



The Florida Surveyor

Volume XXVII, Issue 2

February 2019

Fundamentals of a CST Training Program

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A publication of the Florida Surveying and Mapping Society since 1992

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The Florida Surveyor is an official publication of the Florida Surveying and Mapping Society, Inc. (FSMS) and is published for the purpose of communicating with the membership. The newsletter is financed primarily by the dues of the membership although advertisements are welcome from service and product industries relating to the needs and activities of the profession. Articles and advertising appearing in this publication are not necessarily the official policy of this Society unless specifically stated. FSMS assumes no responsibility for statements expressed in this publication. The Florida Surveyor welcomes contributions from members. Mail correspondence to Administrative Office. Copy all quoted material as it appears in the original. Give credit to the source from which you are quoting. Emailed ads are acceptable. Please send Adobe files, eps, pdf or tif files.

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President's Message



We are off to a great start this year after a well-attended Board of Directors Meeting held on January 10th and 11th in Lakeland. I appreciate everyone who attended and participated in the various committee meetings on Thursday, and the board meetings on Friday. With everyone being extremely busy with their work and personal lives, the dedication and commitment of your Officers, Directors, Committee Chairs, and Committee members is to be highly commended. They are working hard for you, the members, and the Society.

Our Membership Committee, led by Jim Sullivan, District 6 Director, is off to a good start and will be focusing on improving and enhancing Chapter membership. Membership renewals, as well as new member applications, have been coming in steadily since early December and numbers are looking good. Our Associate numbers are growing and that's a great thing. Employers, remember that keeping your technical staff engaged in your profession encourages them to turn a "job" into a "career". Remember our benefits of membership:

- Maintaining and supporting a 63-year-old professional society network of surveyors and mappers in Florida and across the U.S. This network serves and adds credibility and value to your daily interactions with your peers and business partners.
- Protecting and enhancing your license and practice laws in Florida, through our work with the BPSM (Board of Professional Surveyors and Mappers).
- Maintaining a full-time lobbyist and PAC - one of the largest surveying and mapping society PACs in the country – which constantly watches out for our industry and daily businesses.
- Promoting and encouraging the future youth in our profession through several scholarship funds, college programs, high school programs, CST programs, technical programs and seminars.
- Monitoring and addressing unlicensed practice in Florida with a very active state-wide Unlicensed Practice committee.
- Provides a voucher for 3 credits upon full membership renewal, as well as additional credits for attending local meetings and seminars.
- Supporting local chapters, where you can engage with surveyors in your local area who face the same professional challenges as you do.
- Bolstering a state-wide network of surveying professionals, which can be utilized for career advice, business opportunities, and camaraderie!
- NSPS membership, which gives you a voice and opportunities to support and protect our profession at the national level.

If your company is not currently a Sustaining Firm, please encourage them to join. Every Sustaining Firm receives a marketing benefit through our website's directory of sustaining firms, as well as a monthly listing in *The Florida Surveyor*. It is important for ALL of us as professionals to support our Society, which protects and enhances our profession. Utilizing our website is the most efficient method of renewing or joining FSMS.

Another important topic for our profession is the NGS 2022 Datum change that will be on us before we know it. Our Surveying and Mapping Council met on January 10th and achieved the first step in the process by aligning all the stakeholders in Florida to submit the proposed zones for Florida to NGS. A huge thank you to Rick Pryce, Allen Nobles and Randy Tompkins for doing the work necessary to analyze the possible solutions and develop the best scenario with the least amount of distortion for the users.

Our FSMPAC is moving quickly to establish relationships with our new Commissioner of Agriculture as well as legislators across the board. Those relationships are what sustain us when our profession is challenged in the legislative arena. It is very simple to make a contribution to the PAC on the FSMS website. If you haven't done so in 2019, please consider making that donation today.

Lastly, as our license renewal period approaches this month, you can check your CEC hours easily on the DoACS website. Just remember you are capped at 6 credits for attending local meetings, so be mindful to account properly. Please take advantage of the many courses offered by FSMS to meet your Continuing Education needs.

As always, thank you all for your continued support.

"Success is no accident. It is hard work, perseverance, learning, studying, sacrifice and most of all, love of what you are doing or learning to do." – Pele

Dianne Collins
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64th Annual FSMS Conference



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2018 Annual Conference Highlights:

- Over 340 Attendees
- 45 Unique Exhibitors
- 32 Unique Sponsors
- 14 Different Live Seminars Offered



*“Our Annual Conference this past year was one of the best I’ve ever seen...
great things are happening for next summer!”*

-FSMS President Dianne Collins



More Information Coming Soon!

Surveyors in Government



Richard Allen, PSM, CFM

This month's article will not be an article in the traditional sense. I am using this article to reach out to other government surveyors, or to the private surveyors who fill in for this role or know who does. I want to make sure I have the correct contact information for the government surveyors from all counties in Florida.

Counties I am currently missing information for:

Baker	Holmes
Bradford	Jackson
Calhoun	Jefferson
Clay	Lafayette
Columbia	Levy
Dixie	Liberty
Flagler	Madison
Franklin	Monroe
Gadsden	Nassau
Gilchrist	Sumter
Glades	Suwannee
Gulf	Taylor
Hamilton	Union
Hardee	Wakulla
Hendry	Walton
Hernando	Washington

The list above comprises 32 of 62 counties, which does not include Duval, because Jacksonville's City Surveyor fills that position. I need all the help I can get to find or correct the data for these counties.

Nick Campanile and staffers at FDEP did a wonderful job giving me a good starting point to work from. I don't have enough space to list all the cities without surveyors listed, so I ask for in-

"The purpose of this exercise is to increase the level of communication and conversation between government surveyors across the state."

dividuals to submit any directories they may have to me.

I have been working on contacting many in the directory that I do have to verify if their information is correct. Many times, I find that an email address is no longer current, so I reach out to the directors or other officials in the agency to see if anyone can provide appropriate information. Several have responded to me, but a majority of the emails I have written have gone unanswered.

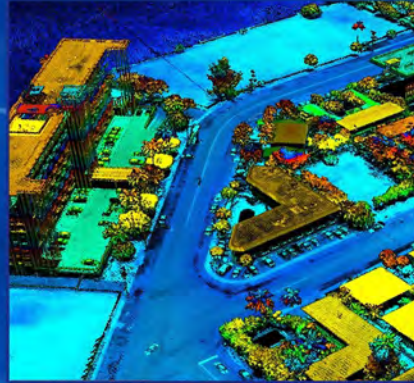
The purpose of this exercise is to increase the level of communication and conversation between government surveyors across the state. It is important for all of us in the government sector to keep abreast of issues impacting us and to begin discussions that relate to regulatory issues, such as platting.

Hopefully this exercise will generate a substantial response and I will be contacting more of you directly in the very near future! Until next month my friends...

You can reach Richard at
Richard.Allen@cityoforlando.net or 407.246.2788

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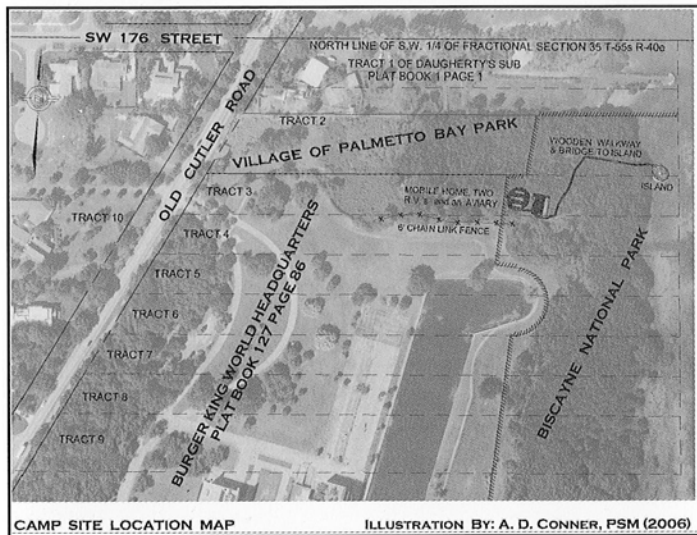
Survey SWAT Team

by Michael J. Whitling, PSM

MIAMI, FLORIDA; 6:50AM, Homestead Bay Front Park Briefing room – My assistant Jose Sanfiel and I were surrounded by heavily armed Black Clad SWAT team police officers. Thankfully we weren't their target. We were representing a new faction in the profession.....the survey SWAT team.

Background:

This story began a few weeks prior when an anonymous informant had reported a possible encroachment into the Biscayne National Park. The Miami-Dade County Department of Environmental Resources Management (DERM) investigated and



confirmed that a new island was recently created from filled rock material in the bay away from the mangrove covered shore line. This new island was connected to a recently vacated, but definitely not abandoned recreational vehicle (R/V) camp-site cut through the dense mangrove forest by a very expensive looking and lengthy wooden bridge. Workers were still building the bridge when the investigation began. The first reaction of investigators was that this campsite was an entry point for illegal drugs, however curiously, large bird cages were also found there. So, envisioning a Tony Montana style gun battle, they left and called in the cops to secure the site and preserve the possible environmental violations and to interview the bridge workers.

The next step in the investigation required proving boundary lines. The investigators needed to know precisely where the violations occurred compared to property lines; hence the term "Survey Swat Team", but most importantly, who was the actual culprit or culprits? Our team was provided photos, camp site sketches, and background searches on the laborers working on the property in case someone there was lying about who they actually were. Perhaps one of the workers was actually the perpetrator. A search of the public records of the adjacent property revealed a name but was thought to be fictitious and provided little survey information. We looked up property and the plat information, which was Plat 1-1 and Plat B-56, both of which dated about 1909, and both provided little information. We found the plat of Burger King World Headquarters to the south, Plat 127-86, which would help us determine the south line of the property, but

the back line and north line were in question. We researched further and found some information showing approximate distances where the National Park Service had acquired land along the coastline. We were concerned about the lack of information, but were assured there would be more provided by Richard Gill, Lead Cartographer for the National Park Service.

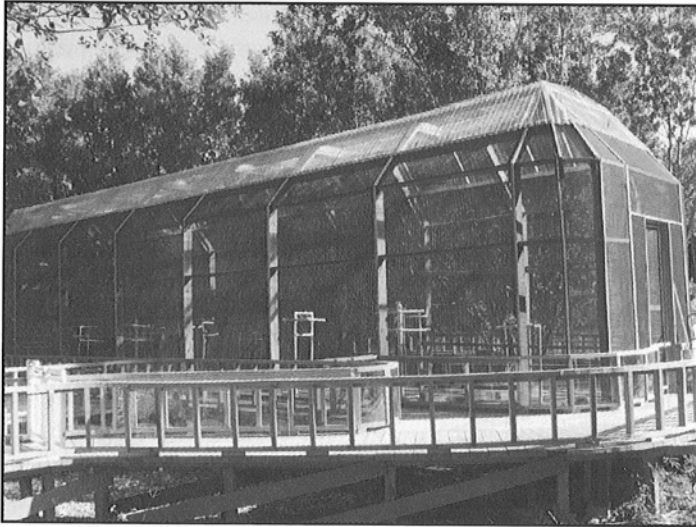
Briefing Room:

The meeting started promptly at 7:00 AM. The discussion was lead by David Pharo, a Law Enforcement Specialist with the National Park Service. He introduced all the attendees who included personnel from EPA, County Department of Environmental Resource Management, Miami-Dade Police Department, Jose and I from Miami-Dade County Survey Section, and other National Park Service Law Enforcement. The one person that was missing was the one most important to us; Mr. Gill, the Lead Cartographer for the National Part Service, but we were assured that he was on his way . . . from Naples. Mr. Pharo began with a discussion of the perceived violations, which were numerous. Wetland destruction, mangrove damage, sea grass damage, and most of the construction and destruction was probably on Federal Lands. The property in question bordered on Biscayne Bay. The National Park Service Law enforcement would go in first to clear the area of possible dangerous persons, along with members of the Miami-Dade County Police Force, followed by the "Survey SWAT Team, who would go in immediately after that and determine what could be torn down based on property lines. The briefing lasted about forty-five



minutes and was very intriguing. We were hearing about the structures, the cages, and the illegal island. Everyone was given their particular assignments, with Jose and I being asked only one thing, "Just how quickly can you determine the property lines?" With insufficient survey data, and not ever being on the site, we

just kind of shook our heads. The “Let’s go” order was given, and out the door we went with law enforcement fully armed and ready. Meanwhile, a Miami Dade County Survey crew was en route to the alleged crime scene. We had our weaponry at the ready, our survey instruments, but we had no ammunition for the moment.



Site Investigation:

We reached the site around 8:15 AM. The area was covered with police cars; swat trucks, and uniformed officers everywhere. The area had a bit of a clearing in the front, and the rest covered by the dense mangroves. We located our crew talking to none other than Richard Gill, the man with the much needed info. He had two surveys, one of the property in question, and one showing the National Park Boundary line. Now, we had our ammunition.

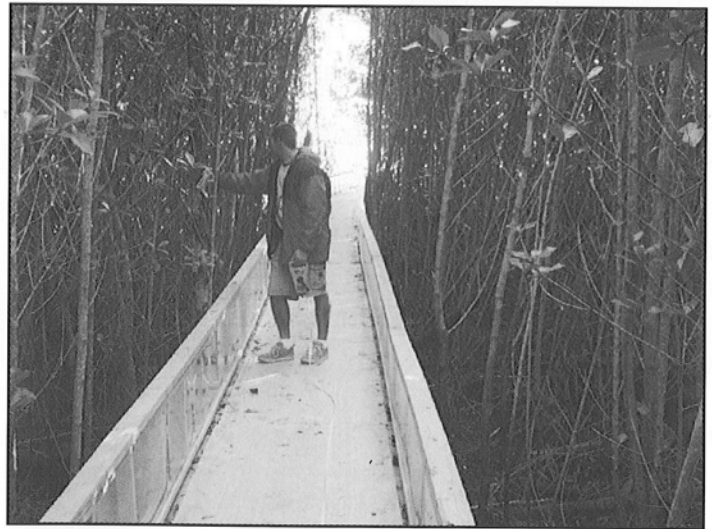
8:44 AM. Some of the non-survey swat team emerged from the back area of the property; assault guns in hand, ammo belts strapped to their chests. According to them, the place appeared to be abandoned. It was time for the Survey Swat Team to do its thing. We moved ourselves and our equipment toward the back of the property. What a sight to behold! The investigation materials didn’t do justice to what we saw which was two new luxury RV’s and a large travel trailer, all surrounded by beautiful decking, and I do mean surrounded, as the decking completely encompassed the vehicles. All along the edge of the decking was a two foot high fence made of plexi-glass and wood. Further in were large cages, built to almost zoo like quality, with what appeared to be bird stands inside. I have to say that the workmanship on the decking was amazing throughout. The decking continued deep into the mangroves, and attached to that was a 330’ long elevated walkway leading to the Bay. And there, at the end of the walkway, was the island. It appeared they had used carts and wheelbarrows to carry large rocks out into the bay via the walkway until they had created their very own island, all very illegal of course.

Investigation Continues:

9:08 AM, “Back on the Ranch”. We began locating the monumentation shown on the National Park Survey which was

greatly helped by an old concrete seawall that we found and was shown on Mr. Gill’s survey. We recovered two survey monuments on the back line and we were off and running. Each step of the way, we were constantly asked, “How long.”? It soon became apparent that the perpetrators had indeed encroached on National Park Property but our work to determine just where the line crossed the property was still underway. We were a little baffled because along with being on National Park property, it looked as if they hadn’t built anything on private property. We had nothing to connect the work to an adjacent private land owner, except for access which became the key to unlocking this case. We had a survey, provided by Mr. Gill, of the property where the perpetrators were gaining access across to get to the camp site, but it wasn’t very clear, especially where the surveyor had shown a fence “along” the south line of the property. That fence was actually 100 feet south of the property line and was just the beginning of the property owner’s problems. The fence was used by the property owner as a basis for the south property line, albeit mistakenly. There were no ties to the fence, but graphically, it appeared to be very close to the property line on the map. In addition, the surveyor failed to show any wetlands; so in addition to their encroachments on other properties, they encroached 300 feet into wetlands, although the mangroves should have given them some clue. However, we were here on behalf of the National Park Service and all they wanted to know was just how much of the adjacent land owner’s structures were on federal property. The Feds had no illusions about the possible innocence of the adjacent land owner. If he was allowing ingress/egress across his property to create this much havoc in the park, he was just as guilty as creating it.

10:30 AM. As we set up to turn the final angle that would give them the line, we noticed several guys with chain saws who were gearing up. The line actually fell just a few feet west of the entrance steps to the decking, so the entire structure was indeed on National



Park property. We then proceeded to put in some stakes across the line. Not a moment after we drove the last stake, the National Park Services chain saws started up. They began cutting out the decking to have the trailers and the RV towed away. With all the activity and excitement, one of the chain saw workers had slipped

off the wood deck and his chain saw cut his upper thigh requiring immediate medical attention. Paramedics soon arrived and before we knew it, a helicopter was landing in the front clearing, whisking the injured man away to the nearest hospital.

The Miami-Dade County Department of Environmental Resource Management had some agents on site also. They were very much appalled and amazed at the environmental destruction, and just kept shaking their heads. We met with them momentarily and they asked us to locate all of the decking, the mangroves, wetlands, and the island. We finished our day doing just that. During the subsequent work, we discovered they had run their own sewer line to a septic tank, all on wetlands. Needless to say, it only added to the large list of violations, and the fines would be enormous.

Follow-up:

It turned out that our “Tony Montana” was listed in Miami-Dade County property records as a woman. Miami-Dade County has since seized her property and sold it to the City of Palmetto Bay for a park. The fines were more than a million dollars. The police are still looking for her for the alleged criminal violations.

Further investigation has revealed that the woman is actually a religious sect leader. Though she isn’t accused of being an illegal drug dealer, she teaches a form of meditation, inspired by

Christianity and Buddhism, called quan yin. The sect is based in Taiwan, and boasts two million members in 50 countries, including Britain. It also advocates vegetarianism and has a string of vegetarian restaurants. To date, the police have not been able to locate the woman.

According to the County property appraiser’s records, the woman owned two luxury homes in the Miami area. Both are now empty. As far as anyone can tell it was her minions who began building the complex in the mangroves, and the island, for her pleasure.

The mystery of this illegal encroachment on park territory is still as deep as ever. What were these people thinking? And what exactly - if they had ever been able to complete it - would this eccentric little hideaway have been used for?

Park personnel were worried that increasing visits would worsen damage to the mangroves and shallow sea grass beds along the shore. Superintendent Linda Canzanelli recently ordered almost half the park’s staff to work a three-day blitz to rip out the 330-foot boardwalk and to plant 400 to 500 young mangroves to replace ones damaged by the construction of the boardwalk.

“Protecting the mangroves is such a critical concern,” she said. “The trees shelter small prey that is a crucial part of Biscayne Bay’s food chain.”

All that now remains is the mysterious New Island. 🇺🇸

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Family Photos



Trudy, John, and Dave Shremshock at the Shremshock Surveying Ugly Sweater Party.



Will and Kayla Hawkins at the Shremshock Ugly Sweater Party.



Chris McLaughlin's son Wyatt, and daughter Adeline, prepare to leave out cookies for Santa on Christmas Eve.



Dione Bazile, Joe Zapert, and Tony Bazile at the Sliger Associates holiday party at Down The Hatch in Ponce Inlet.



Case Breed with his "Big Guy" Jack Breed on a Christmas hunting trip.



The Breed Family before attending a Christmas Eve candlelight communion service.

FUNDAMENTALS

OF A CST TRAINING PROGRAM



I start off every study group session by saying, “You get out what you put into the program and this education/certification is something no one can take away from you”.

Certified Survey Technician Program

The Certified Survey Technician (CST) program in Central Florida is making great strides in the continual professional development of surveyor technician training. My hands-on approach includes guest speakers, utilization of current technology, a CST mentorship program, and a CST Financial Assistance Program. Through our team effort and coordination by the Central Florida Chapter of the Florida Surveying and Mapping Society this program is continually evolving.

Joe Stokes, PSM, City of Orlando City Surveyor, proctors the CST examination for, Level I-III, candidates. CST Training Program candidates are made up of employees from various companies, agencies and municipalities all coming together to learn.



» RONNIE A. FIGUEROA, PSM, GISP, CST DIRECTOR

The basics of the program are:

- Providing a suitable gathering area for a classroom learning environment
- Limiting the lectures to a reasonable time frame
- Utilizing current technology such as a projector for presentations and audio/visual aids
- Recruiting dedicated professionals to donate their time and knowledge
- Standardized calculators to simplify instruction and streamline learning

I became involved in the CST study group after hearing much help was needed with educating and training for technicians. This was exciting to me and I was happy to become a volunteer in this rewarding effort. I was fortunate to be provided with a distraction free learning environment provided by our host Southeastern Surveying and Mapping Corporation. Having experienced the old teaching format, I decided to take a different approach early on by asking the candidates what they wanted to learn, and what they were comfortable with. Their range of knowledge and ability was wide and varied. By handing the reins over to them, I created a candidate lead approach to Technical Certification. In addition, I cut the sessions from 2-3 hours down to 1 hour, with the understanding that I would remain with those who desired one-on-one assistance and the rest of the class could leave without feeling obligated to stay. Attending 2-3 hour sessions after a long work day is asking a lot. Despite this, candidates took on a mentorship role and often stayed long past the full session to assist others.



Mr. Walt Robillard, Esq., RLS lectures CST candidates on “Boundaries, Landmarks, and Miscellaneous Musings.” This lecture was both educational and enlightening for candidates in that it taught not just what they are doing, but why.

Making It Fun

You also have to make it fun, so on occasion, we are honored to host guest lecturers from the GIS professionals, engineers, environmentalists, geotechs, utility designators, and other related fields who come in to lecture on the professional relationships in surveying to help candidates understand not just what we do, but why. Recently, Mr. Walt Robillard, Esq., RLS, an avid supporter of the CST Program, donated his time and knowledge to help promote the value of higher technical training within the survey profession. Mr. Robillard’s lecture on “Boundaries, Landmarks and Miscellaneous Musings” was both educational and entertaining with 35 people in attendance.

Even with a candidate lead approach, being the only instructor presented challenges. I didn’t know all the answers. Knowing this, I sought and continue to seek

out volunteers who are able to communicate knowledge in a way the candidates can grasp, not just someone who is a licensed surveyor. This means that the candidates themselves can become volunteer teachers, embracing our motto of “Let’s learn together.” We embody this philosophy by inviting candidates that rise through the CST ranks to teach and mentor lower level candidates. It has been proven to help focus Technician level training for everyone who participates in their personal educational needs. One particular disheartened student who had attempted the level I test more than once, through determination and encouragement, gained confidence and leadership skills through mentoring in my approach to this program. He contributed to class by guiding other students through the field operations. Therefore allowing me to focus on other subjects and thus maximizing our time. The impact of cross training between field and office from both perspectives in our program contributes to conceptualizing concepts, and its impact on increasing candidate pass rates has proven significant. After successfully obtaining his Level I and II certification, this candidate continues to mentor others and demonstrates that everyone can contribute their expertise. **We can all learn together better as a Team.**



At the Southeastern Surveying and Mapping Training Center, candidates participate in the study groups and take the examination in the same location. Creating a more confident and focused candidate.



Gary Krick, Walt Robillard, and Ronnie Figueroa stand for a photo after Mr. Robillard gave candidates his favorite book, "Boundaries & Landmarks: A Practical Manual" by A. C. Mulford.

Starting the Program

In order to start a program for your surveying chapter, you do not need a complete training facility. When classes were smaller, sometimes training was held at someone's dining room table and a laptop would suffice if a presentation or visual aid was needed. Many places such as local colleges, churches and libraries provide meeting rooms or classrooms at no charge. With this being said, don't feel limited if you do not have a traditional classroom setting. For our CST program in Central Florida, I found that not only having our training, but our Certified Survey Technician Examination in the same place made candidates more

Mentorship is a valuable tool that helps build the confidence of both the mentor and the mentee. Let me reiterate again, it does not require a licensed surveyor, just a candidate one level higher who has already been through the same CST challenges. Even better is when a mentee has a mentor that is outside of the study groups, but within the same company that is interested in sharing a common goal. In general people enjoy teaching and having candidates interested in obtaining this valuable information is fulfilling both professionally and personally. Some mentors who are hesitant to take that role ask "what if I don't know the answer?" I always advise them to admit that you don't know, but you will find someone who does and get the answer. The bottom line for mentors is the same as for the students; you can and should be comfortable with not knowing everything because—**We can all learn together better as a Team.**

One of the highest tier hurdles that I struggled to overcome initially was not being able to use the HP-48 calculator, and the fact that students had multiple calculator types with functions unfamiliar to them. My solution was to uniform the calculators to be used within the study group. The two calculators that met our needs and are the most user-friendly are the HP-35s and Casio FX-115. Being able to walk through calculator functions and solving equations allowed for our time to remain focused on the survey problems themselves. It was

sweet relief to no longer hear, "Where is that on my calculator?". Additionally, if the question was raised, it could be answered by another candidate and not require a pause in classroom instruction—**We can all learn together better as a Team.**

“When Surveyors set their mind to something they can move mountains. The study groups are unique to our chapter in Central Florida and we have a team who can proctor anywhere, anytime, and with or without local support.”



Advanced Surveying Students from Valencia College attend the "CST Advanced Surveying Workshop and Practicum" where they work on a semester long project with CST Program candidate volunteers John York and Steve Carp.

comfortable. When taking an exam the environment directly impacts candidate pass rates. We all know the feeling of driving to an unfamiliar place for an examination, making sure you get there on time, and finding the right room. All this time the candidate is concerned over these issues when they should be focused and comfortable before the exam with minimal distractions. The National Society of Professional Surveyors and Mappers (NSPS) CST Program provides varying options and flexibility in proctoring the test and if you're not sure all you have to do is call. They also provide the option of taking the test in a paper or computer based format. In my experience, I have found that not everyone is comfortable with the computer based format.

Whether this is attributed to generational differences, familiarity with computers or ease of taking the test while looking up at a computer monitor then back down at your notes repeatedly; whichever way you look at it's about the candidate and contributing to their success. The one thing everyone is familiar with is taking a paper exam. It is also much easier to flip through pages reviewing the exam or go back to a previous question without having to hit a forward or backward button repeatedly to get there. I have seen candidates who were prepared for the test and confident, but that failed more than once because of having to take the test on a computer. The next time these candidates took the test on paper they had above average scores because the ability to pass had always been there, but the environment for examination was not conducive to their success. I always ask candidates which medium they would like to utilize for the examination at the first session of our CST Training Program and have found, for the past three years, we have not taken the computer based test.



CST candidate volunteers Rick and Joe Locklin guide Advanced Surveying Students from Valencia College in RTK with a hands-on approach that is both stimulating and engaging.

Successful CST Program Breakdown

If you want to create your very own Technician Training Program the fundamentals are simple. Treat it seriously, provide a learning environment that is flexible, don't be afraid of change or feedback and utilize different training aids (projectors, audio/visual equipment). Respect the time of the candidate and offer 1 hour sessions, with the option to stay longer for those needing individual instruction. Invite dedicated Professionals to lecture, but don't forget to utilize the wide array of talents that the candidates already possess. Involving the students as teachers builds confidence, morale, and increases the pace of learning for everyone. Standardize calculators in the classroom to avoid an endless torrent of "My calculator doesn't have that function", and never hesitate to ask for help.

When Surveyors set their mind to something they can move mountains. The study groups are unique to our chapter in Central Florida and we have a team who can proctor anywhere, anytime, and with or without local support. The chapter is a place where people come together for the betterment of the profession, volunteers in a volunteer organization. From every company, every municipality, and every agency—together, to **learn as a Team**.

The NSPS CST Program is definitely pronounced in Florida as we boast the highest number of Certified Survey Technicians in the nation. Study Groups are held 3-4 months in advance and meet weekly ahead of the CST examination. The CST examination is set up 4 times yearly by the chapter and is always preceded by a study group, averaging 18 candidates weekly. Study groups are hosted at the Southeastern Surveying and Mapping Corp. Training Center in Orlando, Florida through the Central Florida Chapter of the Florida Surveying and Mapping Society and coordinated by myself, Ronnie A. Figueroa, PSM. Having a CST Certification shows qualification, personal investment of time and carries the reputation of the National Society of Professional Surveyors. ■

Ronnie A. Figueroa is a PSM, GISP, and MBA. He is the NSPS CST State Coordinator and has shaped technician training throughout the state of Florida. His background in Surveying and Mapping, GIS, SUE and LiDAR have lent themselves to enrich the program and expand candidate engagement. He challenges each and every surveyor to promote the profession and to start a CST Training Program of their own, but always remember, "You get out of the program what you put into it."

Did YOU Ever WONDER Why?

Michael Whitling, PSM

Why don't we see our nose?

We do see it but our brain edits it out. The image of the nose does, in fact, hit the retina and is sent to the brain. There are a few reasons why you don't see it. The main reason is stereo parallax. Each eye sees the nose in a different position because it is so close. You can notice this if you look down at your nose and alternate closing the right or left eye. The visual region that is blocked by the nose with one eye is "seen" by the other eye. During the first stage of visual processing, the brain forms a unified image from both eyes and takes the region from the eye that is not blocked by the nose. You can also notice this effect if you put a hand in front of one eye close to your face. You can still your hand but it looks semi-transparent. Another reason is that the human brain is capable of amazing things, but in order to do those things, it needs to block out distractions. The nose is one of those distractions. This process is called unconscious selective attention and was noticed by Ulric Neisser in his study that asked participants to count the number of times two basketball players passed a ball in a video. What 79 percent failed to notice in the video was a girl walking through the middle of the court with an umbrella.



Why are they called "deviled" eggs?

Over the course of time and in multiple languages and cuisines, there's a tradition of referring to hot, peppery, or spicy foods as being mean or associated with the underworld. In Italian, for example, the hot tomato sauce called *Arrabbiata* is made with dried red chili peppers, and the name literally translates to "angry" in Italian. With eggs, especially spicy and zesty eggs made with mustard, pepper, or other ingredients like paprika stuffed into the empty yolk cavity of half an egg, they are called "deviled," though in some places they're also referred to as stuffed eggs, dressed eggs, or even Russian eggs. In the 13th century, stuffed eggs began to appear in the southern regions of Spain. A cookbook from this era suggests grinding boiled egg yolks with cilantro, onion juice, pepper, and coriander with a fermented fish sauce, and two centuries later, similar recipes were widely available across much of Medieval Europe. Not until the late 19th century, though, did we start to see "deviled" eggs that resemble what we would call "deviled" eggs. An 1896 cookbook was one of the first to suggest using mayonnaise as a way to bind ground egg yolks together, which leads to today's classic recipe that calls for mayo, mustard, and paprika.



Why is a six-sided, L shaped tool called an "Allen wrench?"

"Allen wrenches" come in various sizes and have been patented all over the world under several different names. In many European countries, for example, the "Allen wrench" is known as an "Inbus" due to its patent by a German manufacturer of that name. The first recorded developments of the tool that would eventually be called an "Allen wrench" were performed in 1911 by the Standard Pressed Steel Company (SPS) in Philadelphia. The SPS Company used the brand name Unbrako, as in "unbreakable," for the screw and became a world leader in its mass production. However, most people became familiar with the "Allen wrench" around the time of World War II, when industrialization was in full swing. The Allen Manufacturing Company in Hartford, Connecticut trademarked their hexagon wrench in 1943, and the product became so successful that most consumers now simply refer to it as an "Allen wrench." The Allen Manufacturing Company no longer exists, but the Danaher Corporation of Washington, DC, took over the name and continued production of the "Allen wrench."

Quick Facts:

⇒ The country with the widest spread of land, Russia, spans 11 different time zones. Russia is the only place in the world where one citizen could be waking up at 8:00 a.m. and another could be going to bed at 11:00 p.m.



⇒ Picasso was a child prodigy who could draw before he could talk. He was accepted to the School of Fine Arts when he was 13 years old. While most students completed their entrance exams in a month, he completed his in just one week.

⇒ Picasso is one of the world's most prolific painters. During his 78-year career, he created over 13,500 paintings or designs, 100,000 prints or engravings, 34,000 book illustrations, and 300 sculptures or ceramics--totaling over 147,800 works of art.



⇒ Picasso would often carry around a pistol loaded with blanks. He would fire it at people he found boring.

⇒ Green has not always been the color associated with St. Patrick and St. Patrick's Day, it was blue. The Order of St. Patrick, established in 1783, selected blue as its color because dark green was already taken. Green became popular with the 1798 Irish Rebellion when wearing a clover on a lapel became a sign.

⇒ Stilts were invented by French shepherds who herded sheep in marshes near the Bay of Biscay.



⇒ According to European folklore, wishing wells were homes for deities, or gifts from gods. Water is a valuable commodity; many early European tribes treated wells as shrines and often placed small statues of gods nearby. People would come to the wells to pray and ask for assistance from the gods.

⇒ Leonardo da Vinci figured out that the rings of a tree reveal its age.



⇒ A new study conducted over three years (2015-2017) by Rover.com, found that 54% of dog owners are willing to end a relationship if their pup doesn't like their partner.

⇒ The first person to use an elevator: King Louis XV, whose "flying chair" went between floors at Versailles in 1743.

⇒ Thomas Hargrove has been archiving homicides for years. Through his experience, he came up with an algorithm that found patterns in recent murders. This allowed him to estimate the number of unsolved, repetitive cases, leading him to the estimation that the number of active serial killers in the U.S. is around 2,000.

⇒ In about 250 B.C., Ancient Greek mathematician Archimedes invented the screw.

⇒ Mark Twain invented a Trivial Pursuit-like game called Mark Twain's Memory-Builder.

⇒ Germany Uncovers 2,000 Tons of Unexploded Bombs Every Year. During the World War II, the Allied forces dropped over a total of 2.7 million tons of bombs on Germany. Due to certain defects in their delay timers, a large number of bombs never exploded—around 10 percent, or 200,000 tons



Send your thoughts to drmjw@aol.com

Around the State



Northwest Florida President and District 1 Director Chad Thurner (left) with Dan Harvey.

The Inaugural Northwest Florida Chapter Sporting Clay Shoot was held on Saturday, December 1st at Talon Range in Midway.

Seven teams and a total of 28 participants competed in the shoot. Nine sponsors helped make the day a success, and the NW Florida chapter raised \$4,350!



The Southeastern Surveying and Mapping team.



Chad Thurner with his game face on.



Jack Sietzinger aims at a clay.



Jason Hill about to shoot.

From the Archives

From 1989: A message from Immediate Past President Steve Vrabel, praising the new FSMS office building. The picture below is from the grand opening in early 1990.

Behind the Cover!

by Steve Vrabel



Over the years our magazine has displayed pictures of Society Presidents, survey projects, convention scenes, etc.

The building shown on the cover of this issue is a landmark — representing an exciting new step for our Society. This is the new building for the FSPLS.

This facility is approximately 5,000 square feet, of which the Society will be utilizing one-half of that space for the time being.

We have been able to incorporate about everything we had hoped for into this space. We have designed a conference room to house future board meetings. We have allowed our employees to no longer have to crawl all over each other to work. And, we have designed into the space a nice size area to become the Society's Historical Museum Room. This is a very beautiful and exciting building for our organization.

The officers, at their budget meeting, met with the developer and signed a rental agreement for this space. We also told him that we were interested in purchasing the building. He has agreed to take the building off the market until the Board meets in January to decide on this purchase. If we agree to purchase the building, we will be looking very seriously to everyone to help in funding this purchase. The cost is \$375,000.

I believe this building will be a landmark for our profession and something we can all be very proud of. I hope each and every one of you will make the effort to get to Tallahassee to visit this new facility.

Want to help right away? Even if we don't buy the building, we have furniture and window covering needs. We also are looking for items for the museum room. Contact Jeannie to see what items are needed.

We will be occupying this new space January 1, 1990. The new address is: FSPLS 1689 Mahan Center Blvd. Tallahassee, FL 32308

If all goes well, we will have a grand opening/ribbon cutting ceremony soon thereafter. Perhaps that can be tied into this year's legislative encounter.

Keep your eyes open for future information on the new building!



IN MEMORIAM

E.R. “Dick” Emerson

January 21, 1932 - January 3, 2019



-LS1867

-Sarasota County Surveyor 1974-1994

-Long time member of FSMS/FSPLS

-Perry C. McGriff Award recipient for outstanding community service by a Professional Surveyor & Mapper in 1984.

Elvin Richard (Dick) Emerson, 86, passed away January 3, 2019. He was born January 21, 1932 in Hopewell, Virginia to the late Elvin Rex and Virna (Johnson) Emerson.

A Class of 1950 alumni of Hamilton High School, Dick was raised mainly in Trenton, NJ where he married his high school sweetheart, Joan Emerson, in 1952. After their marriage, Dick and Joan left New Jersey and spent the 1950s and 1960s in Miami where Dick, after his first Honorable Discharge from active duty military, spent time as a patrol officer with the Miami Beach Police Force.

After enlisting in the Marine Corps in 1951, Dick served in the Korean War until 1954. Subsequently, he joined the Marine Corps Reserve, rising to serve as a Master Gunnery Sergeant and later Chief Warrant Officer Four. By the time he fully retired from the Marine Corps in 1991, Dick had devoted 40 years, 11 months, and 14 days in service to his country with the Marine Corps.

Meanwhile, having found success in civil engineering, he left Miami in 1974 to become the Director of Transportation and Engineering for Sarasota County until his retirement in 1994.

In retirement, he was a member of the Eagles and loved going to the shooting range. He and Joan loved traveling the Southeast with their friends.

Left to cherish his memory are his wife of 66 years, Joan; daughter, Joy Emerson Brewer and her husband Jeff of Wellesley Hills, Massachusetts; brother, Daniel B. Emerson and his wife Mary Jeanne of Juliana County, Pennsylvania; and granddaughter, Lily Elizabeth Brewer.

Memorial contributions in Elvin's honor to the Semper Fi Fund at www.semperfifund.org. Memories and condolences may be left online at www.MaloneyFuneralHomeCares.com.

IN MEMORIAM

Troy N. Townsend

June 15, 1961 - January 22, 2019



Davie, FL

"Dear Customers, Friends, and Co-workers,

It is with a lump in our throats and a tear in our eyes that we inform you of Mr. Troy N. Townsend's lost battle with cancer. He was not only an employee and Director of our Surveying Division but also someone I take great pride in to call my friend and part of our family. He passed away in the early hours Tuesday morning January 22, 2019.

Troy has been an dedicated member of our surveying profession and a key member of our firm for many, many years. For those of us who have had the pleasure of knowing him have been blessed and enriched by his presence.

Some of you have been fortunate enough to have met or work with Troy in the past in person or on the phone. I'm sure it didn't take you long to recog-

nize his knowledge, dedication, and service to all who came in contact with him.

He is survived by his wife, Nancy, and his 5 children (Kareena, Athena, Derrick, Katharine, and Lauren). Please keep them and the rest of Troy's family in your prayers."

-Jay Evans of Pillar Consultants

The family will be holding a Life Celebration at Tradewinds Park in Coconut Creek on February 17th from 1:00 to 4:00pm at the Appaloosa Pavilion at the north end of the park. Everyone is invited.



2019 eLearning Courses



Basics of Real Property Course #8380 (3 General CEC)

\$ 70⁰⁰



Boundaries in Florida Course #8255 (6 SOP/L&R CEC)

\$ 120⁰⁰



Contracts for the Professional Course #8412 (3 General CEC)

\$ 70⁰⁰



Elevation Certificates and the Community Rating System Course #8256 (3 General CEC)

\$ 70⁰⁰



Ethics for the Design Professional Course #8621 (6 General CEC)

\$ 120⁰⁰



Florida Laws Course #7149 (6 SOP/L&R CEC)

\$ 120⁰⁰



Professional Ethics and Professional Courses FULL Video Course #8363 (6 General CEC)

\$ 120⁰⁰



Georgia Technical Standards for Property Surveys Course #8554 (6 General CEC)

\$ 120⁰⁰



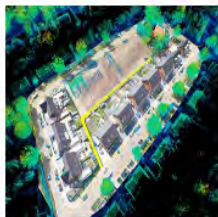
History of Surveying Course #7140 (6 General CEC)

\$ 120⁰⁰



Identification of Native and Non-Native Trees in Florida Course #8132 (6 General CEC)

\$ 120⁰⁰



Introduction to Photogrammetry Course #7968 (3 General CEC)

\$ 70⁰⁰



Land Tenure and Cadastral Systems Course #8260 (6 General CEC)

\$ 120⁰⁰



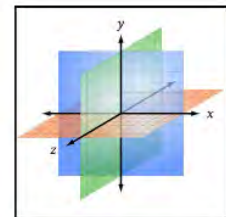
Map Projections and Plane Coordinate Systems Course #8261 (6 General CEC)

\$ 120⁰⁰



Mean High Water Observations & Computations Course #8262 (6 General CEC)

\$ 120⁰⁰



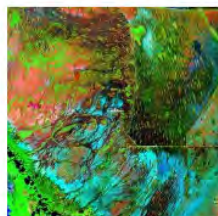
Practical Geometry for Surveyors Course #7141 (6 General CEC)

\$ 120⁰⁰



Public Land Survey System Course #7147 (6 General CEC)

\$ 120⁰⁰



Remote Sensing Applications to Surveying & Mapping Course #7148 (6 General CEC)

\$ 120⁰⁰



Writing Boundary Descriptions Course #8362 (3 General CEC)

\$ 70⁰⁰



FSMS Correspondence Courses

Lowest Rates of Any Florida Surveying and Mapping Continuing Education Provider

Step 1: Choose Course(s)

3 Hour Courses Available

- A History of the Prime Meridian Marker, #8403, 3 CEC**
- Basics of Real Property, #8359, 3 CEC**
- Contracts for the Professional, #8411, 3 CEC**
- Digital Signatures for Surveyors, #8491, 3 CEC**
- Elevation Certificates and the Community Rating System, #8257, 3 CEC**
- 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**

6 Hour Courses Available

- Boundaries in Florida, #7667, 6 CEC**
- Chapter 177, Platting (Plat Law), #6970, 6 CEC**
- Client Satisfaction Excellence for Surveying and Mapping Professionals, #7229, 6 CEC**
- Critical Communication for Surveying & Mapping Professionals, #7228, 6 CEC**
- Ethics for the Design Professional, #8620, 6 CEC**
- Florida Laws, #6966, 6 CEC**
- Florida Surveying Law and Rule Changes, #9573, 6 CEC**
- Georgia Technical Standards for Property Surveys, #8553, 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**
- Land Tenure and Cadastral Systems, #7829, 6 CEC**
- Map Projections and Plane Coordinate Systems, #7669, 6 CEC**
- Mean High Water Observations and Computations, #8220, 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**
- Stress Management for Surveyors & Mappers: How to be Productive Under Pressure, #6902, 6 CEC, ONLY AVAILABLE BY MAIL**
- Time Management for Surveyors & Mappers: How to be Productive & Exercise Time Mastery in a Hectic World, #6901, 6 CEC, ONLY AVAILABLE BY MAIL**

Step 2: Choose Member Type

FSMS Member

<i>EMAILED</i>	Fee	Quantity	Amount
6 CEC	\$115 Per Course	x _____ =	\$ _____
3 CEC	\$58 Per Course	x _____ =	\$ _____
<i>MAILED</i>			
6 CEC	\$125 Per Course	x _____ =	\$ _____
3 CEC	\$68 Per Course	x _____ =	\$ _____
TOTAL			\$ _____

Non-Member

<i>EMAILED</i>	Fee	Quantity	Amount
6 CEC	\$135 Per Course	x _____ =	\$ _____
3 CEC	\$78 Per Course	x _____ =	\$ _____
<i>MAILED</i>			
6 CEC	\$145 Per Course	x _____ =	\$ _____
3 CEC	\$88 Per Course	x _____ =	\$ _____
TOTAL			\$ _____

Non-Licensed in ANY State

<i>EMAILED</i>	Fee	Quantity	Amount
6 CEC	\$100 Per Course	x _____ =	\$ _____
3 CEC	\$60 Per Course	x _____ =	\$ _____
<i>MAILED</i>			
6 CEC	\$110 Per Course	x _____ =	\$ _____
3 CEC	\$70 Per Course	x _____ =	\$ _____
TOTAL			\$ _____

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Name: _____ PSM#: _____ State: _____ FSMS Member: ___ YES ___ NO

Firm: _____ Sustaining Firm: ___ YES ___ NO

Address: _____

City/State: _____ Zip Code: _____

Email Address: _____ Work Phone: _____

Payment Information: _____ Check Enclosed (Payable to FSMS) _____ VISA/MasterCard/American Express
 Card #: _____ Exp. Date: _____ CVV Code: _____

Billing Address of Credit Card: _____

Signature: _____

IF PAYING BY CHECK, MAIL FORM TO: FSMS, P.O. Box 850001-243, Orlando, Florida 32885-0243

IF PAYING BY CREDIT CARD, FAX OR EMAIL FORM TO: 850.877.4852 education@fsms.org

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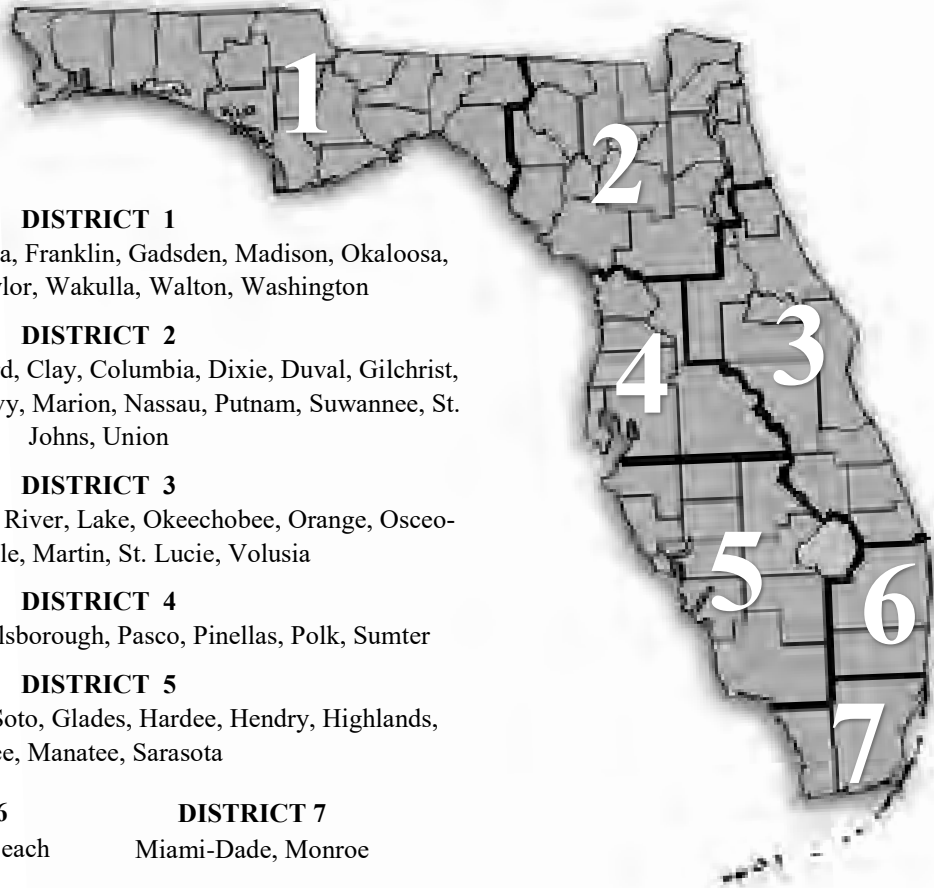
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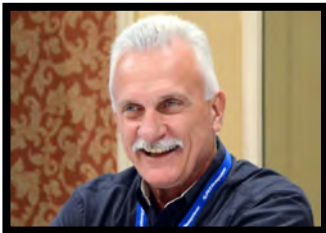
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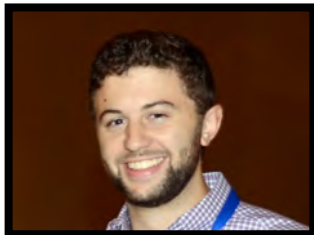
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Tom's Tip of the Month

First Thing Every Morning

Click on the picture below to view the video!



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.

2019 Sustaining Firms

Accuright Surveys of Orlando, Inc.	407-894-6314	DSW Surveying & Mapping, PLC	352-735-3796
Agnoli, Barber & Brundage, Inc.	239-597-3111	Durden Surveying and Mapping, Inc.	904-853-6822
AIM Engineering & Surveying, Inc.	239-332-4569	E.F. Gaines Surveying Services, Inc.	239-418-0126
Allen & Company, Inc.	407-654-5355	Echezabal & Associates, Inc.	813-933-2505
Allen Engineering, Inc.	321-783-7443	ECHO UES, Inc.	888-778-3246
AM Engineering, Inc.	941-377-9178	eda engineers-surveyors-planners, inc.	352-373-3541
American Consulting Professionals, LLC	813-435-2600	Eiland & Associates, Inc.	904-272-1000
American Surveying, Inc.	813-234-0103	Element Engineering Group, LLC	813- 386-2101
Amerritt, Inc.	813-221-5200	Engenuity Group, Inc.	561-655-1151
Arc Surveying & Mapping, Inc.	904-384-8377	Engineering Design & Construction, Inc.	772-462-2455
Associated Land Surveying & Mapping, Inc.	407-869-5002	England, Thims & Miller, Inc.	904-642-8990
Avirom & Associates, Inc.	561-392-2594	ESP Associates FL, Inc	813-295-9024
Axis Geospatial SE, LLC	386-439-4848	Exacta Land Surveyors, Inc.	305-668-6169
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Barnes Ferland and Associates Inc	407-896-8608	F.R.S. & Associates, Inc.	561-478-7178
Barraco & Associates, Inc.	239-461-3170	First Choice Surveying, Inc.	407-951-3425
Bartram Trail Surveying, Inc.	904-284-2224	Florida Engineering & Surveying, LLC	941-485-3100
Bello & Bello Land Surveying Corporation	305- 251-9606	FLT Geosystems	954-763-5300
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Brown & Phillips, Inc.	561-615-3988	GeoPoint Surveying, Inc.	813- 248-8888
BSE Consultants, Inc.	321-725-3674	George F. Young, Inc.	727-822-4317
Bussen-Mayer Engineering Group, Inc.	321-453-0010	Geosurv, LLC	877-407-3734
C&M Road Builders, Inc.	941-758-1933	Global One Survey, LLC	786-486-8088
Calvin, Giordano & Associates, Inc.	954-921-7781	GPI Geospatial, Inc.	407- 851-7880
Carter Associates, Inc.	772-562-4191	GPServ, Inc.	407-601-5816
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Chastain-Skillman, Inc.	863-646-1402	Hamilton Engineering & Surveying, Inc.	813-250-3535
CivilSurv Design Group, Inc.	863-646-4771	Hanson Professional Services, Inc.	217-788-2450
Clary & Associates, Inc.	904-260-2703	Hole Montes, Inc.	239-254-2000
Clements Surveying Inc.	941-729-6690	Honeycutt & Associates, Inc.	321-267-6233
Coastal Supply, Inc.	321-345-4051	Hutchinson, Moore & Rauch, LLC	251-626-2626
Collins Survey Consulting, LLC	863-937-9052	Hyatt Survey Services, Inc.	941-748-4693
Compass Engineering & Surveying, Inc.	727-822-4151	I.F. Rooks & Associates, LLC	813-752-2113
Craven-Thompson & Associates, Inc.	954-739-6400	John Mella & Associates, Inc.	813-232-9441
Cross Surveying, LLC	941-748-8340	Johnston's Surveying, Inc.	407-847-2179
Culpepper & Terpening Inc.	772-464-3537	Keith and Associates, Inc.	954-788-3400
Dagostino & Wood, Inc.	239-352-6085	Kendrick Land Surveying	863-533-4874
Dennis J. Leavy & Associates	561-753-0650	King Engineering Associates, Inc.	813- 880-8881
Donald W. McIntosh Associates, Inc.	407-644-4068	L&S DIVERSIFIED, LLC	407-681-3836
Donoghue Construction Layout, LLC	321-248-7979	Landmark Engineering & Surveying Corp.	813-621-7841
Douglass, Leavy & Associates, Inc.	954-344-7994	Leading Edge Land Services, Inc.	407-351-6730
DRMP, Inc.	407-896-0594	Leiter Perez & Associates, Inc.	305-652-5133

2019 Sustaining Firms

Leo Mills & Associates, Inc.	941-722-2460	Strayer Surveying & Mapping, Inc.	941-497-1290
Long Surveying, Inc.	407-330-9717	Suarez Surveying & Mapping, Inc.	305-596-1799
Ludovici & Orange Consulting Engineers, Inc.	305-448-1600	SurvTech Solutions, Inc.	813-621-4929
MacSurvey, Inc.	727-725-3269	Thurman Roddenberry & Associates, Inc.	850- 962-2538
Manuel G. Vera & Associates, Inc.	305-221-6210	Tuck Mapping Solutions, Inc	276-523-4669
Marco Surveying & Mapping, LLC	239-389-0026	Upham, Inc.	386-672-9515
Maser Consulting, P.A.	813-207-1061	Wade Surveying, Inc.	352-753-6511
Massey-Richards Surveying & Mapping, LLC	305-853-0066	Wallace Surveying Corporation	561-640-4551
Masteller, Moler & Taylor, Inc.	772-564-8050	WBQ Design & Engineering, Inc.	407-839-4300
McKim & Creed, Inc.	919-233-8091	Winningham & Fradley, Inc.	954-771-7440
McLaughlin Engineering, Co.	954-763-7611	Woolpert, Inc.	937-461-5660
Metron Surveying and Mapping, LLC	239-275-8575	ZNS Engineering, LC	941-748-8080
Metzger + Willard, Inc.	813-977-6005	Benchmark Surveying & Land Planning, Inc.	850-994-4882
Mock Roos & Associates, Inc.	561-683-3113		
Morris-Depew Associates, Inc.	239- 337-3993		
Murphy's Land Surveying, Inc.	727-347-8740		
Northwest Surveying, Inc.	813-889-9236		
Omni Communications, LLC	813-852-1888		
On The Mark Surveying, LLC	321-626-6376		
PEC - Surveying & Mapping, LLC	407- 542-4967		
Pennoni Associates, Inc	215-222-3000		
Pickett & Associates, Inc	863-533-9095		
Pittman Glaze & Associates Inc	850-434-6666		
Platinum Surveying & Mapping, LLC	863-904-4699		
Point to Point Land Surveyors, Inc.	678-565-4440		
Polaris Associates, Inc.	727-461-6113		
Porter Geographical Positioning & Surveying, Inc.	863-853-1496		
Pulice Land Surveyors, Inc.	954-572-1777		
Q Grady Minor & Associates, PA	239-947-1144		
R. M. Barrineau & Associates, Inc.	352-622-3133		
R.J. Rhodes Engineering, Inc.	941-924-1600		
Reece & White Land Surveying, Inc.	305-872-1348		
Rhoden Land Surveying, Inc.	352-394-6255		
Richard P. Clarson & Associates, Inc.	904-396-2623		
Robayna and Associates, Inc.	305-823-9316		
Robert M. Angas Associates, Inc.	904-642-8550		
Rogers, Gunter, Vaughn Insurance, Inc. (HUB Florida)	850-386-1111		
Sergio Redondo & Associates, Inc.	305-378-4443		
Settimio	850-341-0507		
Shah Drotos & Associates, PA	954-943-9433		
Shannon Surveying, Inc.	407- 774-8372		
Sherco, Inc.	863-453-4113		
Southeastern Surveying & Mapping Corporation	407-292-8580		
Stephen H. Gibbs Land Surveyors, Inc.	954-923-7666		

Additional Information

Upcoming Events

March 2, 2019
2nd Annual Indian River Clay Shoot
Okeechobee

May 3, 2019
FSMS Board Meeting
Gainesville

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H.O. Peters	William G. Wallace, Jr.	Jack Breed
Harry C. Schwebke	Robert W. Wigglesworth	2000
John P. Goggin	1980	Arthur A. Mastronicola
R.H. Jones	Ben P. Blackburn	Michael H. Maxwell
1960	William B. Thompson, II	John M. Clyatt
Hugh A. Binyon	John R. Gargis	David W. Schryver
Russell H. DeGrove	Robert A. Bannerman	Stephen M. Gordon
Perry C. McGriff	H. Bruce Durden	Richard G. Powell
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James A. Thigpenn, III	Jan L. Skipper	Robert W. Jackson, Jr.
Harold A. Schuler, Jr.	Steven M. Woods	Pablo Ferrari
Shields E. Clark	Stephen G. Vrabel	Steve Stinson
Maurice E. Berry II	W. Lamar Evers	2010
William C. Hart	1990	Dan Ferrans
Frank R. Schilling, Jr.	Joseph S. Boggs	Jeremiah Slaymaker
1970	Robert L. Graham	Ken Glass
William V. Keith	Nicholas D. Miller	Russell Hyatt
James M. King	Loren E. Mercer	Bill Rowe
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E.R. (Ed) Brownell	Robert D. Cross	Lou Campanile, Jr.
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