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Around the State Conference Schedule and Seminars From the Archives Volume XXIX, Issue 6

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FSMS Surveyor Mugs

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Surveyor _(Noun) Definition:

Someone who does precision fuesswork based on unreliable data provided by those of questionable knowledge

Also see: Wizard, Magician

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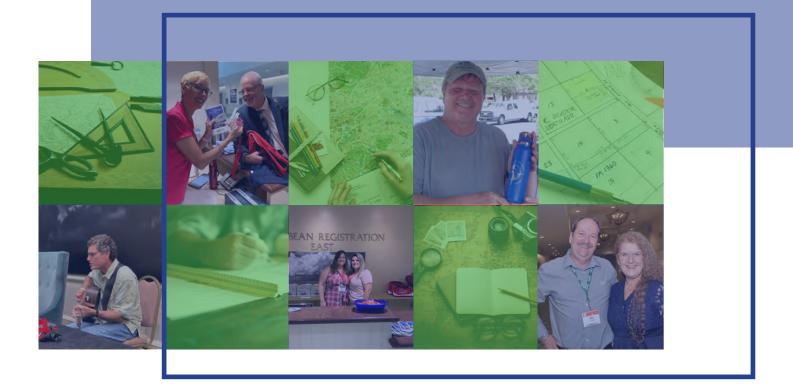
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Cover Photo by: Laura Levine



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2021 FSMS officers







President-Elect

Lou Campanile (352) 547-3086 lou@campanile.net

Vice President Jim Sullivan (561) 687-2220 Jim.Sullivan@wginc.com

Secretary Joe Perez (321) 230-4420 jlperez@pesengsurv.com

> Treasurer Bon Dewitt (352) 392-6010 bon@ufl.edu

Immediate Past President

Don Elder (850) 354-9665 donelderpsm@gmail.com

PRESIDENT'S message

Welcome to Summer!

Hopefully we all had a safe Memorial Day weekend and were able to reflect on those who "gave their all" in service to our Country.

I had a great weekend - did some kayaking and was very pleased to see life returning to normal, from our last year dealing with the COVID crisis. Many people were out and about enjoying time with friends and family, and I hope you were able to take time gather with your loved ones.

Last week, I attended the "Tri-Chapter Meeting", hosted by the Tampa Bay, Central Florida, and Ridge Chapters in Lakeland. It was great to be in a group setting, with fellow surveyors. They had a great turnout, and a good meeting.

As we move into summer, and business is busy, please participate in your local chapter events, and support our Society with sponsorships, and VERY importantly, support YOUR FSM Political Action Committee (FSM-PAC). The FSM-PAC funds the "behind the scenes" efforts to support and protect our profession in the Florida Legislature. This is a year-round activity, not just when our government is in session.

Don't forget our 66th Annual FSMS Conference is ON SCHEDULE for July 28 – 31, at the Sawgrass Marriott, in Ponte Vedra Beach, Florida. Please plan on attending, and we have plenty of <u>SPONSORSHIP</u> opportunities to show off your business to your fellow Surveyors.

To those of you who have already signed up for our Annual Conference in July, thank you very much.

If you haven't signed up for Conference – what are you waiting for? Time is running out!! We have a great conference planned, and I am really looking forward to meeting with all of our members in person, and seeing the latest items offered by our vendors. And when you do sign up, please check the line for the PAC reception.

Hope to see YOU in July at YOUR conference!



President Hal Peters (352) 304-9534 hpeters@gpinet.com

vvednesday, July 28		Wednesday,	July	28 th
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Seminar 1		
8:00 am —		
3.00 nm		

Course #10114 - 6 CEC's Gary Kent, PSM 3:00 pm

Art of Retracement

Boundary Surveying Issues for Florida Surveyors

Course #9331 - 6 CEC's - CE53

David Melvin, PSM

Changes to ALTA Standards Course #10115 - 3 CEC's

Gary Kent, PS



Every professional surveyor across the Unites States knows the phrase "Follow in the Footsteps" as it relates to conducting a boundary retracement survey. But what does it really mean and what is the basis for following the footsteps? And exactly whose footsteps are we talking about? Surveyors also know the effect of the statute of frauds is that what is written in the conveyancing document is considered by the courts to be the highest and best expression of the parties' intentions. But what happens when the evidence of the footsteps on the ground conflicts with the written title? What if there are seemingly no footsteps to follow? What then? In this program we will explore the concept of retracement, how it relates to and is dependent on the document of conveyance, and what controls when conflicts are inevitably encountered. When armed with a full understanding of the concept of retracement, surveyors will be much better equipped to help steer their clients (and their affected neighbors) away from the pain and cost of litigation, and towards an amicable solution based on well-placed confidence and understanding of their respective roles and responsibilities.

Gary Kent is a Professional Surveyor with Schneider Geomatics in Indianapolis. After 37 years, he transitioned to part-time status in 2020 and formed Meridian Land Consulting, LLC to provide training, consulting and expert witness services. Gary has served on the Indiana Board of Registration for Professional Surveyors since 2004 and is a past-president of both ACSM and the Indiana Society of Professional Land Surveyors. He has also served as Chair of the Joint ALTA/NSPS Committee responsible for the ALTA/ NSPS Standards since 1995. Gary has presented programs on easements and rights of way, survey standards, boundary law, and other surveying-related topics in all 50 states.

8:00 am — 3:00 pm	

Seminar 2

The seminar deals with boundary surveying in the State of Florida. Many surveyors all over the State of Florida make boundary surveys for their clients. Revisions made in July of 2018 in the wording of boundary survey standards in Florida have made boundary surveys a very topical subject. The revisions have brought to light the complexities involved in performing a boundary survey. In the opinions of many boundary surveyors the new wording in Florida's standards reflects an apparent reawaking to boundary surveying requirements which are based in the law. Florida surveyors need to reexamine their boundary surveying practices. This seminar provides an excellent opportunity to make such an examination of boundary surveying issues.

David Melvin, PSM, is a Professional Land Surveyor with over 40 years of experience in the surveying and mapping profession. He graduated from the University of Florida in 1981 with a degree focused on land surveying. In 2003 he started Land Pro Seminars, a board-certified continuing education provider for surveyors and engineers. David's chosen areas of expertise are land and water boundaries, floodplain mapping, jurisdictional wetlands, and land surveyors' regulatory issues.

Thursday, July 29th

Seminar I		
8:00 am —		
10:30 am		



After 2 years of work on the part of the Joint ALTA/NSPS Committee, the proposed 2021 ALTA/NSPS Land Title Survey Standards were adopted in August, approved by ALTA and NSPS in October, and they became effective on February 23, 2021. This program will outline the many changes from the 2016 Standards and provide an explanation of what each means to the surveyor. In addition, an overview of the entire set of 2021 Standards will be provided including detailed explanation of the relationship between Land Title Surveys and title insurance. Finally, some common questions that arise in the process of performing a Land Title Survey will be discussed.

Gary Kent is a Professional Surveyor with Schneider Geomatics in Indianapolis. After 37 years, he transitioned to part-time status in 2020 and formed Meridian Land Consulting, LLC to provide training, consulting and expert witness services. Gary has served on the Indiana Board of Registration for Professional Surveyors since 2004 and is a pastpresident of both ACSM and the Indiana Society of Professional Land Surveyors. He has also served as Chair of the Joint ALTA/NSPS Committee responsible for the ALTA/NSPS Standards since 1995. Gary has presented programs on easements and rights of way, survey standards, boundary law, and other surveying-related topics in all 50 states.

Thursday, July 29th

Seminar I
8:00 am —
10:30 am

Sea Level, Tidal Data & Water Boundaries Course #9666 - 3 CEC's George Cole, PLS PE, PhD



This presentation will be based on a publication in development which will be a much updated version of the venerable WATER BOUNDARIES book (John Wiley & Sons, 1996) and will cover some interesting new twists.

The major topics will include the following: Sea Level Change, Tidal Variation and Datum Planes, Tidal Coastal Boundaries, ries, Riparian and Littoral Boundaries, and Boundaries for Riparian and Littoral Rights.

George M. Cole is a professional surveyor, engineer, and geographer. His background includes directing hydrographic and geodetic surveys as a commissioned officer of the U.S. Coast & Geodetic Survey (now NOAA); service as the State Cadastral Surveyor for Florida; as a private consultant directing private surveying and mapping operations in both the United States and Latin America; as a visiting professor at the University of Puerto Rico; and currently continues as an adjunct professor at the Florida State University and at the University of Puerto Rico. In addition, he has served as technical advisor to several states on boundary issues; and has provided expert testimony to a number of local, state and federal courts. Dr. Cole has also made significant contributions to professional literature and is the author of several surveying textbooks (with notable examples being *Water Boundaries*, John Wiley & Sons, *Surveyor Reference Manual*, Professional Publications, and *Land Tenure, Boundary Surveying and Cadastral Systems* (with Don Wilson), CRC Press).

Wednesday & Thursday, July 28th & 29th

8:00 am— 4:30 pm Fundamentals of Professional Surveying - SIT Prep Course Course #10116 - 16 CEC's Dr. Stacey Lyle, RPLS

Interactive course following a workbook on the NCEES's Fundamentals of Surveying Exam. The Fundamentals of Surveying (FS) exam is generally the first step in the process to becoming a professional licensed surveyor (P.S.). The is designed for recent graduates and students who are close to finishing an undergraduate surveying degree from an ABET accredited program. This course will summarize the following: 1. Review FS Exam Format and Exam Taking Skills; 2. Math and Science of Professional Surveying; 3. History of Surveying; 4. Mapping Processes and Methods; 5. Boundary Construction Workflow; 6. Geodesy; 7. Photogrammetry/Hydrography; 8. Engineering Surveying; 9. Business Law; and 10. Fundamental of Surveying Exam Problem Solving



Dr. Stacey Lyle, RPLS, Associate Professor of Practice Texas A&M University College of Engineering and College of Geoscience where he teaches Surveying, Engineering, and Geosciences graduate and undergraduate courses. Dr. Lyle is a Licensed Professional Land Surveyor with 30 years of experience in Land Surveying, Geodesy, Hydrographic Surveying, and Photogrammetry with over 30 peer-review publication. He holds a BS in Engineering, a MS Computer Science, and a PhD in Geography. He has worked for Wimpol (Fugro Chance) as an offshore surveyor, for Leica Geosystems as GPS and Photogrammetry Expert, and Director of Machine Control, and was a Research Scientist with Conrad Blucher Institute for Surveying Science at Texas A&M University- Corpus Christi as an Associate Professor in the Geographic Information Science and Geospatial Engineering Programs. Dr. Lyle is the 2021-2022 ABET Engineering Accreditation Commission's Commissioner representing the National Society of Professional Surveyors. He is a former NASA Faculty Fellow, USDA Faculty Fellow, and NOAA NGS Honouree for work developing High Accuracy Reference Networks. And in 2013 he was invited to the United Nations for the Global Geospatial Information Management as the Energy Industry Representative. Dr. Lyle has testified as an expert witness on Federal and State court cases on Land Boundary/ Oil& Gas issues acted as an expert to industry to US Congress and US Senate, to the State of Texas Railroad Commission and to the Board of Professional Land Surveyors on regulations. He has also co-authored State regulatory Rules and Acts with State Boards. Currently, Dr. Lyle is a Subject Matter Expert with BP's onshore Lower 48 operation as the Survey Lead working with the new Technical Information Management team to drive business with Geospatial solutions and capabilities.

Saturday, July 31st (All Day Course)

8:30 am— 3:00 pm

Chapter 177 Course # 10113 - 6 CECs Panel Discussion - Moderators: Richard Allen, PSM, CFM & Matt Kalus, PE, PSM



Panel to Discuss Proposing Changes to Florida Statutes Chapter 177.

The discussion will cover the history of FS 177 and what is the intent of the statute. Discussion will include proposed changes and what discussions there have been thus far and to gather additional positions on the legislation. The importance of subdividing and platting real property is becoming increasingly important as more development takes place in the state and the discussion on what is the purpose and what are the requirements become increasingly important. It must also be discussed that the use of the plat for legal or planning purposes outside of the platting of real property is becoming more prevalent and overburdensome as it has no place on the plat.

Richard Allen, PSM, CFM, Is the City Surveyor for the City of Orlando. Richard has over 24 years of land surveying experience and has been with the City of Orlando for the last 15 years. He over sees the survey activities for the City of Orlando and manages the survey section. Richard is the Surveyors in Government Liaison for FSMS and is the Secretary for the Geospatial Users Group. In addition he is the Region 5 Director for the Florida Floodplain Managers Association representing Central Florida.

Matt Kalus, PE, PSM, Is a Senior Surveyor and Mapper in the Development Engineering Division of Public Works for Orange County Government. Matt has extensive experience in surveying, mapping, GIS and engineering. His current role is the review and approval of subdivision plats and for development across Orange County. He has also worked for the Orange County Property Appraisers Office in the GIS Mapping section and for Lake County Government.

Saturday, July 31st (2 Hr. Morning Segments)

8:30 am— 10:10 am

Craig Emrick, Sherry Grymko, Nick DiGruttolo

Data Fusion

Course #10106 — 2 CEC's

This course includes a brief summary of technologies used for data collection and how to fuse this data together to create a seamless dataset. Technologies included in this course are Airborne LiDAR, Terrestrial scanners and Single/Multi-Beam Hydrographic Surveying. The course is designed to provide an understanding of the various datasets created with different technologies (Air, Land, Water) and how to merge them together to provide the full topographic picture.

Craig Emrick is a native Floridian and has been involved in surveying since 1993 in both the public and private sectors statewide. He is a 2002 graduate of the University of Florida's Geomatics Program and is a licensed surveyor in the States of Florida and Alabama. Craig is Pickett's Vice President of Geospatial Services and is responsible for the management, execution, and quality control of various aerial surveying projects throughout the US and Caribbean.



Sherry Grymko has been involved in the surveying and mapping field since 2002 when she began her career at Pickett and Associates. She graduated from Penn State University with a Bachelor's in Surveying, and the University of Florida with a Master of Science in Geomatics in 2004. Her experience includes hydrographic surveys, boundary surveys, topographic surveys, ALTA/ACSM title surveys, "as-built" surveys, photogrammetric geodetic ground control, volume computations and GIS mapping. Ms. Grymko is the Survey Manager and Lead Project Surveyor for all hydrographic surveys

and has extensive knowledge of single beam and multibeam hydrographic survey data collection and processing.



Nick DiGruttolo has been surveying since 1988 and spent 15 years working as a field crew chief for Sarasota County before moving to Gainesville to pursue his bachelors in Geomatics. After obtaining the bachelor's degree, Nick obtained surveying licenses in Florida, Georgia and Mississippi and completed a MSc and PhD with a concentration in geomatics while working for Northrop Grumman Advanced Geospatial Intelligence Operating Unit. At Northrop Grumman, Nick managed surveying and mapping projects mainly in support of the Naval Facilities Engineering Command, which involved establishing control for LiDAR and photogrammetry projects and producing real estate base maps for Navy installations. Nick currently works for Pickett and Associates as a Survey Manager supporting electrical utility projects.

	Saturday, July 31 st (2 Hr. Morning Segments)
8:30 am— 10:10 am	Updates on the Modernized NSRS (2022) and NGS Products Course # 10107- 2 CECs Denis Riordan, Gulf Coast Region Geodetic Advisor, NOAA, National Geodetic Survey (VIRTUAL)
	The National Geodetic Survey continues to work on the updated 2022 Datums for the U.S., now being called the "Modernization of the National Spatial Reference System" (NSRS). This presentation will provide updated information on the state of that NSRS modernization project, along with discussion on related NGS products such as, coordinated transformations using NCAT, deprecation of the U.S. Survey Foot, the NGS GPS on Benchmark project, and the latest on OPUS products.
Pan	Denis Riordan, has worked with the National Geodetic Survey (NGS) for the past 16 years and serves as the Geodetic Advisor for the NGS Gulf Coast Region (AL, FL, LA, & MS). He works to support those who use NGS products and services (products like the National Spatial Reference Frame (NSRS). He holds a B.S. Degree in Surveying and Mapping from the University of Florida, is a licensed surveyor in the State of Florida, and worked for over ten years with private industry is the field of land surveying prior to joining NGS
8:30 am — 10:10 am	Future of Florida Surveyors and Mappers Course #10108 — 2 CEC's Moderated by: Jack Breed
	The Florida Surveyor and Mapper
AL AL	A Professional?
	A Tradesman?
	Licensed or Certified?
75.2	Educated, Experienced and Tested?
	Two-tiered license?
	Jack Breed will serve as the Moderator of a no-holds-barred, no-sacred-cows group discussion of the future of our grand old Profession (Trade?) This is not for the timid, and it's most certainly not a time for poor manners. Join in the mutual respect and camaraderie of your fellow Surveyors and let's hash it out. If you are not a member, pay your dues before offering your opinion!
	<i>J.N. "Jack" Breed, P.L.S.</i> is a Fellow, Life Member, and Past President of the Florida Surveying and Mapping Society, and currently serves our profession as the Chairman of both the Legal and Legislative Committees. Mr. Breed is a High Honor graduate of the University of Florida College of Engineering, with a 1982 Bachelor's Degree in Land Surveying. In addition to being one of the Founders of CivilSurv Design Group, Inc., he is an Adjunct Instructor in the School of Forest, Fisheries and Geomatics Sciences (FFGS) in the University of Florida's College of Agriculture & Life Sciences. He is a Florida-licensed Professional Surveyor and Mapper (LS4089), an FDACS BPSM approved Continuing Education Provider (CE77), and serves on the UF Geomatics Program Advisory Committee and the FFGS Advisory Board. The grandfather of a sixth-generation Floridian, Mr. Breed is active in many arenas, including serving as an Elder and Bible Instructor in the Associate Reformed Presbyterian Church, Founding Chairman of the Geneva Classical Academy, and holding active memberships in the National Society of Professional Surveyors, the Lakeland Chamber of Commerce, the Ridge League of Cities, the Lake Management Society, the Sebring Historical Society, the Coastal Conservation Association, Ducks Unlimited, and the National Rifle Association. Mr. Breed is the CC&BW for the world-renowned Grove In The Swamp Barbecue Team, and a Life

Mr. Breed's 40+ years of experience has included leading all phases of infrastructure planning and development in Surveying and Mapping, Engineering, Environmental Sciences, Planning, Design, Agency Permitting, and Construction Management. His career has focused on Public Infrastructure projects. As a Professional Surveyor and Mapper, he has been responsible for route/right-of-way, sectional retracement, boundary, construction, topographic, hydrographic and geodetic control surveys for roadways, electric transmission lines, transportation projects, land acquisition / conservation projects, watershed modeling, and commercial and residential developments. Mr. Breed's credentials as an Educator combined with his expertise in resolution of complex boundary and title problems has established him as an Expert Witness throughout the State of Florida, particularly in eminent domain proceedings and professional practices issues.

Ambassador for Maker's Mark.

Saturday, July 31st (2 Hr. Mid-Morning Segments) **Standards of Practice** 10:30 am -Course #10109 - 2 CEC's 12:10 pm Howard Ehmke II This course will look at the Standards of Practice Howard Ehmke, PSM earned his Associate in Science Degree in Land Surveying from Palm Beach Junior College in 1979 and an Associate in Arts Degree in Building Construction from Palm Beach Junior College in 1973. Mr. Ehmke earned his Florida Professional Surveyor and Mapper License in 1985 (License number 4191). He has worked for the South Florida Water Management District for the past 46 years. In 1999 he was a co Project Manager for the CERP Geodetic Vertical Control Project a joint survey control project of the Army Corps of Engineers and the South Florida Water Management District (SFWMD). In 2008 he served as President of the Indian River Chapter of the Florida Surveying and Mapping Society (FSMS). He also served as chairman of the Florida Surveying and Mapping Council for FSMS. Worked at the South Florida Water Management District for 45+ years. Member of the Board of Professional Surveyors and Mappers from 2009-2017. FSMS District 3 Board Member 2020-10:30 am — Human Performance & Safety 12:10 pm Course #10110 - 2 CEC's Greg Prather, PSM This discussion will focus on safety and how human performance tools can improve workplace safety, or can they? Gregory A. Prather, PSM is the Vice President of Surveying and the Company Safety Officer for Pickett and Associates, Inc. Mr. Prather began his career with Pickett in 1983 and became a Florida Registered Surveyor in 1992. later he became a company partner in 2003. Gregory has extensive field and office experience and is a hands-on leader. He has held several positions at the Chapter level of FSMS and currently the District 4 Director. He remains an active member of FSMS and is Chair of the Education Committee and a member of the Ethics and Professional Practice Committee. Professionalism & Ethics 10:30 am -Course #9391— 2 CEC's 12:10 pm Robin Petzold, PSM This course will introduce attendees to all aspects of professionalism and ethics. Surveyors and mappers need to know, understand, and execute the highest levels of professionalism and ethics. Attendees will learn tips and answers to solving ethical problems. Robin Petzold recently retired after 40 years in the surveying industry. He was a senior partner with the firm of Wantman Group, Inc. headquartered in West Palm Beach with offices throughout the country. In addition, he served on the Board of Professional Surveyors and Mappers from 2010 to 2018 and continues to serve on the Probable Cause Panel as a past Board member. Robin currently serves on the EPS committee and has served on several past Committees including Surveying Task Force, PAKS, Education, National Surveying Award to name a few with The National Council of Examiners for Engineering and Surveying Mr. Petzold currently holds degrees in Business, Land Surveying, and Animal Science. He began surveying in 1981 while studying Land Surveying at Palm Beach Junior College, which eventually became Palm Beach State College. While attending school and working full time, he also served as an adjunct faculty instructor at PBSC in the surveying program from 1982 to 1994, teaching basic surveying, route geometrics, and measurement science. Mr. Petzold holds surveying licenses in Florida, Alabama, Ohio, Iowa, and Wisconsin.

	Saturday, July 31 st (2 Hr. Afternoon Segments)
1:30 pm — 3:00 pm	Trimble Connect - Spectra Central Cloud Services Course #10118 - 2 CEC's - CE91 Earl Soeder, PSM
	This course will go over Trimble connect / Spectra Central Cloud services – How to create account, set up account and implement for field to office contactless data transfer. Also configuring hardware i.e. Base & Rover internet data collection including best practices. We will discuss best practices as well as warnings "things not to do" procedures.
	Earl Soeder is a licensed Professional Surveyor & Mapper and Registered in Florida and has been surveying for 36 years. Earl has been deeply involved in many aspects of surveying from GPS/Hydrographic to ControlSurveys. His unique experience led him to teaching surveying as an associate scientist at Florida Atlantic University Geospatial department as well as community colleges throughout Florida. A member of FSMS (Florida Surveying and Mapping Society), he has given back to his profession through education and volunteering in many trade associations. Earl is well versed in all Trimble & Spectra products from Surveying/Engineering Systems to Mapping grade products
1:30 pm —	Aerial Mapping & Accuracy
3:00 pm	Course #10111 — 2 CEC's Jason Heywood
A A	This discussion will focus on safety and how human performance tools can improve workplace safety, or can they?
	Jason Heywood is the President of DroneView Technologies. An aerial mapping and geospatial services company based in Southeast Michigan. He is an ASPRS Certified Photogrammetrist (CP) a Florida Professional Surveyor and Mapper (PSM) and is a Virginia licensed Surveyor Photogrammetrist (SP). He earned his Bachelor's degree at Stafford-shire University in England, and his Master's degree at Eastern Michigan University. He is an active member of several national and state professional geospatial organizations and is the Past-President of the Eastern Great Lakes Region of the American Society for Photogrammetry and Remote Sensing [ASPRS]. His 25 years of experience providing aerial mapping and geospatial services include projects for federal, state, municipal and private clients.
1:30 pm — 3:00 pm	PLS vs. Metes & Bounds States Course #10112— 2 CEC's Sam Hall, PSM
one pin	Meets, Bounds, Meanders, and Public Lands
	A Comparison of Meets and Bounds vs the Public Land Survey System
	This course will discuss the history of each system including the challenges the led to the Land Act of 1785, the order of calls, retracement challenges in each system, and various differences between Florida boundary law and various regions within the 13 Colonial States.
	Sam Hall, PSM has 22 years of experience, the majority of which has been spent supporting public infrastructure development in the southeast region in the U.S. He is licensed as a professional surveyor in Florida, Maine, and New Hampshire. His experience covers a broad range of surveying and mapping aspects, including traditional boundary retracement, GNSS positioning, remote sensing, and subsurface utility engineering surveys. He's currently a Vice President at DRMP, Inc., a multidiscipline engineering consulting firm headquartered in Orlando, Florida.





Instrument Specialist for Craven Thompson & Associates, Tyrell Skippings is still repping 'Owls' everywhere, "Hoot! Hoot!"



DRMP's Structural Engineering team conducted a load test for the City of Maitland's Boardwalk at Community Park. Their team recommended to reuse the piling instead of replacing the boardwalk altogether as a way to preserve the surrounding wetlands, as well as help save the client money. In order to reuse the piling, the team developed a load test to prove the piling can take the new load criteria and proposed wider boardwalk. Check out these cool photos from the load test!



All photos this page courtesy of DRMP







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presented by Dr. Stacey Lyle, RPLS, Associate Prof. of Practice, Texas A&M University College of Engineering and College of Geosciences



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DAY ONE -WORKBOOK TECHNICAL REVIEW

 Workbook Introduction NCEES Exam Format
 Surveying Mathematics
 History of Surveying
 Geodesy and GNSS
 Photogrammetry and Mapping
 Topographic Surveying
 Boundary Surveying
 Route Surveying

DAY TWO -ANALYTICAL REVIEW

PLSS and Metes/Bounds

 Contract Law
 Business Concepts
 Transfer of Ownership
 Boundary Law
 Boundary Construction
 Exam Practice Questions

MATERIALS ONLY

if you are unable to attend the seminar, the course materials are available for purchase. Visit <u>www.GeoScholar.com</u> to order.

Conference Schedule 2021

Wednesday, July 28 7:00am - 5:00pm Conf Conference Registration Desk Open Masters Reg. Desk 7:30am - 8:00am Seminar Sign In Masters Reg. Desk Seminar / Meeting - Session 1 Art of Retracement 8:00am - 10:00am Masters ABCD Course #10114 - 6 CEC Hours Instructor: Gary Kent, PSM Seminar / Meeting Session 2 Boundary Surveying Issues for Florida Surveyors 8:00am - 10:00am Masters E Course #9331 - 6 CEC Hours - CE53 Instructor: David Melvin, PSM Seminar - 2 Day Course (Day 1) Fundamentals of Prof. Surveying Course #10116 - 16 CEC Hours 8:00am - 10:00am Players B & C Instructor: Dr. Stacey Lyle, RPLS 10:00am - 10:15am Break (All seminars) Masters Foyer 10:15am - 11:45am Seminar / Meeting - Session 1 Art of Řetracement Masters ABCD Course #10114 - 6 CEC Hours Instructor: Gary Kent, PSM 10:15am - 11:45am Seminar / Meeting Session 2 Boundary Surveying Issues for Masters E Florida Surveyors Course #9331 - 6 CEC Hours - CE53 Instructor: David Melvin, PSM 10:15am - 11:45am Seminar - 2 Day Course (Day 1) Fundamentals of Prof. Surveying Players BC Course #10116 - 16 CEC Hours Instructor: Dr. Stacey Lyle, RPLS Lunch on your own (All seminars) 11:45am - 1:00pm Seminar / Meeting - Session 1 1:00pm - 3:00pm Art of Řetracement Masters ABCD Course #10114 - 6 CEC Hours Instructor: Gary Kent, PSM 1:00pm - 3:00pm Seminar / Meeting Session 2 Boundary Surveying Issues for Masters E Florida Surveyors Course #9331 - 6 CEC Hours - CE53 Instructor: David Melvin, PSM 1:00pm - 3:00pm Seminar - 2 Day Course (Day 1) Fundamentals of Prof. Surveying Players BC Course #10116 - 16 CEC Hours Instructor: Dr. Stacey Lyle, RPLS 3:00pm - 3:15pm Break (All seminars) Masters Foyer Seminar - 2 Day Course (Day 1) 3:15pm - 4:30pm Fundamentals of Prof. Surveying Players BC Course #10116 - 16 CEC Hours Instructor: Dr. Stacey Lyle, RPLS Surveying & Mapping Council 3:15pm - 4:30pm Heritage ABC 4:30pm - 5:00pm Executive Committee Meeting Heritage DE BBQ Dinner ("Wednesday" arm band *required*) Cornhole Tournament (Sign up at Registration Desk) 6:00pm - 9:00pm Masters ABCDE 8:00pm - 10:00pm Masters ABCDE Thursday, July 29 7:00am - 5:00pm Conference Registration Desk Open Masters Reg. Desk 7:30am - 8:00am Seminar Sign In Masters Reg. Desk 8:00am - 10:30am Seminar / Meeting - Session 1 Changes in ALTA Standards Masters ABCD Course #10115 - 3 CEC Hours Instructor: Gary Kent, PSM

Conference Schedule 2021

8:00am - 10:30am	Seminar / Meeting Session 2 Sea Level, Tidal Data, and Water Boundarie Course #9666 - 3 CEC Hours	es Masters E
8:00am - 10:30am	Instructor: George Cole, PLS, PE, PhD Seminar - 2 Day Course (Day 2) Fundamentals of Prof. Surveying	Players BC
10:30am - 10:45am 10:45am - 11:45am	Course #10116 - 16 CEC Hours Instructor: Dr. Stacey Lyle, RPLS Break (All seminars) Seminar - 2 Day Course (Day 2)	Masters Foyer
	Fundamentals of Prof. Surveying Course #10116 - 16 CEC Hours Instructor: Dr. Stacey Lyle, RPLS	Players BC
10:45am - 11:15am 11:45am - 1:00pm 12:00pm - 4:00pm	Depart for Topgolf (Green arm band <i>required</i>) Lunch on your own Exhibitor/Vendor Set-Up	Off-Site Venue Off-Site Venue Champions ABCDE
1:00pm - 3:00pm	Seminar - 2 Day Course (Day 2) Fundamentals of Prof. Surveying Course #10116 - 16 CEC Hours Instructor: Dr. Stacey Lyle, RPLS	Players BC
3:00pm - 3:15pm	Break	Masters Foyer
3:15pm - 4:30pm	Seminar - 2 Day Course (Day 2) Fundamentals of Prof. Surveying Course #10116 - 16 CEC Hours Instructor: Dr. Stacey Lyle, RPLS	Players BC
3:30pm - 4:00pm 4:00pm - 4:10pm 4:10pm - 5:30pm 6:00pm - 8:00pm 9:00am - 12:00am Friday, July 30	Return from Topgolf Exhibit Hall Grand Opening Exhibitor Reception ("Attendee" badge <i>required</i>) Legislative Reception Game Night	Champions ABCDE Champions ABCDE Arbor Ballroom Arbor Ballroom
7:00am - 5:00pm 7:00am - 8:00am 7:30am - 8:00am 7:30am - 5:00pm 8:00am - 9:30am 9:30am - 10:00am 10:00am - 12:00pm 12:00pm - 1:00pm 1:00pm - 3:00pm 2:00pm - 5:00pm 3:00pm - 4:00pm 4:00pm - 5:00pm 6:30pm - 7:00pm 7:00pm - 10:00pm 10:00pm - 11:00pm	Conference Registration Desk Open Breakfast (FSMS Members Only) General Business Session - Sign-In Exhibit Hall Open General Business Session Break (General Business Session) General Business Session Exhibitor Luncheon ("Admit One" arm band required) FDOT - Town Hall (Open to all) NSPS Geospatial Users Group Surveyors in Government Cocktail Reception Recognition Dinner (VIP or Smiley Face (child) arm band required) President's Reception	Masters Reg. Desk Heritage CDE Masters ABCDE Champions ABCDE Masters ABCDE Masters ABCDE Masters ABCDE Champions H Champions FG Champions FG Heritage ABC Masters ABCDE Masters ABCDE Cascades Deck
7:00am - 12:00pm 7:30am - 11:00am 8:00am - 5:00pm 8:00am - 8:30am	Conference Registration Desk Open Exhibit Hall Open Certified Survey Technician (CST) Exam Seminar Sign-In Saturday Tech Sessions (Registration Reguired)	Masters Reg. Desk Champions ABCDE Masters C Each Classroom
8:30am - 10:10am	All Day Session Chapter 177 Course #10113 - 6 CEC Hours Panel Discussion - Moderator: Richard Allen	Masters D

	Conference Schedule 2021	
8:30am - 10:10am	Morning Segments Data Fusion Course #10106 - 2 CEC Hours Instructors: Craig Emrick,PSM,	Masters E
	Sherry Grymko,PSM, Nick DiGruttolo,PSM Updates on the Modernized NSRS (2022) and NGS Products Course #10107 - 2 CEC Hours	Heritage AB
	Instructor: (Virtual) Denis Riordan, NOAA, NO Future of Florida Surveyors and Mappers Course#10108, 2 CEC Hours Group Discussion - Moderator: Jack Breed, P	Heritage CDE
10:10am – 10:30am	Morning Break (All Sessions)	Champions Foyer
10:30am - 12:10pm	Mid-Morning Segments Standards of Practice Course #10109 - 2 CEC Hours Instructor: Howard Ehmke II, PSM	Masters E
	Human Performance & Safety Course #10110 - 2 CEC Hours Instructor: Greg Prather, PSM	Heritage AB
12:10pm – 1:30pm	Professionalism & Ethics Course #9391 - 2 CEC Hours Instructor: Robin Petzold, PSM Lunch (On Your Own)	Heritage CDE
1:30pm - 3:00pm	Afternoon Segments Trimble Connect - Spectra Central Cloud Services Course #10118 - 2 CEC Hours Instructor: Earl Soeder, PSM	Masters E
	Aerial Mapping & Accuracy Course #10111 - 2 CEC Hours	Heritage AB
	Instructor: Jason Heywood, PSM, ASPRS Cl	
	PLS vs. Metes & Bounds States Course #10112 - 2 CEC Hours Instructor: Sam Hall, PSM	Heritage CDE
3:15pm – 5:00pm	Board Meeting	Champions FG

Event Armband & Ticket Guide

<u>Wednesday -</u>	Welcome BBQ:	Wednesday Armband Yellow Drink Ticket	
<u>Thursday</u> -	Topgolf: Exhibitor Reception: Legislative Reception	Green Armband Red or Green Name Badge <i>Required</i> : Flag Armband	
<u>Friday</u> -	Exhibitor Luncheon: Banquet - Adult: Banquet - Child:	Admit One Armband VIP Armband Smiley Face Armband	VIP COCOCO

NEED TO TAKE TAKE THE CST EXAM?

What: CST (paper) exam Where: FSMS Conference at the Sawgrass Marriott Resort When: July 31st, 8 a.m.

Advance Registration Required!

<u>Click Here:</u> Deadline for application submittal to NSPS is July 10th

Questions?

Contact Alex Jenkins p: (407) 292-8580 ext. 2209 <u>ajenkins@southeasternsurveying.com</u> Florida Surveying & Mapping Society

2021 Exhibitor

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July 28-31 66th Annual Conference



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- □ Basics of Real Property, #8359, 3 CEC
- Digital Signatures for Surveyors, #8491, 3 CEC
- □ Easements and Rights of Ways, #9945, 3 CEC *2020 UPDATED COURSE
- Elevation Certificates and the Community Rating System, #8257, 3 CEC *2020 UPDATED COURSE
- □ Introduction to Photogrammetry, #7887, 3 CEC
- Quality Assurance/Quality Control for the Design Professional and Technical Staff, #9293, 3 CEC
- Writing Boundary Descriptions, #8361, 3 CEC *2020 UPDATED COURSE

6 Hour Courses Available

- D Boundaries in Florida, #7667, 6 CEC
- D Chapter 177, Platting (Plat Law), #6970, 6 CEC
- □ Critical Communication for Surveying & Mapping Professionals, #7228, 6 CEC
- □ Ethics for the Design Professional, #8620, 6 CEC
- D Florida Laws, #6966, 6 CEC
- □ Florida Surveying Law and Rule Changes, #9574, 6 CEC
- □ Geographic Information Systems (GIS), #7107, 6 CEC
- □ History of Surveying, #7108, 6 CEC
- □ Identification of Native and Non-Native Trees in Florida, #7874, 6 CEC *2020 UPDATED COURSE
- □ Land Tenure and Cadastral Systems, #7829, 6 CEC
- □ Map Projections and Plane Coordinate Systems, #7669, 6 CEC
- □ Practical Geometry for Surveyors, #7109, 6 CEC
- □ Public Land Survey System, #6979, 6 CEC
- □ Remote Sensing Applications to Surveying & Mapping, #6972, 6 CEC

FSMS Correspondence Courses

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	6 CEC	\$125 Per Course	x	= \$		
	3 CEC	\$68 Per Course	x	= \$		
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	3 CEC	\$70 Per Course	x	= \$		
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2021 eLearning Courses

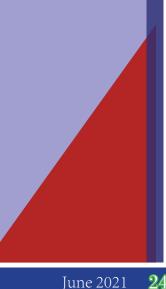
6 General CEC - \$99/course (members) \$120/course (non-members)

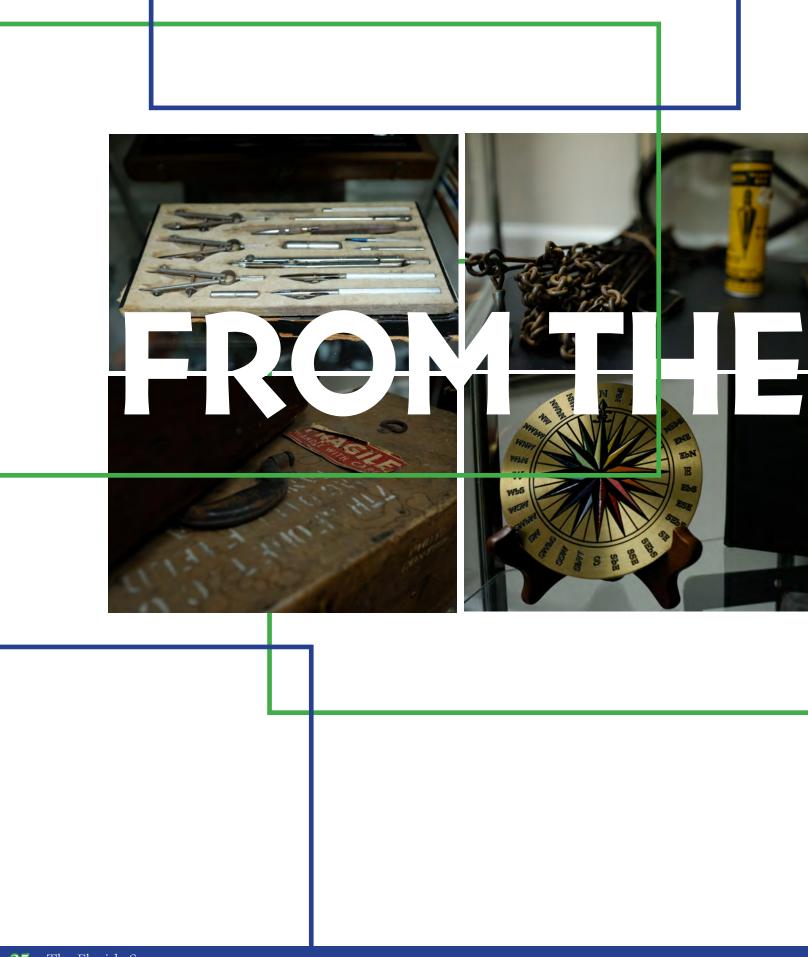
- Professional Ethics & Professional Courtesy FULL Video - Course #8363
- Georgia Technical Standards for Property Surveys-Course #8554
- History of Surveying Course #7140
- Identification of Native & Non-Native Trees in Florida - Course #8132
- Ethics for the Design Professional Course #8621
- Land Tenure & Cadastral Systems Course # 8260
- Map Projections & Plane Coordinate Systems -Course #8261
- Mean High Water Observations & Computations -Course #8262
- Public Land Survey System Course #7147
- Remote Sensing Applications to Surveying & Mapping - Course #7148
- Practical Geometry for Surveyors Course #7141

3 General CEC - \$49/course (members) \$70/course (non-members)

- Basics of Real Property Course #8360
- Contracts for the Professional- Course #8412
- Elevation Certificates & the Community Rating System - Course #8256
- Introduction to Photogrammetry Course #7968
- Writing Boundary Descriptions Course #8362

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Byni's Banquet

WHAT A NIGHT IT WAS, OFFICIALS AND DIGNITARIES FROM ACROSS THE STATE. CAME TOGETHER TO GIVE RECOGNITION TO EDWINA "BYNI" POLK FOR HER DISTINGUISHED CAREER IN SURVEYING AND HER SINGULAR DISTINCTION AS "FLORIDA'S FIRST LADY OF SURVEYING". THAT'S RIGHT, SHE WAS THE FIRST FEMALE TO RECEIVE PROFESSIONAL REGISTRATION AS A LAND SURVEYOR IN THE STATE OF FLORIDA! IT SHOULD ALSO BE NOTED THAT MRS. POLK'S LATE HUSBAND, V. I. "IKE" POLK WAS ALSO A REGISTERED LAND SURVEYOR AND TOGETHER THEY WERE FLORIDA'S "FIRST COUPLE" OF SURVEYING! "BYNI" POLK, AS SHE IS KNOWN THROUGHOUT THE HIGHLANDS OF FLORIDA, IS A PETITE LADY (SHE WOULD SAY, WELL I'M JUST KINDA SMALL) BUT AS THOSE WHC PAID TRIBUTE THAT NIGHT TESTIFIED. SHE'S BEEN A TOWER OF CHARACTER TO SO MANY IN HER PROFESSIONAL LIFE. BEING RECOGNIZED AS BOTH THE COUNTY SURVEYOR AND AS THE ASSISTANT COUNTY ENGINEER. SHE HAS DEMONSTRATED PERSEVERENCE BY MAKING IT TO THE TOP OF HER CHOSEN PROFESSION AS WELL AS PROVIDING A LIVING EXAMPLE OF HOW TO BE FIRM AS AN ADMINISTRATOR, YET STILL MAINTAIN RESPECT AND COMPASSION FOR THE PROBLEMS OF OTHERS

PRIOR TO THE BANQUET, FELLOW RIDGE CHAPTER MEMBER BILL HINKLE AND : MET AT MRS. POLK'S HOME WITH TAMPA BAY'S FOX-TV-13 PERSONALITY CATHY UNRUH AND HER CAMERAMAN, BRIAN. MRS. POLK'S HOME HAS MANY ANTIQUES (SHE JOKES THAT SHE LIKES TO HAVE A FEW THINGS AROUND THAT ARE OLDER THAN SHE IS) AND AMONG THEM IS A CHILDS ANTIQUE ROCKING CHAIR WHICH, GIVEN HER SMALL FRAME, SHE CAN EASILY OCCUPY. AFTER DOING THE INITIAL INTERVIEW AT MRS. POLK'S HOME WE ALL SET OUT FOR JACK BREED'S OFFICE (KEITH & SCHNARS) WHICH IS LOCATED ADJACENT TO A CURRENT CONSTRUCTION SITE FOR A NEW PARKWAY, THIS PROVIDED A GOOD VIDEO SETTING FOR THE TELEVISION CREW AND IT WAS HERE THAT CATHY UNRUH DECIDED ON SHOOTING THE GRADE STAKE SCENE WHERE MRS.



POLK USED LIPSTICK TO MARK THE STAKES. A MOMENT OF EXPLANATION: MRS. POLK TOLD ABOUT HER EXPERIENCE LONG AGO, WHEN HER CREW ARRIVED ON THE JOB SITE ONLY TO DISCOVER THAT THEY HAD FORGOTTEN TO BRING THE MARKING CRAYONS. UNDAUNTED. MRS. POLK SAID "WELL I'M NOT GOING TO LET THAT STOP US, I HAVE A TUBE OF LIPSTICK. WE'LL JUST USE THAT TO MARK THE STAKES" AND SHE DID! AFTER THE TV TAPING WAS OVER. BILL HINKLE COMMENCED TO PULL UP THE STAKES WHICH HAD BEEN USED AND IN THE PROCESS GOT SOME LIPSTICK ON HIS COLLAR. BILL WAS VERY MUCH IN EARNEST A SHORT TIME LATER WHEN HE GAVE THE BENEDICTION AT THE BANQUET. AFTERWARDS, I EXPLAINED TO THE AUDIENCE ABOUT THE LIPSTICK INCIDENT AND TOLD THEM THAT BILL'S WIFE WAS NOT ABLE TO BE WITH HIM AT THIS EVENT AND FURTHERMORE THAT HE WAS GOING TO HAVE TO EXPLAIN THE LIPSTICK ON HIS COLLAR WHEN HE GOT HOME. (HONEST FOLKS, THIS REALLY HAPPENED). WELL OL' BILL SURVIVED THAT ONE, CAUSE HE SHOWED UP AT WORK IN ONE PIECE THE NEXT DAY!

THE TV SEGMENT HAS AIRED IN THE TAMPA BAY AREA WITH VERY GOOD REVIEW. THIS VIDEO REPORT IS A FOX NETWORK HUMAN INTEREST SERIES CALLED 'FOX FOLKS' AND IS NOW IN SYNDICATION ACROSS THE USA. IT WILL ALSO BE SHOWN AT OUR 1998 STATE CONVENTION. OUR NEXT EVENT WITH 'BYNI POLK, FLORIDA'S FIRST LADY OF SURVEYING" IS SCHEDULED FOR MARCH 9 AND 10 AT TALLAHASSEE ON MONDAY AFTERNOON SHE WILL ATTEND A RECEPTION AT OUR STATE OFFICES FOR THE OFFICIAL PLACEMENT OF HER PORTRAIT AND THE SCHOLARSHIP AWARD PLAQUE, WHICH WAS ESTABLISHED IN HER NAME. THE NEXT DAY (TUESDAY, MARCH 10) SHE WILL BE TAKEN TO THE CAPITAL CABINET MEETING ROOM. WHERE THE RESOLUTION, SPONSORED BY FLORIDA'S ATTORNEY GENERAL BOB BUTTERWORTH AND SIGNED BY GOVERNOR LAWTON CHILDS AND HIS CABINET IS TO BE PRESENTED TO HONOR AND RECOGNIZE EDWINA "BYNI" POLK AS THE FIRST FEMALE REGISTERED LAND SURVEYOR IN THE STATE OF FLORIDA. THIS HAS PROVEN TO BE QUITE AN HONOR FOR OUR PROFESSION AND RECOGNITION IN GENERAL THAT WOMEN CAN AND DO MAKE IT TO THE TOP IN SURVEYING



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NSRS Modernization News

For all issues of **NSRS Modernization News**, visit: geodesy.noaa.gov/datums/newdatums/TrackOurProgress.shtml

Updates to Blueprint Documents

<u>Blueprint for the modernized NSRS, Part 2:</u> <u>Geopotential Datum and Geopotential Coordinates</u> and <u>Blueprint for the modernized NSRS, Part 3:</u> <u>Working in the Modernized NSRS</u> were both updated and released this last quarter. The update to Blueprint Part 1 is being finalized and will be released soon. A pair of webinars, discussing both <u>Blueprint Part 3</u> and the <u>Use Cases</u> found in Blueprint Part 3 occurred in March and April. Recordings of these webinars can be found by clicking the links above.

Geospatial Summit

NGS will host a completely virtual 2021 Geospatial Summit on May 4–5, 2021. The event is open to the public, and registration is free. <u>Registration</u> information is available online.

Industry Workshop

On May 6, NGS will host a small invitation-only workshop to continue coordination between commercial equipment/software representatives and NGS regarding NSRS Modernization. More information will be posted after the event, or you can contact NGS.Infocenter@noaa.gov.

Correction

Last month's newsletter incorrectly stated a GRAV-D collection goal of 84.0% at the end of 2020. The correct goal for that time was 82.5%

Progress in Ongoing Projects

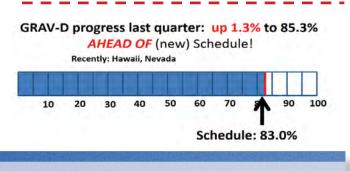
There are currently **27 ongoing projects** directly related to NSRS modernization around NGS. Here are highlights from two:

SPCS2022 (Project Manager: Dr. Michael Dennis)

March 31, 2021, was the deadline for state stakeholder groups to provide their designs for SPCS2022 zones, based on previously submitted proposals (due one year prior). NGS received designs from 28 states for more than 800 lowdistortion projection zones. The actual final number of zones will be determined later this year, after the designs are reviewed by NGS.

OPUS Projects 5.0/GPS Campaign for Transformations (Project Managers: Dr. Daniel Gillins/ Galen Scott)

OPUS Projects 4.0, which supports submission of data to the NGS IDB will soon move from the NGS Beta website to the <u>main NGS website</u>. Coming soon to the <u>Beta website</u> is **OPUS Projects 5.0**, which will support the uploading and processing of pre-computed GNSS vectors (from RTK/RTN surveys, historic vectors, or vectors processed using non-OPUS software). This enhanced capability will allow for more data to be submitted to the GPS campaign for Transformations. See this <u>webinar</u> for more info.



National Oceanic and Atmospheric Administration

National Geodetic Survey

WHO WILL BETTE NEXT CORNHOLE CHAMPIONS?



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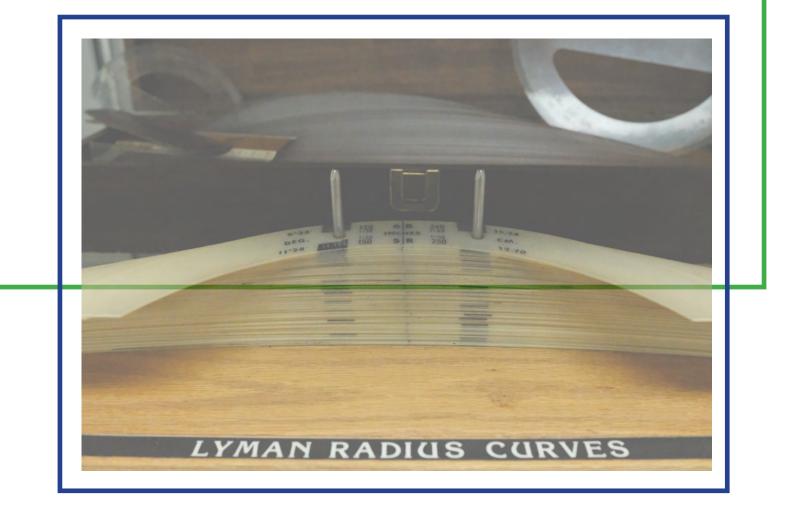
Tom's Tip of the Month



The Florida Surveyor is the official publication of the Florida Surveying and Mapping Society, Inc. (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 of the year of national, state, and district events and accomplishments as well as articles relevant to the surveying profession. The latest educational offerings are also included.



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Engenuity Group, Inc.	561-655-1151
Engineering Design &	772-462-2455
Construction, Inc.	
ER Brownell & Associates,	305-860-3866
Inc.	
ESP Associates	813-295-9024
ETM Suryeying & Mapping	904-642-8550
Exacta Land Surveyors, Inc.	305-668-6169
F	
Ferguson Land Surveyors	727-230-9606
First Choice Surveying, Inc.	407-951-3425
Florida Design Consultant,	727-849-7588
Inc.	
Florida Engineering &	941-485-3100
Surveying, LLC.	
F.R. Aleman & Associates,	305-591-8777
Inc.	
F.R.S. & Associates, Inc.	561-478-7178
FLT Geosystems	954-763-5300
Fortin, Leavy, Skiles, Inc.	305-653-4493
FTE Engineers & Planners	800-639-4851

G	
Gary Allen Land Surveying	850-877-0541
Geoline Surveying	386-418-0500
Geomatics Corporation	904-824-3086
GeoData Consultants, Inc.	407-732-6965
Geo Networking, Inc.	407-549-5075
GeoPoint Surveying, Inc.	813-248-8888
GeoSurv, LLC.	877-407-3734
George F. Young, Inc.	727-822-4317
Germaine Surveying, Inc.	863-385-6856
GPI Geospatial, Inc.	407-851-7880
Gustin, Cothern & Tucker, Inc.	850-678-5141
Н	
H.L. Bennett & Associates, Inc.	863-675-8882
Hanson Professional Services, Inc.	217-788-2450
Hanson, Walter & Associates, Inc.	407-847-9433
Hole Montes, Inc.	239-254-2000
Hyatt Survey Services	941-748-4693
Ι	
I.F. Rooks & Associates, LLC.	813-752-2113
J	
John Ibarra & Associates, Inc.	305-262-0400
John Mella & Associates, Inc.	813-232-9441
Johnston's Surveying, Inc.	407-847-2179

K	
KCI Technologies	954-776-1616
Keith and Associates, Inc.	954-788-3400
Kendrick Land Surveying	863-533-4874
L	
L&S Diversified, LLC.	407-681-3836
Land Precision	727-796-2737
Corporation	
Landmark Engineering &	813-621-7841
Surveying Corporation	
Langan Engineering	973-560-4900
Leading Edge Land	407-351-6730
Services, Inc.	
Leiter Perez & Associates	305-652-5133
Lengemann Corp.	800-342-9238
Leo Mills & Associates	941-722-2460
Long Surveying, Inc.	407-330-9717
Ludovici & Orange	305-448-1600
Consulting Engineers	
М	
Manuel G. Vera &	305-221-6210
Associates, Inc.	
Marco Surveying &	239-389-0026
Mapping, LLC.	
Maser Consulting, P.A.	813-207-1061
Massey-Richards Surveying & Mapping, LLC.	305-853-0066
Masteller, Moler & Taylor,	772-564-8050
Inc.	
McCain Mills, Inc.	813-752-6478
McKim & Creed, Inc.	919-233-8091
McLaughlin Engineering, Co.	954-763-7611
Metron Surveying and	239-275-8575
Mapping, LLC.	
Metzger + Willard, Inc.	813-977-6005
Mock Roos & Associates,	561-683-3113
Inc.	
Moore Bass Consulting, Inc.	850-222-5678
Morris-Depew Associates,	239-337-3993
Inc.	
Murphy's Land Surveying	727-347-8740

Ν	
Navigation Electronics, Inc.	337-237-1413
Northstar Geomatics, Inc.	772-485-1415
Northwest Surveying, Inc.	813-889-9236
NV5, Inc.	407-896-3317
	221 (2((27)
On The Mark Surveying, LLC.	321-626-6376
Р	
PEC Surveying & Mapping	407-542-4967
Pennoni Associates, Inc.	215-222-3000
Pickett & Associates, Inc.	863-533-9095
Platinum Surveying &	863-904-4699
Mapping, LLC.	
Point Break Surveying	941-378-4797
Polaris Associates, Inc.	727-461-6113
Porter Geographical	863-853-1496
Positioning & Surveying, Inc.	
Pro-Line Survey Supply	904-620-0500
	954-572-1777
Pulice Land Surveyors, Inc.	954-572-1777
Q	
Q Grady Minor &	239-947-1144
Associates, PA	
R	
Reece & White Land	305-872-1348
Surveying, Inc.	
Richard P. Clarson &	904-396-2623
Associates, Inc.	
R.M. Barrineau &	352-622-3133
Associates, Inc.	
R.J. Rhodes Engineering,	941-924-1600
Inc.	205 022 021 (
Robayna and Associates,	305-823-9316
Inc.	950 296 1111
Rogers, Gunter, Vaughn Insurance, Inc. (HUB FL)	850-386-1111
	l

S		U	
SAM Surveying &	850-385-1179	Upham, Inc.	386-672-9515
Mapping, LLC.		W	
SCR & Associates NWFL,	850-265-6979	Wade Surveying, Inc.	352-753-6511
Inc.		Wallace Surveying Corp.	561-640-4551
Sergio Redondo & Associates, Inc.	305-378-4443	Wantman Group Inc.	561-687-2220
Settimio Consulting Services	850-341-0507	WBQ Design & Engineering, Inc.	407-839-4300
SGC Engineering, LLC.	407-637-2588	Winningham & Fradley,	954-771-7440
Shah Drotos & Associates,	954-943-9433	Woolpert, Inc.	937-531-1322
PA Shannon Surveying, Inc.	407-774-8372	Z	
Sherco, Inc.	863-453-4113	ZNS Engineering, LLC.	941-748-8080
Sliger & Associates	386-761-5385		
S&ME, Inc.	407-975-1273		
Southeastern Surveying & Mapping Corp.	407-292-8580		
Spalding DeDecker Associates, Inc.	248-844-5400		
Stephen H. Gibbs Land Surveyors, Inc.	954-923-7666		
Stoner & Associates, Inc.	954-585-0997		
Strayer Surveying & Mapping, Inc.	941-497-1290		
Surv-Kap	520-622-6011		
SurvTech Solutions, Inc.	813-621-4929		
Т			
T2 UES Inc.	407-629-7144		
Thurman Roddenberry, & Associates	850-962-2538		

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Russell Hyatt

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Jose Sanfiel (305) 351-2942 josesanfiel@woolpert.com

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