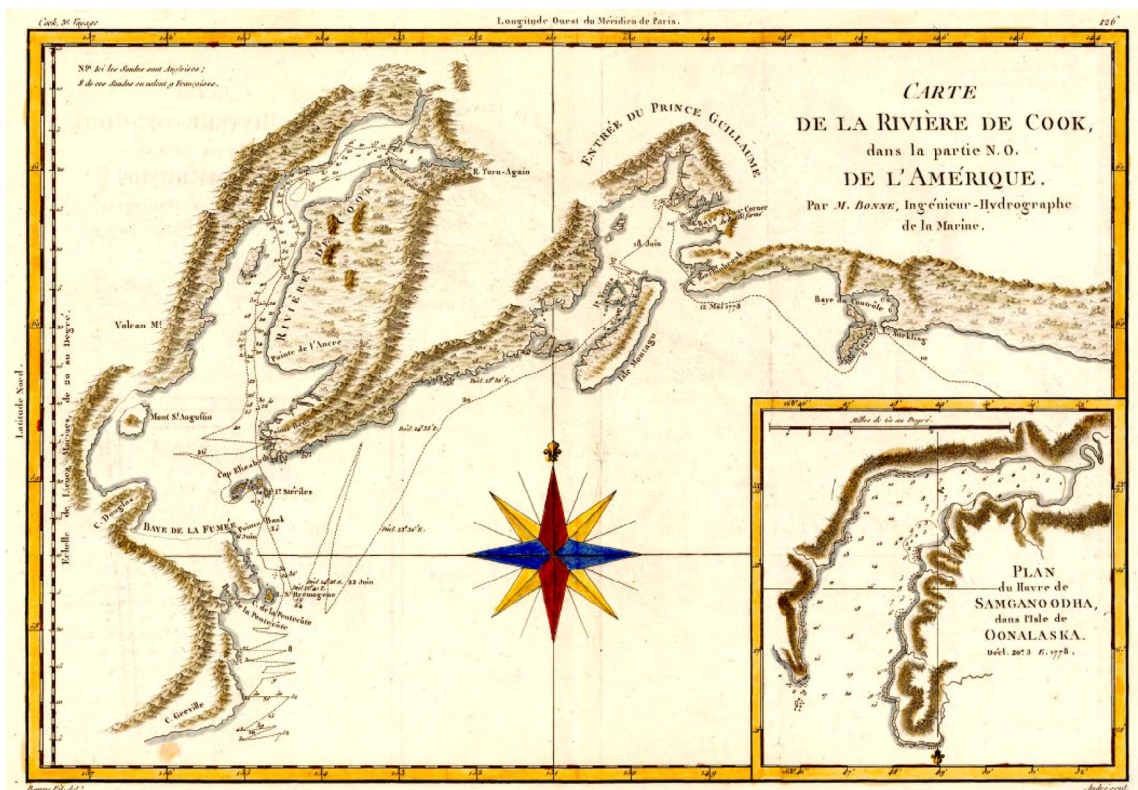




Cook Map of Hawaii (Sandwich Islands) Since Cook died during this voyage maps were produced from his journals



Cook Map of Alaska Coast, maps were produced from his journals





Cook's voyages were so famous and thought of around the world that many countries showed Cook's voyages on their maps.

Spanish Chart showing Cooks Voyage.

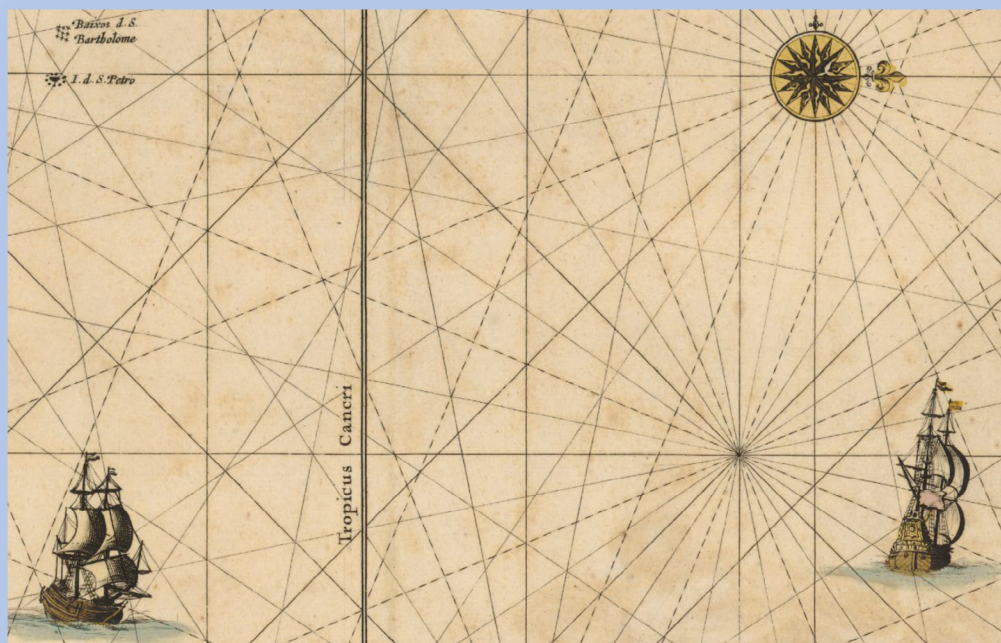
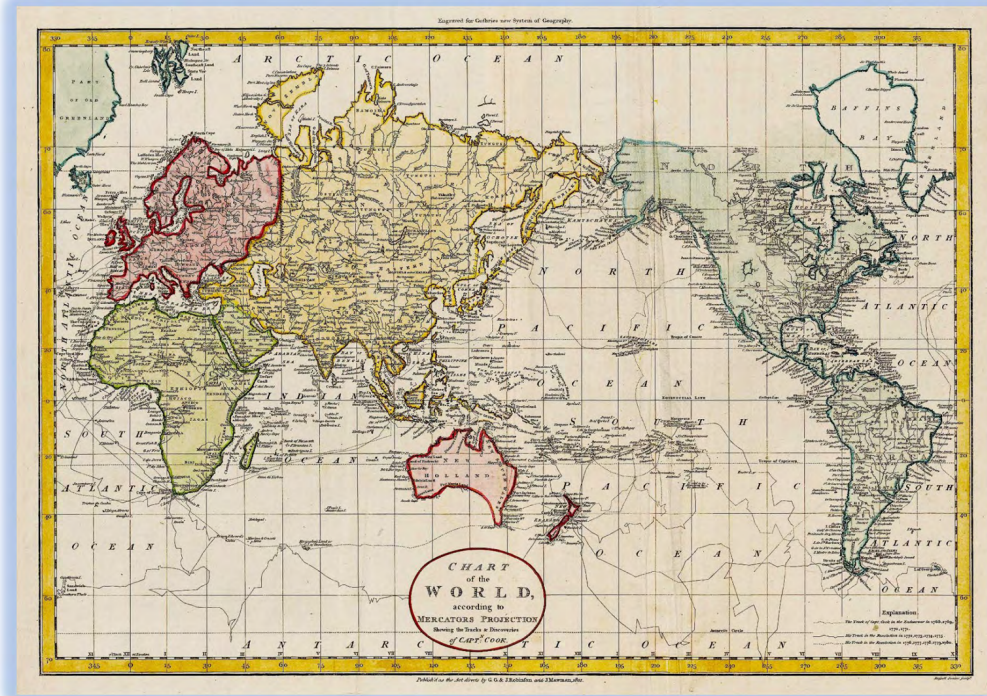




Chart of the World – Showing all Tracks & Discoveries by Captain Cook



Well, this concludes my story of Olde Maps, hope you've enjoyed the journey and the stories...  
Keep searching for your own stories and adventures.....

Read more about Captain Cook: [James Cook 250 |](#)

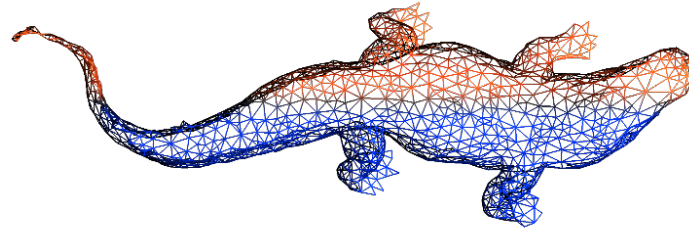
Links to Cooks Maps: <https://craventhompson.sharefile.com/d-s79615461e6b34c01bcfcb85a473d3dca>

*Richard D. Fryce . . . . RLS / PSM*

Replica of Cook's Ship  
"ENDEAVOR"







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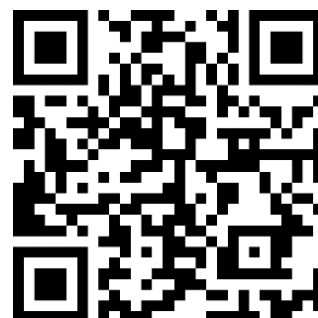
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# FACES ON THE FRONTIER

## FLORIDA SURVEYORS AND DEVELOPERS IN THE 19TH CENTURY

by Dr. Joe Knetsch

### CHAPTER 3

#### A FINDER OF MANY PATHS: JOHN WESTCOTT AND THE INTERNAL DEVELOPMENT OF FLORIDA

**I**nventor, Surveyor General of Florida, railroad president, canal builder, educator, doctor, soldier, politician, etc. the list of accomplishments of the remarkable John Westcott continues to grow as one investigates his life. He was, as with most men of originality, frequently embroiled in arguments, political turmoil and the search for answers. At the time of his death, he was working on a book concerning the origins, care and cures for yellow fever.<sup>1</sup> His mind seemed never to rest and intrigued all who knew him. He was also a practical man given to attempting the possible, even when the odds seemed forbidding. Because so many of his interests became major avenues of travel and commerce still in use today, John Westcott deserves a closer look as one of Florida's pathfinders.

<sup>1</sup>Quoted in Creville Bathe, *The St. Johns Railroad: 1858 to 1895* (St. Augustine: Allen, Lane & Scott, Philadelphia, Centennial edition, 1958), 56.

John Westcott, unlike his famous brother James D. who was born in Virginia, first saw the light of day in New Jersey on June 16, 1807. This date has eluded some who have written of his life, such as Rowland Rerick, who stated that he was eighty-four at the time of his death on December 31, 1888.<sup>2</sup> Little is known of his early education except that it was good enough for him to obtain an appointment to West Point, at the age of sixteen.



However, he did not last long at the Military Academy, being admitted as a cadet on July 1, 1823, and resigning by November 15th of the same year.<sup>3</sup> Though it has not been stated in any reference, it has been presumed that young Westcott soon entered into the study of medicine, probably in Philadelphia, but this has not been confirmed. That he became a doctor, however, is well known and he left the northeast to journey to Florida, settling in Madison, probably in 1838 or 1839.<sup>4</sup> If this dating is correct, Westcott arrived in Madison at the age of thirty-one or thirty-two and during the conflict known as the Second Seminole War. The time between his leaving the Military Academy and his arrival in Florida during this crucial war remains a mystery because of a lack of documentation.<sup>5</sup>

<sup>2</sup>Rowland H. Rerick, *Memoirs of Florida*, Volume II, (Atlanta: Southern Historical Association, 1902), Rerick also has his death listed as January 1889, which may be excused in that it was reported in newspapers of that year up to two weeks after the actual event.

<sup>3</sup>Letter of March 1, 1950. Colonel R. S. Nourse, Adjutant General's Office, U. S. Military Acadademy, Alfred Hanna, Gilbert Youngberg Papers, Box 4, Rollins College Archives and Special Collections, Winter Park, Florida.

<sup>4</sup>*Applications for Employment*, Volume 2, 1845-56, 57. In a letter of September 10, 1847, S. J. Perry wrote that he had "intimately known" Westcott for eight years, thus giving some evidence of Westcott's arrival prior to 1840. This volume is located in the Land Records and Title Section, Division of State Land Department of Environmental Protection, Tallahassee, Florida. Further citation will reference only the *Applications for Employment*.

<sup>5</sup>In a letter of November 4, 1949, Margaret Borland, a descendant of the Westcotts, wrote to A. J. Hanna that only a few medical pamphlets, which her aunt gave away, the family Bible and one piece of correspondence were all that she could trace in her family's records and possessions. Youngberg Papers, Box 4.

Westcott soon made a name for himself as a medical doctor and served in the Seminole War with Colonel William Bailey's First Regiment of Florida Mounted Volunteers. He was first mustered into the service on April 20, 1840, as an assistant surgeon, the normal starting rank for a trained physician in

## *Faces on the Frontier*

the military. He was promoted to the rank of surgeon on August 7, 1840, and remained at this rank for the remainder of his unit's service, which ended in early 1842, the usual enlistment period for Bailey's regiment being three months. Some of his colleagues during his service included Lt. Colonel F. L. Dancy, who was to succeed him as Surveyor General of Florida, Elias E. Blackburn, John Osteen and John H. Gee, of the successful Gee family of Gadsden County, and other prominent pioneers of early Florida. He frequently operated without an assistant surgeon until the appointment of John H. Gee in December of 1840.<sup>6</sup> After the war, he remained in Madison somewhat raised in stature and always referred to as "Doctor Westcott" by local residents.

<sup>6</sup>"Florida Militia Muster Rolls: Seminole Indian Wars," Volume I, Special Archives Publication Number 67, Florida Department of Military Affairs, State Arsenal, St. Francis Barracks, St. Augustine, Florida. 67-73. ed. Robert Hawk, no date of publication. Copies provided by the Executive Assistant for Government and Community Relations, Ramelle Petroglou, without whose assistance some of this valuable military information could not have been located.

From March 15, 1844, until August 21, 1845, John Westcott served as post-master at Madison, an important local position.<sup>7</sup> As post-master, he received the circular from Thomas Baltzell, President of the Board of Trustees for Seminary Lands, requesting information regarding the state of education in Madison County. Westcott took this opportunity to put forth a plan for the use of the fund and a system of education that was very modern in its methods. In this plan, the Madison post-master put forth the idea of a large common school fund generated from the rents of Seminary lands. The local section sixteen lands, would also be rented out and under local control through a commissioner of school lands located in each county and appointed by the governor and with Senate confirmation. He also called for a local property tax to aid in the support of education which would be voted on by local residents (property holders). Another innovation was the call for the creation of a Secretary of School Land and funds, to reside in Tallahassee, who would oversee most of the bonding and interest payments due to the various counties' school funds. Most importantly, as an adjunct to proper education, Westcott called for "uniform libraries" accessible to all classes in the community. These libraries, he believed, would be "important auxiliaries of public instruction and moral reformation." In a telling phrase,



he summed up his notions concerning public education: “Education is to the Republican body politic, what vital air is to the natural body; necessary to its vary existence, without which it would sicken, droop, and die.”<sup>8</sup> The calls for a local property tax, support for public libraries, a “Secretary of Education” and rentals of lands for purposes of raising funds for education were far in advance of most other plans put forth for education in the South or elsewhere. There was nothing elitist in his plan and it indicates a Jacksonian frame of reference that was to last throughout his life.

<sup>8</sup>Nita Katharine Pyburn, “John Westcott's Plan for Public Education in Florida, 1844,” *Florida Historical Quarterly*, 27 (January 1949), 300-07. An original copy of this report is also found in the Land Records and Title Section, Division of State Lands, Department of Environmental Protection, Tallahassee, Florida. (File - Rectangular file box, “School Land Selections”)

Westcott did not let his plan sit idle while policy makers elsewhere made up their collective minds. In January of 1845, Westcott and other Madison leaders formed Masonic Lodge No. 11. The Masons, with a long tradition of republicanism and public spirit, pushed forth in Madison and soon formed the St. Johns Seminary of Learning, the “best known and most important antebellum schools.” Located on the eight acres of land acquired by the Masonic Lodge at the corner of Base and Duval Streets, the school was convenient for the students of Madison and the surrounding countryside.<sup>9</sup> This pioneering school offered, according to historian Elizabeth Sims, the equivalent to a high school degree.

<sup>9</sup>Sims, 38-39. Page 50 notes Westcott's role as a charter officer in the Masonic Lodge.

The respect John Westcott had developed soon led him, like his older brother into politics and election to the House of Representatives of the State of Florida. Appearing in its first session, in November of 1846, Westcott had an opportunity to lead the new state in many directions. He was made chairman of the House Rules Committee and the Committee on Schools and Colleges, and was a member of the Committee on Amendments and Revisions to the Constitution and the Committee on Printing. Most significantly, he was a member of the Judiciary Committee, charged with the setting up of the new judicial system for the state. In this capacity, Westcott

## ***Faces on the Frontier***

pushed for the concept of elected judges for probate and co-sponsored the bill for “certified copies of records evidence” which would prevent fraudulent documents being admitted as evidence in trials, a concept in use to this very day.<sup>10</sup> From the *Journal of the Proceedings for 1846*, it appears that the Judiciary Committee assignment took up most of Westcott's attention in this session.

<sup>10</sup>For Westcott's support of elected probate judges see, *Journal of the Proceedings of the House of Representatives of the Second General Assembly of the State of Florida at its First Session* (Tallahassee: Southern Journal Office, 1846), 39. For the committee's recommendation regarding the certified documents and voting thereon see pages 44 and 50 in said *Journal of the Proceedings*.

However, because education was also an important subject to Westcott, one of his more important assignments was the Committee on Schools and Colleges. In this capacity, as in the plan noted above, Westcott led the way in delivering what appears to be an impassioned address concerning the need to fund public education. All were agreed and he began reading of the committee report, on the need to address the topic and its vital importance. However, the topic had been discussed to such lengths that too many were growing up in ignorance of their rights because of a lack of educational facilities. “A people cannot properly exercise their rights,” he declared, “and discharge their duties, without understanding them. In a republican government it is the duty of every citizen to have a knowledge of his rights and duties, and of the means or laws securing the one and enforcing the other. And from this, we derive the obligation of the whole, to furnish the means of study, or in other words provide schools, where rights and duties shall be taught.” To fund these needed schools, the committee felt that the immediate sale of the section sixteens would be the best method and from the proceeds to establish a common school fund under a common superintendence. This report, controversial by its nature, was adopted.<sup>11</sup> A separate Secretary of Education was not set up by the final enactment of the Legislature and control of the lands, especially the sixteenth sections, went, instead, to the Register of Public Lands, under the supervision of the Governor. The funds, beyond expenses, were to be invested in interest bearing bonds or like securities. These provisions angered Westcott and fellow representative Charles Russell of Benton County, with Westcott voting against the bill when it reached the floor.<sup>12</sup> The final law, Chapter 93, Laws of 1846,





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## ***Faces on the Frontier***

also did not include a provision proposed by Westcott concerning the method of payment over time and required in its place the payment of one quarter down with equal payments, plus interest, following in the next three years.<sup>13</sup> This principle, the payment over an extended period of time, was dear to Westcott and he often proposed it in some form each time the public was required to pay a large amount for property. In this belief, he was in keeping with many progressive thinkers of the day, including Thomas Hart Benton, who championed this principle in Congress.

<sup>11</sup>*Ibid*, 62-64.

<sup>12</sup>*Ibid*, 145-49.

<sup>13</sup>*Acts and Resolutions of the General Assembly of the State of Florida. Second Session, 1846* (Tallahassee: Office of the Floridian, 1846), 47-49.

Rowland Rerick noted that Westcott, while in legislature, “was one of the projectors of the internal improvement system of Florida.”<sup>14</sup> This is not a strictly accurate statement if one includes the promotion of ferry crossings and other such undertakings as incorporated into the realm of internal improvements. Indeed, Westcott opposed such uses of government power to grant monopolies to private individuals. In keeping with his basic Jacksonian principles, John Westcott constantly voted against ferry monopolies and toll roads. His votes in favor of reducing the burdens of financing land purchases show that he favored the “little man” in his politics, as later he would openly oppose the vested interests of St. Augustine and fall heavily into political disfavor with the large land owners who were frequently united with the banking houses. Westcott's support of the concept of internal improvements came from his belief that it should be done by individuals or public corporations, not government subsidies to particular interest groups. Indeed, he voted against the bill for the sale and use of lands set aside for the benefit of internal improvements that became Chapter 94, *Laws of 1846*.<sup>15</sup>

<sup>14</sup>Rerick, Volume II, 158.

<sup>15</sup>*Journal of the Proceedings*, 172-73. A close examination of the Journal reveals his constant defense of the time payment method and attempts to



get it approved as an amendment to each bill involving land purchases. His approach is consistent with the national movement for a graduated price for public lands and, eventually, free homestead lands for settlers, first reflected in American public life by the Armed Occupation Act of 1842, sometimes called the “Florida Donation Act” by some historians.

Whether his policies or his constant negative voting in the legislature discouraged him or not is unknown, however what is clear is that John Westcott did not serve in the next legislative session from Madison County. In August of 1847, John Westcott embarked on a career in public lands surveying as a means of supplementing the meager income he made from being one of two doctors in a small town. In his quest for a position as U. S. Deputy Surveyor, he enlisted the aid of S. J. Perry, another surveyor and political leader in Madison County. Robert Butler, then finishing a second tour of duty as Surveyor General of Florida, hired Westcott on August 26, 1847, and brought a sigh of relief from the ex-legislator.<sup>16</sup> By November 26, 1847, Dr. John Westcott was now U. S. Deputy Surveyor Westcott and operating in the not so friendly confines of Township 23 South, Range 24 East, near the headwaters of the Little Withlacoochee River, known today as the Green Swamp. There, with his men and supplies, he gratefully experienced bad weather, swamp and sickness that were the common experiences of surveyors then, and now.<sup>17</sup>

<sup>16</sup>*Applications for Employment*, 675.

<sup>17</sup>*Letters and Reports to Surveyor General, 1825-1847*, Volume 1. Letter of December 31, 1847, 875. Land Records and Title Section, Division of State Lands, Department of Environmental Protection, Tallahassee, Florida. Hereafter, *Letters and Reports*.

Almost every U. S. Deputy Surveyor who served in Florida, and other territories, was a pathfinder. Few, if any, persons traveled the lines blazed by the surveyors until the time of settlement, which, in some parts of the State, did not come until the verge of the Twentieth Century. In his first surveys in the Green Swamp area of central Florida, Westcott was one of the first human beings, including Indians, who saw the pristine nature of this fabulous resource, which is the source of four major rivers (The Withlacoochee, Hillsborough, Peace

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In 1828 the Territorial Legislature of Florida approved an act to create a state banking system and to issue \$10,000 in notes, with denominations ranging from 12½ cents to \$5.00.

The notes could be used for payment of debts to the Territory of Florida, and to purchase public land. Later the territorial government approved the incorporation of individual banks, as well as railroad companies, and allowed them to print and circulate their own currency.



Top: \$2 Bank note from Bank of Pensacola, 1840. Middle: \$5 dollar bank note issued by the Bank of St. Johns, 1859. Bottom: \$10 Bank Note issued by Bank of St. Johns (Florida Historical Society Archives)



and Kissimmee). The territory was one of vast swamps, some of which were unsurveyable at the time, and countless lakes, bayous, bayalls and intermittent streams. Westcott's description of the land is worth noting:

The work has been tedious on acct of numerous and Large swamps. The head of “Devore” & other Creeks tributaries of the Withlacoochee Through T 25. R. 23 T 25 R. 24 & T. 24 R. 24 the Main Stream of the Withlacoochee passes, with an immense swamp from 1/2 to 3 miles wide. The South Branch of the Withlacoochee & Hillsborough river rise in Large Swamps ... I have carried my “bed & board” on my back & Stomped on the Line upwards of 60 nights, that I might commence my work in day light & work until sunset. I do not mention this because there is any novelty on it, but to show the proper perseverance & intensity, has been used; the matter of the country is such that it is impossible to Pack to advantage.<sup>18</sup>

<sup>18</sup>*Letters and Reports*, Volume 2, 273. Letter of March 30, 1848.

In such primitive conditions the legislator, the community leader, this man of medicine and indomitable will forged forth to create a pattern of lines useable by settlers yet to come.

The difficulty of the terrain was not the only difficulty he faced as a Deputy Surveyor. In addition to the usual problems of Indian scares, bad weather, illness, lack of supplies and poor communications, he also faced the irritations of the bureaucracy in St. Augustine and Washington. One of the many controversies he encountered was a disagreement with fellow surveyor A. H. Jones, a former engineer in many canal and railroad ventures in Ohio and Pennsylvania. Jones, it appears, was under the impression that Westcott wanted to take nearly half of a proposed contract between Jones and the new Surveyor General of Florida, Benjamin Putnam. In two lengthy letters to Putnam, Westcott tried to persuade him that there was enough territory for at least two contracts and that the survey of those in the vicinity of Fenholloway and Steinhatchee Rivers headwaters was vital concern since the Indians, in the previous war, had used this area to the great harm of nearby settlers and soldiers. Putnam, however, had given his word to Jones and offered Westcott a choice of territories to survey, thus avoiding a difficult situation. Westcott

## *Faces on the Frontier*

chose the area near Peace River as his next contract, the other offer being “scrap work” in western Florida where he had no information as to the lay of the topography or distances between scraps.<sup>19</sup> Although Westcott had an additional contract for the 1849-50 surveying season, he also had hopes of more involvement in politics for he noted to Putnam, “My friends here Say my Election is Certain, knowing the uncertainty of Such matters, I am not So yet Sanguine, yet feel that the probabilities are in my favor.”<sup>20</sup> His election, as he feared, did not result in a seat in the legislature and on December 3, 1850, he wrote to Putnam that, “I am now So Situated that I could commence operations immediately.”<sup>21</sup> One does not ask for a surveying contract at a time when the legislature is meeting unless you are free from obligations, that is not sitting in the legislature.

<sup>19</sup>*Applications for Employment*, Volume 2. 683-88. Letters of October 13, and November 1, 1849; and Letters and Reports, Volume 2, 291-92.

<sup>20</sup>*Applications for Employment*, Volume 2, 691. Letter of August 30, 1850.

<sup>21</sup>*Miscellaneous Letters to Surveyor General*, Volume 2: 1848-1856. 1106. Land Records and Title Section, Division of State Lands, Department of Environmental Protection, Tallahassee, Florida. Hereafter, *MLSG*.

His stay in Tallahassee cut short for want of ready employment, it apperas John Westcott returned to Madison and practiced medicine. However, he did not remain tied to his office while there and continued to “dabble in mechanics” and other economic ventures. At about this time, Westcott is recorded as having begun a sawmill on the east side of Range Street in Madison.<sup>22</sup> He also continued to employ his time in community projects and other involvements. One such involvement actually proved a bit embarrassing when he injured himself slightly by misfiring the cannon during the July 4, 1851, celebration.<sup>23</sup> His time away from the spotlight was to be short-lived however, and in early 1853 Westcott was named Surveyor General of Florida by President Franklin Pierce.

<sup>22</sup>Sims, 37.

<sup>23</sup>Sims, 57.



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## *Faces on the Frontier*

His tenure as Surveyor General of Florida was to last five very busy years during which time he worked with his deputy surveyors on the surveying of the swamp and overflowed lands, the establishment of the Internal Improvement Trust Fund, the carrying on of the statewide surveys of public lands and cooperated with the U. S. Army in its preparations for the Third Seminole War, which “broke out” with the attack on Lieutenant Hartsuff’s command on December 20, 1855. The Third Seminole War, and the events leading up to it, put tremendous pressure on the Surveyor General. The United States policy, from the passage of the Armed Occupation Act of 1842 through the ordering of surveyors into the twenty-mile buffer zone, was one of gradual, but continual, pressure on the Indians to live up to their bargain and leave Florida. The native Floridians did not agree with this interpretation of past treaties and resisted the pressure of white settlements as best they could. Because one of the spearheads of this gradual pressure was the official surveying of the lands inside the twenty-mile buffer zone, pressure was brought to bear on Westcott to get his deputies into the area. Westcott, who agreed with the overall goals of this policy, attempted to accommodate the policy at nearly every turn. He was personally convinced that the policy of gradual pressure would get the desired results. The only problem for Westcott in this scenario was the timing of the removal. He was convinced it would happen in late 1853 or in 1854. The trials began in earnest on March 23, 1854, when the Secretary of War, Jefferson Davis, ordered the surveying of the Everglades region to begin.<sup>24</sup>

<sup>24</sup>Joe Knetsch, “John Westcott and the Coming of the Third Seminole War: Perspectives from Within,” Unpublished paper presented at the Annual Meeting of the Florida Historical Society, May 12, 1990, Tampa, Florida. In this paper, I covered much of this territory and presented the documents upon which this discussion is based. Copies of the paper are on file at P. K. Yonge Library of Florida History, Gainesville, Florida; the Special Collections Section of the University of South Florida Library, Tampa, Florida; and at the State Library of Florida, Dodd Room of Florida History, Tallahassee, Florida.

In early 1852, Commissioner of the General Land Office, John Wilson, wrote to Westcott asking which lands he would recommend for surveying first in the disputed area. Westcott replied that, “The lands on Okeechobee, Kissimmee river and Peas Creek would command the immediate attention



of the settlers & larger purchasers, when all fears are quieted of molestation by the Indians.”<sup>25</sup> He sent three of his deputies into the area, conscience of the possibility that an incident could, at any time, spark a new war. His men were also aware of the danger, but, undaunted, proceeded to their work. U. S. Deputy Surveyor, John Jackson, acknowledged that the prevailing opinion in Tampa was the possible loss of scalp and life if he and his crew were to proceed to the survey of the Peace River country. After a lengthy silence and no communications to the outside world, Jackson wrote to Westcott on January 12, 1855: “I presume on account of my long silence that you begin to think by this time (with others of our neighbors) that King Billy has got hold of us but such is not the case as you will presently see on my reporting progress.”<sup>26</sup> However, Jackson did realize that he was being closely watched and followed nearly every step of the way: “The Indians were watching our movements, even after our crossing Charlieopka Creek and particularly about the Big Prairie and thence to Istockpoga Lake they set the woods on fire about us frequently; I presume they thought to frighten us from going further on their boundaries...They have been complaining to Capt Casey that we frequently crossed their lines.”<sup>27</sup> The U. S. Deputy Surveyors did not present as large a threat to the Indians as did the military reconnaissance parties, who were also actively mapping the territory for totally different purposes. The three parties remained in the field until after the outbreak of the conflict without loss of life or serious injury.

<sup>25</sup>*Letters of Surveyor General 1853-1860*, Volume 9, 115. Land Records and Title Section, Division of State Lands, Department of Environmental Protection, Tallahassee, Florida. Hereafter, *Letters of Surveyor General*.

<sup>26</sup>*Letters and Reports to Surveyor General*, Volume 2, 152. Letter of January 12, 1855. For additional information on the life and career of John Jackson see, Joe Knetsch, “A Surveyor's Life: John Jackson in South Florida,” *Sunland Tribune*, 18 (November 1992), 3-8.

<sup>27</sup>*Letters and Reports to Surveyor General*, Volume 2, 153-54. Letter of February 7, 1855.

These surveys were valuable to the military and Captain John Casey, the former Indian agent and one of the few men trusted by the Seminoles and Miccosukees, wrote frequently to Westcott requesting maps of the most

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recent surveys of southern Florida. On two separate occasions prior to the outbreak, he provided the needed maps to Casey and Colonel J. Monroe, then commanding in Florida at Tampa.<sup>28</sup> After the commencement of hostilities, Westcott was very cooperative in providing the most current information gathered from the surveyors to the Army's top topographical experts, including Lieutenant Joseph Ives whose famous map of Florida in 1856 was compiled from the surveyors materials and the reconnaissance reports of his fellow officers in the field. In one of the more telling letters reflecting on the role of the Surveyor General in the conduct of the war, Westcott wrote:

I have caused to be constructed a diagram of part of South Florida, from the Surveys as made by this office, and the Sketch you were so kind as to present me, of that portion of the Country south of the Caloosahatchee, which I send you. I also send you a copy of letter I received to day from deputy surveyor Wm. S. Harris. There is no doubt but that Indians are in that section of country. Mr. Harris had not heard of the out break when he wrote the letter...I would respectfully suggest that you send at least a Lieutenants command east of the Kissimmee to scout that portion of country from Mr. Harris locality south to Okeechobee.<sup>29</sup>

<sup>28</sup>*MLSG*, Volume 2, 271. Letter of June 7, 1854 and Letter of April 25, 1855.

<sup>29</sup>*Letters of Surveyor General*, Volume 9, 269-70. Letter of January 17, 1856

Not surprisingly, Westcott, himself, was in the field on an inspection when news of the outbreak of hostilities was relayed to him at Fort Kissimmee.<sup>30</sup> Unlike previous Surveyor Generals of Florida, Westcott was often in the field to assure Washington and himself that the surveys were being carried on correctly, which also increased his personal knowledge of the territory and exposed him to the same dangers faced by his deputies, but his information to Casey, Monroe and Ives was more correct than any that could have been provided by his predecessors.

<sup>30</sup>*Letters of Surveyor General*, Volume 9, 270-71. Letter of January 18, 1856.

The Third Seminole War took up the remainder of his tenure as



Surveyor General of Florida and limited his men to surveys of grants, donations and other “scrap” work left undone in relatively safe locations. By mid 1858, John Westcott was looking for new employment, but not done with the controversy involving his tenure as Surveyor General. In June of that year, he began a rather acrimonious correspondence with the new Surveyor General, Francis L. Dancy, over his living quarters in the barracks at St. Augustine. Westcott maintained that Quartermaster General Thomas Jesup, had agreed to allow him to keep his private rooms in the barracks and that they were *not* part of the rooms granted for the use of the Surveyor General's offices. Westcott noted to Dancy that the barracks had not been fully occupied for some years and that Jesup preferred to have all of the rooms in use and maintained by the occupants, which Westcott did, at his own expense. Dancy, of course, believed that these rooms were part of those he obtained for use in his official duties.<sup>31</sup> This rather trivial squabble was more than a quest for more office space on the part of Dancy, it appears to be a portion of a plan to get at Westcott for political purposes, as the former Surveyor General was now a candidate for Congress as an Independent Democrat (Know-nothing).

<sup>31</sup>*MLSG*, Volume 3, 161-71. Letter of June 7 and two of June 8, 1858.

Westcott's political gamble was a weak one from the start. Although well known throughout the state and respected for his learning, his choice of political “party” left much to be desired. Even before he officially declared for the office of Congressman, he was castigated by the *Floridian & Journal*, the Tallahassee based organ of the state Democratic party, in the following words:

We alluded last week to a political demagogue calling himself a Democrat, who is represented to us as being busy in efforts to induce divisions in the Democratic ranks in counties East of Tallahassee. We suppose our readers understood to whom we referred. He is the Ex-Surveyor General of Florida. His expulsion from office is the cause of his attempt to give to the contemplated Alligator meeting in imposing character. We stated a week ago, that that meeting was of Know Nothing origin, but we now have reason to believe that *Westcott* has become its chief director. It is an office precisely suited to his genius. Wanting in that kind of ability that commands respect, but not without a certain degree

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of smartness, he makes up all deficiencies by low unscrupulous cunning.<sup>32</sup>

<sup>32</sup>*Floridian & Journal*, July 24, 1858.

This was the mild beginning of the opinion that painted only the darkest of pictures of the “Ex-Surveyor General.” Within less than a week, Westcott had announced his official candidacy against the incumbent Democratic Congressman, George S. Hawkins, who had gone into office in the Democratic sweep of 1856. Westcott did not hide the fact that he looked to support to old Whigs, Know Nothings and disaffected Democrats, and committed himself to backing the unionist policies of the Buchanan administration. One of his major planks, as he had argued while in the legislature and in an 1856 election pamphlet, was a low, affordable price for state lands. He declared himself a follower of the principals of Andrew Jackson and openly avowed his first vote was for the General and his last for Buchanan. In some of his best campaign rhetoric, he stated:

In advocating cheap lands - opposition to monopolies - free agency in voting, and the right of citizens to become candidates independent of the caucuses, or of conventional nominations, I violate no *principals* [sic] of teachings of the Fathers. I must confess, however, I never knew a part so just, so reasonable, and strictly right in *all* things that a man could be *tied* to it, strictly and blindly follow it, in its height and violence, and at the same time to observe the divine injunction, *do right*. Fidelity to the true interests of the State is a higher and more imperative obligation than that to party organization, especially when used by a *few* improperly.<sup>33</sup>

<sup>33</sup>*Floridian & Journal*, July 31, 1858.

Acceptance of the Buchanan administrations interpretation of the fugitive slave law, its weak stand on territorial self-rule, and other policies did not give Westcott a strong platform to run on in a state rapidly moving toward secession and being opposed by the regular Democratic machine, including both Senators and Congressman Hawkins. Even strongholds of leftover American Party (Know Nothing) sentiment, such as Hillsborough County, did not give Westcott consistent support.<sup>34</sup> The end result was very predictable, an election loss by over two thousand votes.



<sup>34</sup>A good discussion of the decline of the Know Nothing movement in Hillsborough County can be found in Spessard Stone, “The Know Nothings of Hillsborough County.” *Sunland Tribune*, 19 (November 1993), 3-8. A brief discussion of Westcott's election can be found in Arthur W. Thompson, “Political Nativism in Florida, 1848-1860: A Phase of Anti-Successionism,” *The Journal of Southern History*, 15 (February 1949), 60.

John Westcott had other distractions in the year of 1858. The State Legislature in its early session of that year, granted a charter to the St. Johns Railroad Company. The Board of Directors of this new venture to construct a railroad between St. Augustine and the St. Johns River, were John Westcott, Richard F. Floyd, B. E. Carr, D. G. Livingston and C. Bravo, with Floyd being elected the first president of the line. According to the newspaper account, “The Directors have assured us that in less than twelve months we shall ride in comfortable cars, after the “iron horse,” to the river in thirty minutes.”<sup>35</sup> The optimism which met the roads organization was felt throughout the area and great things were looked for from the new line of communication. These expectations were not to be met until many years after the Civil War, when new investors and more funds made getting an iron horse a reality and not a dream.

<sup>35</sup>*Floridian & Journal*, July 31, 1858.

Westcott had not only invested in the railroad, but obtained valuable experience in the operation and construction of railroads when he was appointed examining engineer for the Florida, Atlantic and Gulf Coast Railroad by the Board of Trustees of the Internal Improvement Trust Fund in July of 1858. As such, he investigated the grading, laying of the ties, and other details of the construction of the line as were in compliance with the orders of the Trustees.<sup>36</sup> This experience must have been of some value, as this line was more ambitious and complex than that proposed by Westcott, Floyd and partners.

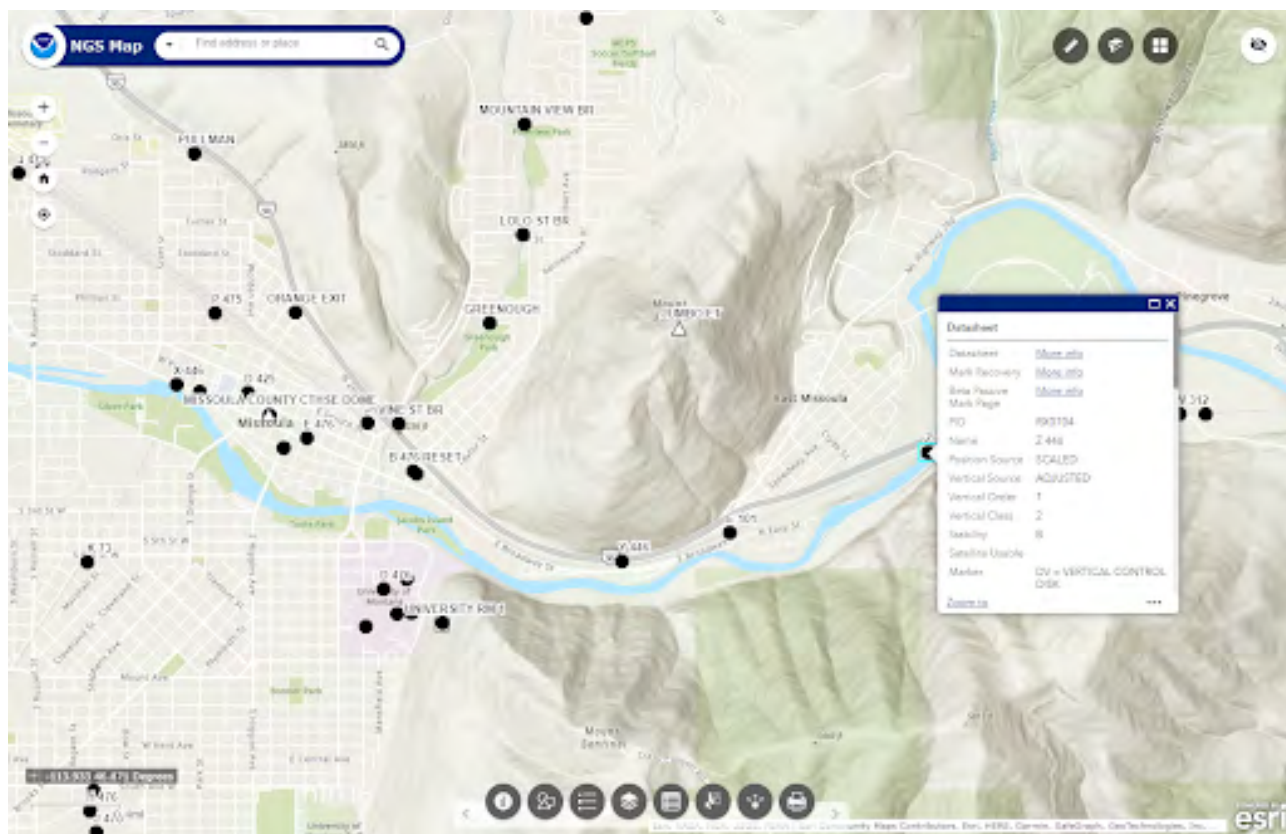
<sup>36</sup>*Board of Trustees of the Internal Improvement Trust Fund: Minutes*, Volume 1 (Tallahassee: L. B. Hilson, 1902), 91.

As a practical surveyor and prudent investor, John Westcott laid out the initial route for the new railroad. He surveyed every inch of the way and noted the major obstacles that would be encountered. The route lay

# NGS News

## NGS Data Explorer will be Decommissioned on November 16, 2023

Later this month the [NGS Data Explorer](#) will be decommissioned and will no longer be available. Users are encouraged to switch to the [NGS Map](#), an improved application with more NGS information available. Please make sure to update any bookmarks you have to the old application and point them to the NGS Map. There are two tutorial videos available that describe the [basic](#) and more [advanced](#) features of the NGS Map application.



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between Toco Landing on the St. Johns River and to the west bank of the San Sebastian River on the outskirts of St. Augustine. According to Greville Bathe, railroad historian, the reason for stopping short of the city proper was the large amount of intervening marsh along the river that would have to be crossed, a very expensive proposition.<sup>37</sup> As Bath described it: “The original tracks of the St. Johns Railroad were simply squared wooden stringers, laid on the felled trees cut down during the clearing of the right of way, and were protected on the top by thin strips of iron, similar to that used on tires of wagon wheels, and around 1858, sold for twenty dollars a ton.”<sup>38</sup> This description is similar to other early railroads of Florida, especially the Tallahassee to St. Marks railroad. The early cars, once the construction was completed for the first twelve miles, were drawn by horses or mules, which meant that two animals were used to haul the freight over a broad-gauged rail, i.e. five feet apart. This arrangement was not rapid nor satisfactory as the mules often balked at their task. In 1860, Westcott and friends were forced to rethink and redo most of the roadbed to accommodate a new mode of power, the iron-horse. However, as reported in the newspapers, by May of 1861, although the road had been regraded to within one and a half miles of St. Augustine and rails laid over the first mile and one half, construction had to be stopped because of “political troubles” then brewing, namely the firing on Fort Sumter and the beginning of the Civil War.<sup>39</sup>

<sup>37</sup>Bathe, 2.

<sup>38</sup>Bathe, 2-3.

<sup>39</sup>Bathe, 4-5.

Westcott, although a man of some unionist principals as noted in his defense of Buchanan's policies, did not let the coming of the war interfere with his proposed projects. In April of 1861, while work was continuing on the railroad, he proposed to the Board of Trustees the possibility of draining the swamp and overflowed lands in the reaches of the upper St. Johns River for the growth of sugar and other products. The Trustees, responding to this proposal, agreed to allow Westcott to survey the area, run the necessary levels to ascertain the practicability of such a project, and allowed themselves latitude to determine the compensation based on the results of Westcott's survey. The

## ***Faces on the Frontier***

area to be surveyed for improvement drainage lay south of Township 20, South, or in the area of Salt Lake, near Titusville, down to about the vicinity of Lake Poinsett, across the way for modern Rockledge. Not coincidentally, this was the area near the route of the St. Johns and Indian River Canal Company, headed by J. G. Speer.<sup>40</sup> His interest in this area was to continue after the war.

<sup>40</sup>*Trustees Minutes*, Volume 1, 215-226.

Just prior to the war, Westcott was active in a number of local concerns. In April of 1860, he was elected as High Potentate of the Florida Royal Arch Chapter No. 2.<sup>41</sup> Earlier that year, he presented a paper of significance before another relatively new organization, the Florida Historical Society. In this groundbreaking paper, he discussed, based upon his surveying experience, the probable route DeSoto took across Florida. The newspaper of the time stated: "We cannot but regard his address, as a most valuable communication on this subject, and one which will do much towards it, if it does not entirely settle this disputed route."<sup>42</sup> Although this did not end the dispute, as Buckingham Smith returned a few weeks later with new information from the Spanish Archives in Seville which differed in interpretation from that presented by Westcott, it did add more fuel to the debate which rages on today.

<sup>41</sup>St. Augustine *Examiner*, April 7, 1860.

<sup>42</sup>St. Augustine *Examiner*, February 4, 1860.

The war ended his social and economic ventures for some years. His record in the war shows an older soldier who was willing to take command and contribute. The official records show that John Westcott was mustered into service in 1862, with no specific date listed. It is well known that he served at Tampa early in the war and was present at the Battle of Olustee as an officer in the 6th Florida Battalion. Exactly what his assignment was is unclear, the picture of him in his uniform at the Confederate Memorial Literary Society, in Richmond, Virginia, notes his position as surgeon, 6th Florida Regiment. The official records list him as a major in the 10th Florida Infantry, 2nd Battalion. Dickison's *Military History of Florida* in the *Confederate Military History* series states that immediately following the Battle of Olustee, Westcott's company was ordered to the Ocklawaha area to assist in heading



off an attempted raid in that sector.<sup>43</sup> Therefore, there is some confusion as to Westcott's service in Florida during the war. What is equally clear from the records, he served in the Virginia campaigns of later 1864, including Petersburg and Cold Harbor, and mustered out of service on April 9, 1865.<sup>44</sup> The date of his mustering out is significant in that Westcott, along with the remainder of the 10th Florida Infantry, was present to surrender at Appomattox Court House. He was one of eighteen officers and one hundred and fifty-four men who survived the rigors of war.<sup>45</sup>

<sup>43</sup>J. J. Dickison, *Military History of Florida, Part of Confederate Military History*, Volume 1, (Secaucus, New Jersey: Blue & Grey Press, n.d.), 83.

<sup>44</sup>Florida Department of Military Affairs. "Florida Soldiers: CSA 9th, 10th, and 11th Infantry," Special Archives Publication No. 93. 219 and 233. These records show him to be part of the field staff of Colonel Charles F. Hopkins, a fellow surveyor, and as a Captain of I Company. His promotion to Major came after his immediate service in Florida and probably came with the commands transfer to Virginia, or shortly thereafter.

<sup>45</sup>"Florida Soldiers: CSA," 219.

Westcott's return home was not a joyful one, like most who came back to Florida. His immediate dream of revitalizing the railroad was not to be, for, as he wrote, "During the War, the depots were burnt, the rolling stock destroyed, nearly all the iron carried off, leaving only the road bed, land, & franchise to the owners. Since, for want of ready means we have been unable to re-construct it."<sup>46</sup> The exact status of the road until 1870 is another puzzle in that Bathe represents that a small "Coffee Mill" engine was running on the line between Toco and St. Augustine in the 1866 to 1870 period. He goes to great length to quote from Charles Hallock, noted author and editor, and Dr. Andrew Anderson, the prominent St. Augustine physician and Westcott's friend, about the state of the railroad in 1868. However, the petition quoted above was written in March of 1870 and indicates that the road was not operating its full length, fourteen and one-half miles. This is reinforced by the fact the Board of Trustees of the Internal Improvement Trust Fund passed a resolution on behalf of Westcott and the railroad granting additional lands for the "completion of the Road and its necessary drains and ditches," at which time the title to the granted lands would be given to the railroad after a certificate of

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completion had been issued by a competent engineer.<sup>47</sup> Additionally, most of the correspondence found for Westcott during the period between 1866 and 1870, concerns his law and land practice out of Jacksonville and not the matters of the railroad.<sup>48</sup> The problem presented here may not be answerable until further correspondence emerges in the future, however, the one thing that is certain, is the fact that all of Florida suffered from the war and Westcott and his partners in the railroad were not immune.

<sup>46</sup>Florida Department of State, Archives and Record Management. Series 914, Box 14. Letter of March 15, 1870. John Westcott to Board of Trustees of the Internal Improvement Trust Fund.

<sup>47</sup>*Trustees Minutes*, Volume 1, 416-17.

<sup>48</sup>Letters found to date include ones of March 28, 1866, October 19, 1866 and February 2, 1870. Florida Department of State: Archives and Record Management. Series 914, Boxes 12 and 14. Other letters found in the MLSG 1869-74, Volume 4, 9, 20, 34, 57, 100 also indicate his major concern was the law and land practice. All of these, however, do not convince this researcher that one can assume that the above statement is true. Too much of Westcott's correspondence is missing to preclude that an opposite conclusion could not be reached.

And although John Westcott eventually sold his interest in the St. Johns Railroad to William Astor and others, he remained on the Board of Directors until he died, demonstrating a commitment to the enterprise until the very end.

John Westcott also had other dreams regarding internal improvements. Another type of railway was envisioned by the inventor, lawyer, Surveyor General was a “saddlebag” railroad. This unique invention, which he patented, consisted of a single rail system that is similar in concept to today's monorail system. He demonstrated his creation at the famed Centennial exposition in 1876.<sup>49</sup> The energetic inventor soon interested some prominent men of Florida to back him in forming the “No Gauge or Single Rail Railroad and Construction Company” in early 1876 and got the legislature to incorporate it. Westcott, on behalf of his new company, then asked the Board of Trustees of the Internal Improvement Fund to sell swamp and overflowed lands cheaply to the company along a route from Orange Lake to the



# COMING IN JANUARY 2025 — *Seminars at Sea*



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**Presenter:** Patricia "Gail" Oliver

**Bio:** Gail Oliver is a Professional Surveyor & Mapper licensed to practice in the State of Florida. She has over 40 years of experience. In March 1979, after graduating from the First Coast Technical Institute Mapping and Cartography Program, she began her career in Jacksonville, FL where she had the opportunity to participate in many high profile projects with groundbreaking technology and approaches. Gail served as the County Surveyor for St. Johns County, FL for 30 years, including the last 5 years as the Director of Land Management, which included Real Estate, GIS, and Survey. Gail has extensive experience in most aspects of surveying and GIS, including Boundary, Platting, Topographic, Mean High Water, Rights-of-Way, Hydrographic, and Geodetic Surveys.

# COMING IN JANUARY 2025 — *Seminars at Sea*

## *Faces on the Frontier*

Ocklawaha River in Marion County. The Trustees reserved lands along the route for six months, at which time the road was to have been completed.<sup>50</sup> The road was not built or even graded. It appears that the time limit was too short and the capital needed was not forthcoming, therefore, the scheme had to be abandoned. But this minor setback did not dampen the spirits of the good Doctor and he went on to his next, and most important, enterprise.

<sup>50</sup>*Trustees Minutes*, Volume 2, 136-37.

The dream of an intra-coastal canal extending from the St. Augustine to Biscayne Bay was not original with John Westcott. Many men before him had contemplated the idea, including the Spanish who had used the natural “inside passage” during the first Spanish occupation. With the beginnings of the Internal Improvement Board, the predecessor to the Board of Trustees of the Internal Improvement Fund, member John Darling of Tampa had solicited ideas concerning such a canal route and found a favorable response from the Miami postmaster, George W. Ferguson.<sup>51</sup> Westcott himself noted to Issac Coryell that he had contemplated the canal as early as the organization of the St. Johns Railroad and considered it “part of the projected work” that would link transportation systems and tap the unused resources of southern Florida.<sup>52</sup> The idea, however unoriginal, had not been attempted with any serious funding, unless one includes the short-lived attempt by William Gleason in 1869-72, and it is Westcott who is most often credited with the title, “father of the East coast system of canals.”<sup>53</sup>

<sup>51</sup>Joe Knetsch and Paul George, “Life on the Miami Frontier,” *South Florida History Magazine*, Fall 1990, 8-9. The article is an edited version of the original letters found at the Department of Environmental Protection's Land Records and Title Section in a rectangular file box labeled, “Swamp and Overflowed Lands.”

<sup>52</sup>Letter of January 14, 1882. Westcott to Coryell. Photocopy of the original letter is located in the State Library of Florida's Special Collections (Dodd Room) at the Florida Department of State, Tallahassee, Florida.

<sup>53</sup>Rerick, 158.

Many things delayed the beginning of the Florida Coast Line Canal



and Transportation Company's work in constructing the intra-coastal canal. There were many competing claims for land, such as those of the St. Johns and Indian River Canal Company, the Atlantic Coast Steamboat, Canal and Improvement Company and the old Hunt and Gleason scheme. Added to these difficulties was, of course, the famous litigation surrounding the actions of the Board of Trustees of the Internal Improvement Trust Fund and one Francis Vose. The Vose suit and injunction delayed the construction of most internal improvements in Florida for nearly a decade. Once these legal problems were surmounted, the technical difficulties were encountered. This complicated project took a great deal of engineering skill, funding and political cajoling to complete. The initial surveying of the route was taken on by Westcott himself, though he had little practical training in this type of civil engineering and was later, after his death, criticized for his planned route. The project was aided by earlier construction over difficult places, such as the famed "Haulover Canal" area, by the Army Corps of Engineers.<sup>54</sup> However, most of the early work was done by the company without any outside assistance except in the form of land grants from the Board of Trustees of the Internal Improvement Fund. Although the company was incorporated in 1881, it did not have the funds or equipment to begin work until 1883. As Westcott wrote to Coryell in January of 1882:

This canal is an immediate necessity. All the Settlers South of here on the Coast, are clamorous for the work to be commenced at once. The Halifax country is now an important point to Secure, or other improvements may be made. & so it is with the Indian River Country. The shipments of fruit & vegetables are now large, & under the most adverse Circumstances and so with their receipts of Merchandise. If this Canal was now finished & which must be accomplished for the next crop, and for passengers to easily get South I believe it would not be a difficult matter to put from three to five thousand Settlers, on the line of improvement in a Short time. No man now can Settle on the coast water Line, because what he produces is locked up, for want of quick & Certain transportation.<sup>55</sup>

<sup>54</sup>George E. Buker, *Sun, Sand and Water: A History of the Jacksonville District Army Corps of Engineers, 1821-1975* (Jacksonville: U.S Army Engineer District, 1981), 116-17.

<sup>55</sup>Westcott to Coryell, letter of January 14, 1882.

## *Faces on the Frontier*

Westcott's sense of emergency was real enough, but it could not get the canal built in time for the shipments of 1883. Indeed, not until more funds and equipment were available could the canal become much of a reality at all.

The original requirements for the canal were fifty feet in width and five feet in depth, enough to float steamers that normally were plying the trade of the Ocklawaha and upper St. Johns above Lake Monroe. The originally constructed canal however, was a bit smaller than the required depth and width, primarily so that these types of craft could get the goods to and from market sooner. The result was, as Westcott admitted to Coryell, a short term projected canal of only thirty feet in width and three feet in depth. Westcott, in his optimism for the project, was very correct in predicting some of the results of this canal, even if the requirements were not strictly met at first. One of his predictions was the growth of a new city on Biscayne Bay, or Barnes Sound, which would soon eclipse Key West and open a new line for commercial products, primarily from tropical fruits.<sup>56</sup> Although this prediction became true, Westcott did not live to see it even begin nor did he last long enough to see the canal reach the required depth and width.

<sup>56</sup>Westcott to Coryell, letter of January 14, 1882.

After turning over the actual construction of the line to the construction crews, Westcott spent the remaining years arguing before the Board of Trustees of the Internal Improvement Fund for grants of land or proposing other grants in lieu of those that could not be fulfilled. As late as April 26, 1888, Dr. Westcott, as he was always referred to in the official documents, was stating the canal company's case before the Board of Trustees.<sup>57</sup> The constant travel and mental strain of these trips to Tallahassee must have taken their toll on the elderly doctor. In the long run, however, his efforts helped to obtain 1,030,128 acres of land for the company which, in turn, paid for the construction of the intracoastal canal, which was not finished until 1916.<sup>58</sup>

<sup>57</sup>*Trustees Minutes*, Volume 3, 489-90.

<sup>58</sup>Buker, 117.



The efforts of this man's remarkable life brought many changes to the lives of all Floridians. Anyone who travels the intracoastal waterways owes a bit of gratitude to John Westcott. Anyone who travels comfortably or ships their fruits over the railroads of Florida can look to John Westcott with a knowing eye that his efforts helped to bring Florida into the railroad age. And anyone who owns property in the Sunshine State must realize that as a surveyor and as Surveyor General, John Westcott had something to do with maintaining the integrity of their property lines. Doctor Westcott's life, in Florida, was one dedicated to the public welfare, from nursing the wounded in two wars to initiating the construction of the intracoastal canal system, his was a life of service. Like all of us, he made his enemies and paid for his mistakes. In the end, however, this neatly trimmed man in the white calico suits with soft mustache and goatee beard, must stand above most others as a leading pathfinder of Florida and a precursor to the modern world.<sup>59</sup>

<sup>59</sup>This physical description is taken from Bathe, 10.

Next Month ...

## CHAPTER 4

### UNTIRING, FAITHFUL AND EFFICIENT: THE LIFE OF FRANCIS LITTLEBERRY DANCY

Joe Knetsch has published over 170 articles and given over 130 papers on the history of Florida. He is the author of [\*Florida's Seminole Wars: 1817-1858\*](#) and he has edited two additional books. [\*Faces on the Frontier: Florida Surveyors and Developers in 19th Century Florida\*](#) is a history of the evolution of surveying public lands in Florida and traces the problems associated with any new frontier through the personalities of the major historical figures of the period. As the historian for the Division of State Lands, Florida Department of Environmental Protection, he is often called to give expert witness testimony involving land titles and navigable waterways issues.





VERO E REAL DISEGNO DELLA IN

ALL III<sup>mo</sup> ET ECC<sup>mo</sup> SIG<sup>no</sup> ANGELO COLONNA  
 ET PRINCIPALIS AEDIFICATORIS S<sup>mo</sup> M<sup>o</sup>

Corriere di honor volubente in questa felice Venezia su l'armata del  
 maturoi suo foto che cipitata alla base del Monte et alla destra  
 immagine di S<sup>to</sup> Marco e di S<sup>to</sup> Pietro non ha appreso che l'impero  
 la ragione a V<sup>o</sup> E. non è quel che si ha in più trovare  
 per passate l'ore. Si dice per aver parlo non d'Agosto  
 perora sua gola occhio di M<sup>o</sup> non è il luogo che è  
 perora l'ignora. Invece resti alla fama. Subsequente del  
 Principe della base M<sup>o</sup> a unione che lo bene l'ambrosio. Das  
 sulla sua digna commissione i suoi benefici rifloro come all'  
 Aquila et a Lani di regna tempo per unno quanto a se  
 quando si a l'armi della terra 1520 speranza animata i sup  
 dunque i C. V. non regno i regno. Invece della sua preziosa  
 a questa Venezia effigata che l'ora. I ambrosio come  
 d'istore per conto di quanto più vuole la ricorrenza come  
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 sopra. Invece hanno i suoi maturoi alla l'istore più ambrosio  
 nel suo tempo maturoi C. V. non regno. Invece a dar spem  
 a V<sup>o</sup> E. che in Vile sua più ripulante quanto più  
 maturoi loro i regno della a la loro. che qual è venuta  
 ora per sempre

DELL' ECC<sup>mo</sup> V<sup>o</sup> E.

Ilm<sup>o</sup> D<sup>no</sup> et Oblietcom<sup>o</sup>  
 Sec<sup>o</sup> Gu<sup>o</sup> Metio

1676



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LA GIVDECHA

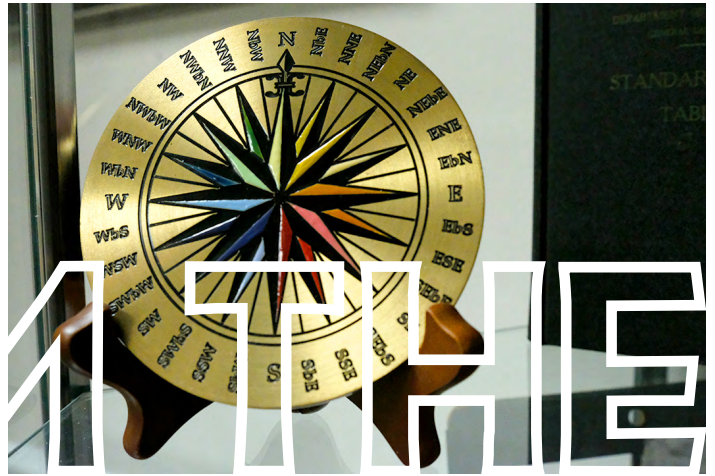
FONDAMENTA



# Early Modern Venice, Italy — 1676







# FROM THE ARCHIVES

CONCRETE HIGHWAYS AND WATERPROOFING  
STRUCTURAL TABLES AND DESIGN  
MATERIALS OF STRUCTURAL ENGINEERING  
WATER TURBINES





SCENES

IN A

**SURVEYOR'S LIFE;**

OR A

RECORD OF HARDSHIPS AND DANGERS ENCOUNTERED.  
AND AMUSING SCENES WHICH OCCURRED,

IN THE

**Operations of a Party of Surveyors**

IN

**SOUTH FLORIDA.**

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By W. L. PERRY.

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JACKSONVILLE:  
C. DREW'S BOOK AND JOB PRINTING OFFICE 1859.

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### CHAPTER III

About noon of the day on which we left our encampment at Sand Point, we put into Turkey Bay, into which Turkey Creek empties, to replenish our water-jugs at a spring near by; and also, to get a supply of oysters, which, in this bay, are remarkable for their large size and fine flavor. The entrance from the river is not more than one hundred feet in width; the bay itself is about two hundred yards from side to side, and in shape perfectly round. The bank, all around, rises from the water's edge at an angle of some thirty degrees, to the elevation of forty feet. The bay is entirely inclosed in a hammock of considerable extent and fertile soil, in which there is a grove of wild oranges. We noticed a number of otters fishing in the bay, and were no little amused at their cunning and dexterity in catching the fish. The water was in a perfect boil with the fish. No description can convey anything like an adequate idea of their immense number, everywhere visible, not only here, but in every part of Indian River. Just before reaching Turkey Creek we passed the southern point of an island called Merrit's Island, which is some thirty miles in length and five in width. The land on this island is principally pine, of the first quality, with some hammock, but I had no means of ascertaining how much.

The remainder of our voyage was remarkable for nothing save the number of musketos, and their blood-thirstiness. The bluffs on the river in many places were steep, high, and studded with large masses of cokena rock. As far as we could judge, from the boat, the country on either side of the river was rather elevated, and of a good quality of pine, with an occasional hammock.

As we sailed along the river we saw very little game, but



wherever we landed we saw any quantity of deer, turkey, and bear signs, particularly the latter, which at almost every place seemed to predominate. We also frequently saw the tracks of other animals, such as panthers, wolves, wildcats, foxes, raccoons, &c. No country can afford a greater amount or variety of amusement to the sportsman than this.

We arrived safely, and in good health, at Fort Capron on the evening of the sixth day from Smyrna. Finding no suitable place near the garrison, we ran down some two hundred yards below and encamped for the night, where we suffered bountifully from the bites of musketos, and a cutting north-easter, which swept like a hurricane down the river. Here we had much difficulty in finding wood to cook with, as the soldiers had used all within reach; and only after a long search in the dark, we found a sufficient number of small twigs to half cook our supper. When it was announced as ready for eating we were forced, in order to prevent the musketos flying down our throats, to take it on board the boat and push half a mile out in the river before we could do so.

On inquiry we found, as expected, that our team had not yet arrived, and of course we had nothing to do but wait until it did come. We found Fort Capron on a fine situation, and, on the whole, quite a pretty place. A company of United States troops were stationed here at the time of our visit, for the purpose of keeping in check the Seminole Indians, who occupy all, or nearly all, that portion of Florida south of this point. The barracks, commissary, hospital, officers' buildings, and the dwellings of one or two citizens in the immediate vicinity, altogether formed quite a little village. The parade-ground is perfectly level, and beautifully interspersed here and there with the palmetto tree. The garden of Major Russel at this time presented a superb appearance. In addition to the different varieties of vegetables ordinarily grown in gardens, there were numerous varieties of fruit, such as oranges, lemons, limes, pine-apples, plantains, bananas, guavas, and others. The Major had also a number of cocoanut trees, but they were not yet old enough to bear. Of the various fruits (we were permitted to pluck and eat at pleasure) none suffered more than the banana.

Through the kindness of Majors Russel and Haskins, we were furnished a house the day after our arrival, divided into bed-rooms by partitions of musquito-netting, and spent a whole week in waiting for the team, quite comfortably quartered. During this week we fared

sumptuously on fish, of which there were many in the river, it required only one throw of a small cast-net to procure enough to last four of us more than a day. Shooting the salt-water trout, which swam up near the banks to catch the smaller fish, and drying them in the sun to take with us to the woods, was a source of amusement and pastime. Some of them weighed twelve or fifteen pounds.

At the end of a week our team and men arrived by the land-routes after a tedious and perplexing trip of twelve days. We had thought until now that we had passed through the grand rendezvous of all the musketos in East or South Florida; but judging from the *virulent pustulic* apperance of every exposed part of the men who had made the land-trip, we had only seen the outposts of the enemy. While we of the boat had reason to complain more of the musketos at our present location than at any other point on the river, they of the team expressed themselves as being perfectly delighted as having arrived where there were no musketos. We gave it up.

The Major and his little company suffered much hardship on their trip. They neglected, in the hurry of their departure from Enterprise, to take a sufficient quantity of provision to last them, and suffered no little in consequence. The sixth day from the Enterprise they ate their last, supposing they could not be more than a few hours journey from Fort Capron, and the remaining six lived entirely on fresh venison, without salt, with an occassional palmetto bud, as they could spare the time to cut it. Fortunately for them they found game plentiful, and tame enough to be shot down at pleasure. For the want of salt and bread they only ate enough to keep up strength, and when they arrived at Fort Capron they were ravenously hungry. The first thing the Major did was to sit himself down with a large tin-pan of baked beans and pickled pork on one side of him, and a ten-gallon keg of whiskey on the other, where he remained, dividing his time and attention between the two, until I verily thought the man would kill himself.

The Major described the whole route as being a prairie country, with some pine land, and an occassional cabbage hammock; some of the prairies so large that the eye could not reach the opposite side, and all covered with the most luxuriant grass, waist high, making it the finest cattle-range in the world. My own opinion is, that ere a great while these prairie lands will be made valuable for planting purposes. They are of a



dark, rich colored soil, with a foundation of marl from eighteen to twenty-six inches below the surface; and, being somewhat elevated, are not subject to overflow, except during an extraordinarily rainy season, and even this danger might be easily obviated by a little ditching.

Our survey began some thirty miles west of Fort Capron, extending twelve miles still farther westward, and twenty miles south, to Lake Okeechobee, including the ground upon which the celebrated battle between Gen. Taylor and the Seminole chiefs Apeiaka, Oloke-thlock, and Coa-coachee was fought, December 26, 1838. Our work lay immediately contiguous to the boundary line of the territory now claimed by Billy Bowlegs and his party, and, in truth, was not especially enviable on this account, as the treacherous character of these Indians render them anything but safe and pleasant neighbors. I shall probably have occasion to speak more particularly of the Seminoles hereafter. Giving our tired team one day's rest, we began to make preparations for taking leave of the last vestige of civilization.

Loading the wagon with as many articles as the team could well pull, we struck out on an old trail leading almost due west. For several miles we passed over a succession of barren sand-hills, with little or no growth upon them save here and there a rough, scrubby pine, so low in stature that one might almost hitch his horse's bridle to the topmost bough without very materially stretching himself. Here and there, also, were parched and shriveled bunches of wire-grass, which looked as though it might not have grown an inch during the last quarter of a century. In an hour or two, however, we passed this sterile barren, and entered an elevated, but level, country, of rich soil, fine timber, and the most luxuriant growth of green grass I had ever seen. We passed a number of prairies : some of them containing many thousand acres, all covered with a peculiar grass some three feet high, which appeared to me unsurpassed for stock-raising purposes. Occasionally, too, we traveled close to the margin of a large lake, four or five miles in circuit, the water clear as crystal, and containing every variety of fresh water fish. At sunset we came to a small brook of pure water, clear and cool, where we encamped for the night. It was an excellent camping place, dry and grassy. We collected a large quantity of *fat lightwood* in anticipation of a bloody attack from our old enemies, the musketos. When we have plenty of fuel we can ward off their attacks, by kindling a

number of fires, in a circle, and getting into the centre; for it is a singular fact, as well as a most merciful provision of providence, that a musqueto will not pass between two fires when burning near each other.

But on this night, to our inexpressible joy, notwithstanding all our trouble in collecting lightwood to keep them off, not a musqueto buzzed about our ears; nor did they for sometime afterwards. They seemed all to have concentrated on, or about Indian River.

At this camping place, the Major and myself concluded to take a fire hunt, as all hands had expressed a desire for fresh venison. That the reader may have a distinct idea of this kind of pursuit, I will briefly describe the modus operandi. Two persons are indispensable to the operation. One walks ahead with a fire pan on his shoulder, filled with blazing pine-knots, casting a glaring light all around upon the neighboring forest, while the other follows immediately behind the first, with a gun in his hand, and a small wallet of split pine knots on his shoulder, for replenishing the fire from time to time, as occasion may require.

They walk steadily and silently forward, the pan-man turning his light from side to side and keeping his eyes steadily fixed all the while on the edge of his shadow some distance ahead. The deer, reposing quietly in the grass, is awakened by the hunters, and instead of fleeing to the thickets, he remains stupidly gazing on the portentous light, and the glaring of his eyes betrays his place of rest to the hunter. As soon as the man with the fire shines the eye, he makes a sign to his comrade behind him, who silently cocks the gun hands it to him, and then squats in the grass, to wait the result. The man with the fire and gun, now steps slowly and stealthily forward, until within fair gun-shot, and fires. Fire hunters also usually have a dog, trained for the purpose, which is led by a line, and when a deer is wounded, but runs off, the dog takes the trail and leads the hunter directly to his place of retreat, when, if he is not already dead, his eyes are again shined, and a second shot procured. But to return to our hunt.

Having split a sufficient quantity of pine, the Major shouldered the long-handled fire pan, and myself the gun and wallet of pine, not forgetting Bull, (the dog,) and started. Keeping along the same old trail we had followed from Fort Capron, we did not walk more than a mile, before the Major made sign that he had shined a pair of eyes. I



immediately handed him the gun, and he advanced a few yards and fired. At the crack of the gun, the deer gave several heavy plunges among some brush and palmetto bushes, and fled. We put the dog on the track, and in ten minutes got another shot, which resulted precisely as the first. We now thought our game must be badly crippled, and after some consultation loosed the line from Bull's neck and let him go, supposing he would catch it in a few moments. Away he went as hard as he could scamper, yelping at every jump. We listened at every moment to hear the deer bleat, but further sounded Bull's voice until it could no longer be heard, and we gave up the deer as lost. Presently, however, we heard the yelping again, and as it approached, the more and more distinct it became. The deer was coming down the creek swamp, with Bull in close pursuit, as we could now distinctly hear the plunges of each in the brush and water. Just as they came opposite to us in the swamp, the deer bleated, and we knew Bull had him. We started to them as fast as possible, guided by the deer's incessant bellowing, the growls and suppressed barks of Bull, and their tremendous plunges in the water. When within about fifty yards of the scene, a vine caught the pan and emptied every spark of fire into the water, then over knee deep; but without stopping to cry over *spilt fire*, we pushed on as fast as we could make a way through the vines, bushes, and bamboo briars, in the pitchy darkness, and when we arrived at the edge of the creek channel, Bull was standing on a tussock looking wistfully into the water, giving occasionally a whine and bark, but no deer was to be seen.

"He's in the creek," said the Major, "and if you'll hold on to the pan I'll go in and fish him out."

I took the pan and he walked in; the water coming up to his armpits. He felt around for some time before finding it, and when he had done so at last, cried out, "Here he is—here's the rascal," and then commenced a scuffle, the like of which I have never seen before. The water splashed all over me, so much so indeed, I was forced to retire somewhat to keep the gun dry.

"Hand me the hatchet," said the Major, "quick, hand me the —," then under he and the deer both went.

"O-o-s-h," said he, blowing the water out of his mouth and nose as he came up again.

"Hand me your kni—," but the balance of the sentence was carried under with him.

"Jump astride of him," I shouted as he came up, "and drown him. I can't come to you, loaded as I am. Mount his back and sink him."

"Straddle thunder," bawled the Major, "sink the nation. Come and help me, he's tearing me to pieces."

Fearing the Major might get seriously hurt, I laid the gun and other plunder on some roots which projected out of the water, and ran in to his assistance, and with our combined efforts soon drowned the deer. On dragging him out and striking a light, I found the Major almost bereft of his clothes, and not only were his clothes torn, but his skin also, in upwards of forty places. We strung our buck on a pole, and returned to camp, when the Capt. and boys laughed no little at my recital of our adventure in the creek swamp.●

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- Elevation Certificates and the Community Rating System
- Datums (eLearning Video Course)

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# Past Presidents



1956 - 1957  
H.O. Peters



1957 - 1958  
Harry C.  
Schwebke



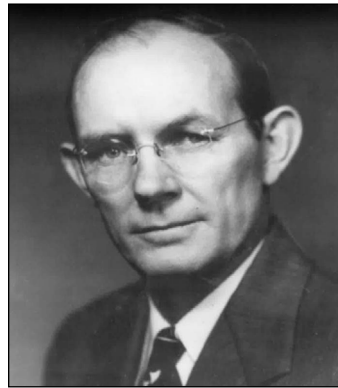
1958 - 1959  
John P. Goggin



1959 - 1960  
R.H. Jones



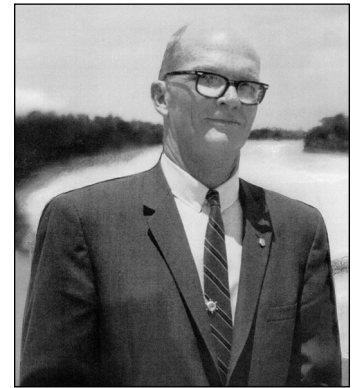
1960 - 1961  
Hugh A. Binyon



1961 - 1962  
Russell H.  
DeGrove



1962 - 1963  
Perry C. McGriff



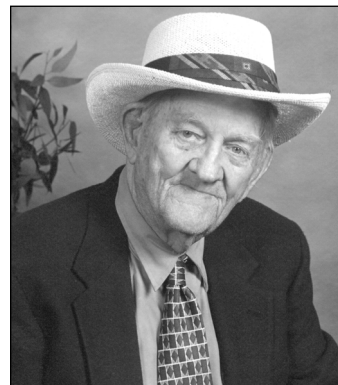
1963 - 1964  
Carl E. Johnson



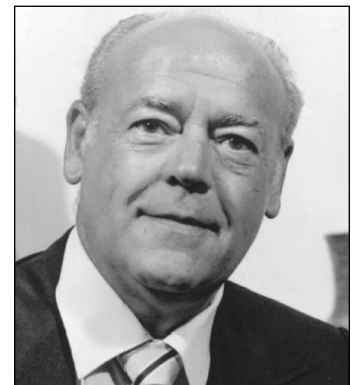
1964 - 1965  
James A.  
Thigpenn, III



1965 - 1966  
Harold A.  
Schuler, Jr.



1966 - 1967  
Shields E. Clark



1967 - 1968  
Maurice E. Berry



# Past Presidents



1968 - 1969  
William C. Hart



1969 - 1970  
Frank R.  
Shilling, Jr.



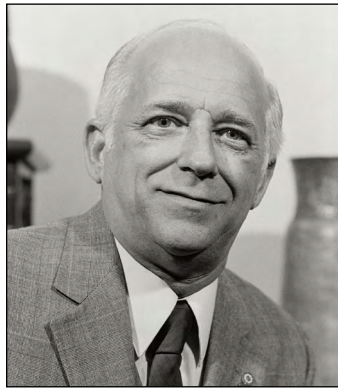
1970 - 1971  
William V. Keith



1971 - 1972  
James M. King



1972 - 1973  
Broward P. Davis



1973 - 1974  
E.R. (Ed)  
Brownell



1974 - 1975  
E.W. (Gene)  
Stoner



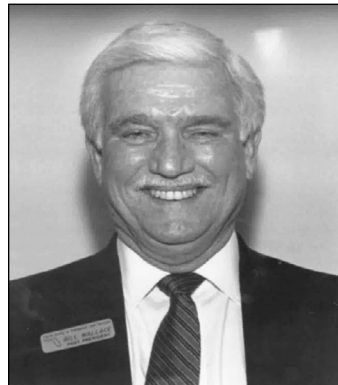
1975 - 1976  
Lewis H. Kent



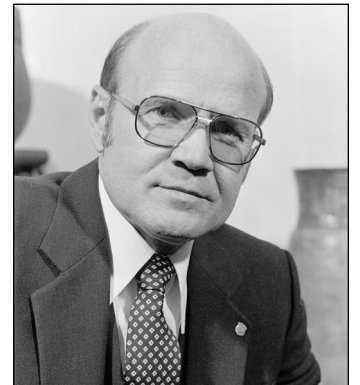
1976 - 1977  
Robert S. Harris



1977 - 1978  
Paul T.  
O'Hargan

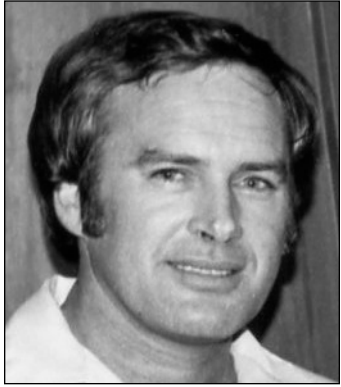


1978 - 1979  
William G.  
Wallace, Jr.



1979 - 1980  
Robert W.  
Wigglesworth

# Past Presidents



1980 - 1981  
Ben P.  
Blackburn



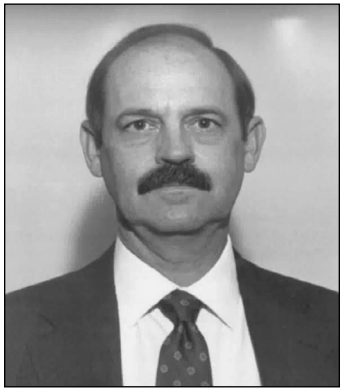
1981 - 1982  
William B.  
Thompson, III



1982 - 1983  
John R. Gargis



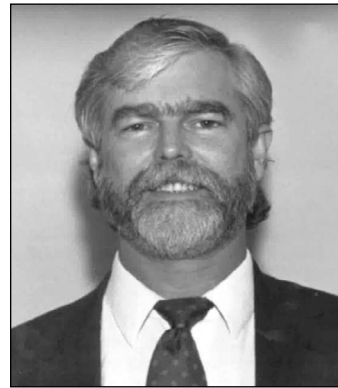
1983 - 1984  
Robert A.  
Bannerman



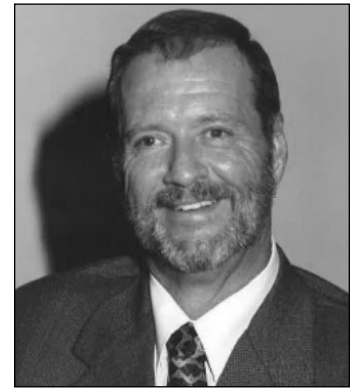
1984 - 1985  
Buell H. Harper



1985 - 1986  
H. Bruce  
Durden



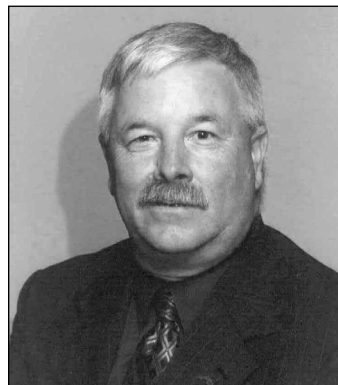
1986 - 1987  
Jan L. Skipper



1987 - 1988  
Stephen M.  
Woods



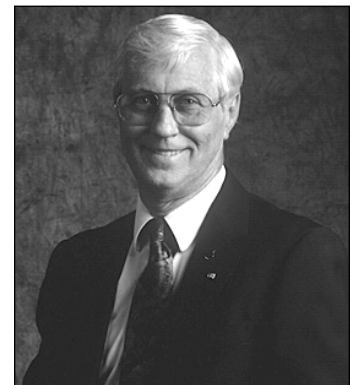
1988 - 1989  
Stephen G.  
Vrabel



1989 - 1990  
W. Lamar Evers



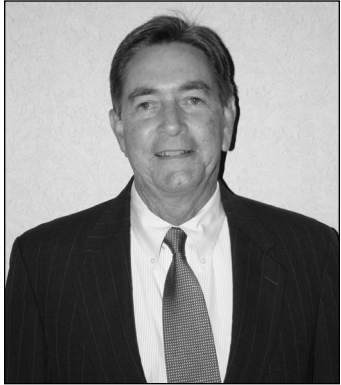
1990 - 1991  
Joseph S. Boggs



1991 - 1992  
Robert L.  
Graham



# Past Presidents



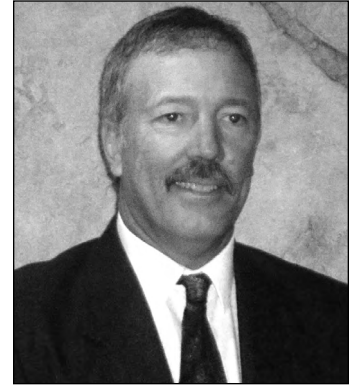
1992 - 1993  
Nicholas D.  
Miller



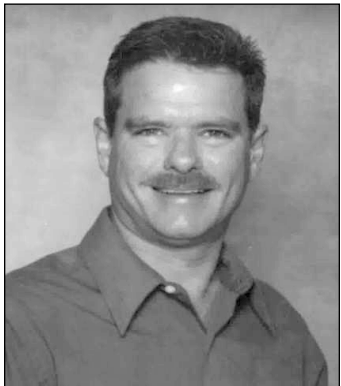
1993 - 1994  
Loren E.  
Mercer



1994 - 1995  
Kent Green



1994 - 1995  
Robert D. Cross



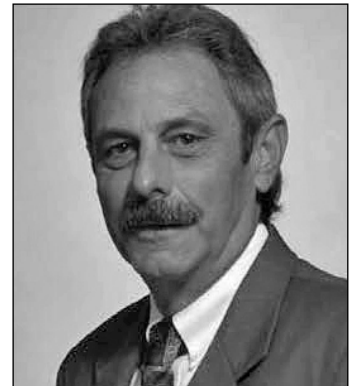
1995 - 1996  
Thomas L.  
Connor



1996 - 1997  
Gordon R.  
Niles, Jr.



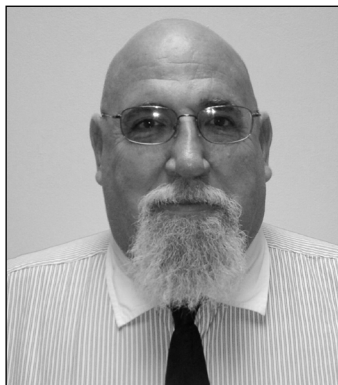
1997 - 1998  
Dennis E.  
Blankenship



1998 - 1999  
W. Lanier  
Mathews, II



1999 - 2000  
Jack Breed



2000 - 2001  
Arthur A.  
Mastronicola



2001 - 2002  
Michael H.  
Maxwell



2002 - 2003  
John M. Clyatt

# Past Presidents



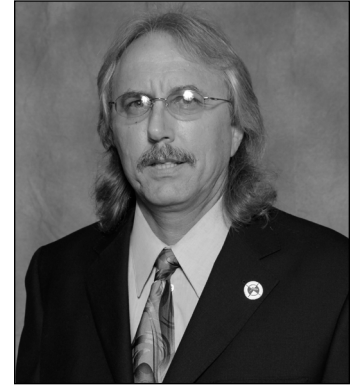
2003 - 2004  
David W.  
Schryver



2004 - 2005  
Stephen M.  
Gordon



2005 - 2006  
Richard G.  
Powell



2006 - 2007  
Michael J.  
Whiting



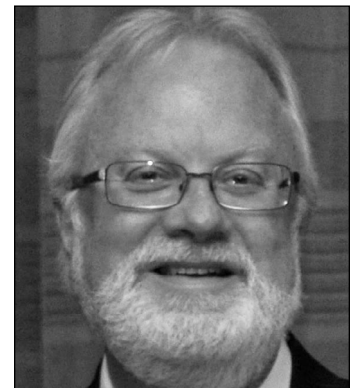
2007 - 2008  
Robert W.  
Jackson, Jr.



2008 - 2009  
Pablo Ferrari



2009 - 2010  
Steve Stinson



2010 - 2011  
Dan Ferrans



2011 - 2012  
Jeremiah  
Slaymaker



2012 - 2013  
Ken Glass



2013 - 2014  
Russell Hyatt



2014 - 2015  
William Rowe



# Past Presidents



2015 - 2016  
Dale Bradshaw



2016 - 2017  
Lou Campanile, Jr.



2017 - 2018  
Robert Strayer, Jr.



2018 - 2019  
Dianne Collins



2019 - 2020  
Don Elder



2020 - 2021  
Hal Peters



2021 - 2022  
Lou Campanile, Jr.

# ADMINISTRATIVE Staff



**Executive Director**

Rebecca Porter

[director@fsms.org](mailto:director@fsms.org)



**Education Director**

Samantha Hobbs

[education@fsms.org](mailto:education@fsms.org)



**Communications  
Coordinator**

Justin Ortiz

[communications@fsms.org](mailto:communications@fsms.org)



**Regional Coordinator**

Cathy Campanile

[seminolecc84@gmail.com](mailto:seminolecc84@gmail.com)



WE WISH YOU  
*Merry  
Christmas*  
& HAPPY NEW YEAR





# Win a Trip to Annual Conference!

FSMS is offering a Recruitment Bonus for Current Members who bring in New Members. The Recruitment Bonus will be a Conference Packet One Registration (*includes One Wed. BBQ Ticket, One Fri. Exhibitor's Luncheon Ticket, One Fri. Recognition Banquet, & Six Sat. Seminar CECs*) along with a 2 Night Stay at the DoubleTree by Hilton Hotel Orlando at Seaworld.

Recruitment Bonus will be Awarded based on a Point System. 6 Points for each New Full Member, Gov. Surveyor, & Sustaining Firm. 1 Point for each New Associate, Affiliate, & Student Member.

Whenever a New Member fills out their membership form they must provide referred current member's name when asked, "Were you referred by a Current Member of FSMS?"

Points will be awarded during Open Enrollment between November 15, 2023 and March 31, 2024. The Member with the most points will be deemed the Winner & be announced in *The Florida Surveyor!*

