The Florida Surveyor

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June 2018

TradeWinds Island Grand Resort St. Pete Beach

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President's Message

June is the month we all start thinking about the "H" word. I wasn't going to say it, but OK, I'll say it - Happy Summer! Kids are getting out of school, and graduations and summer vacations have arrived. It's time to stay cool, relax, and enjoy the outdoors, family, and friends. It's also time to catch up on unfinished business and look toward the dwindling part of 2018.

A great place to be this summer would be the TradeWinds Island Grand Resort on St. Pete Beach. A great time to be there would be August 15th-18th. That's right - you should

join your fellow FSMS members at our 63rd Annual Conference on the beautiful St. Pete beach! Conference this year is shaping up to be another fun, informative, and rewarding four days of social events, seminars, dinners, entertainment, gaming events and more. Not to mention, it's a great venue to hang out at the pool and the beach and have fun with your kids, family, and friends.

The conference format this year will be basically the same as last year. We have tried different formats in the past, but the great feedback we received after last year's conference assured us that this was the schedule to keep. To kickoff the festivities on Wednesday, there will be a full-day seminar presented by Mr. Don Wilson, author of the book *Boundary Retracement, Principles and Practices*, and one of the leading authorities on boundary surveying in the country. That evening we will have our annual Welcome BBQ, followed by the always-fun cornhole tournament. This dinner gets better and better every year. Last year we really out did ourselves, cooking enough food and desserts that we had to hand out "to-go" boxes!

Thursday will be another action-packed day, with fishing and golfing tournaments in the morning and seminars being offered throughout the day. The seminars on Thursday will be presented by some of the leading authorities in our profession: David Melvin, George Cole and Mr. Wilson. Thursday evening offers a great itinerary that includes social events with vendors and committees, a legislative reception, our always-exciting game night, and the beloved conference tradition of group music night.

On Friday, we rise and shine with a complimentary breakfast, and then begin our annual business meeting. The Exhibitor Hall, which houses our fantastic trade show, will be open all day, and lunch will be held here with the vendors, who showcase the latest must-have technologies. The awards and recognition banquet will be Friday evening, followed by a comedy show featuring Les McCurdy of McCurdy's Comedy Club. We could all use a little more "good" humor in our lives and be able to laugh at ourselves! Trust me, Friday night features comedy and entertainment you don't want to miss!

Saturday we will wrap up our four fantastic days with seminars and technical sessions for everyone, including our Associates. We will have CST testing again this year, as well as Associate-level seminars. The highlight of Saturday will be our expert panel discussion and review of the recent revisions to Statute 472 and the final amendments to our "Standards of Practice" 5J-17.

I truly look forward to these conferences every year. Meeting and interacting with fellow surveyors from all parts of the state and country really gives you a sense of pride and accomplishment to belong in this profession. Let's all continue to help each other in this great and honorable profession we work in.

As Reverend Michael Curry put it at the Royal Wedding (yes, I did watch it): "Love God. Love your neighbors. And while you're at it, love yourself." Bob Stray

Bob Strayer, Jr, (941) 497-1290 bob@strayersurveying.com



Summer is soon to be upon us, which means the arrival of heat, humidity and the dang sun burning us! This is the most important time to talk about safety and precautions regarding the good ole' Florida weather. I want to discuss this now because of recent reports of surveyor deaths. There was a traffic-related fatality in Fort Worth, Texas, and a fall from a high-rise building in St. John's, Newfoundland in Canada. The gentleman in Texas was 45, and the gentleman from Canada was 26 - far too young for either of them to die. We don't know if anything could have prevented these deaths, but we can make sure we do everything in our power to prevent any incidents here in Florida. This requires proper training and project planning in all services that we perform.

Here in the City of Orlando, we go through extensive safety training. This training varies from heat stress, confined space entry, first aid and CPR, intermediate or advanced MOT (now Temporary Traffic Control), tag in/tag out and a number of other safety classes the city offers through our Risk Management Division.

Our survey staff must go through most of these classes, because our jobs are prone to be exposed to a number of safety risks. I myself actually go through all of these classes, as I am the one who is going to admonish my employees if something is not done properly.

For instance, I assess a situation when a lane closure was not properly setup, as does our field crew supervisor. If they do not properly submit a confined space entry log sheet, we will know it. This is very important, as I know most surveyors do not enter manholes - most try and get the information from the surface, but that is not always possible. Because of huge vaults and the structures of storm drainage systems, sometimes a confined spaced entry is required. Confined space entry is a "I know it is our responsibility to keep up regularly with changes, but I know most of us are too busy to do so. Usually this can be countered by staggering your staff's training schedule, so at least your staff is regularly updated by someone else on staff. This may be more difficult for entities that only have one or two employees on staff."

big safety issue. It is common to hear about a fatality from an entrance to a compromised confined space where an individual did not realize there was a gas leak or some other issue that can be fatal. That is why there is so much stress on education and training and following safety protocols.

Traffic control is another area of importance, as we do a great deal of design work for roadway improvements and future development. Sometimes, we wonder if education every four years is sufficient to keep up with MOT training (now TTC). I know it is our responsibility to keep up regularly with changes, but I know most of us are too busy to do so. Usually this can be countered by staggering your staff's training schedule, so at least your staff is regularly updated by someone else on staff. This may be more difficult for entities that only have one or two employees on staff. I am fortunate to have 13 employees in our survey section, so this training can be rotated.

Employees are a company's biggest investment, and their biggest asset. Properly training those assets will help to ensure that everyone makes it safely home every night. Assess every project and situation, and properly plan for the work to be done in the safest way possible. Be sure to have a safety plan in place and require that everyone follows it. My organization accomplishes this with the City of Orlando Safety Plan Manual. Right now is a good time to take a look and see what your organization needs! Until next month my friends...

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

Safety Training

The following is a list of some of the safety training the Risk Management Division offers:

- Basic MOT Flagging Safety
- Bloodborne Pathogens
- Confined Space Entry
- CPR/AED
- Fall Protection
- Fire Extinguisher
- First Aid
- Forklift Operations
- Hazard Communication
- Hazardous Energy Control Program LOTO
- Heat Stress
- PPE
- Respiratory Protection
- Sunshine 1 Call

Special training needs are coordinated through the City of Orlando's Risk Management Division. If you have questions regarding safety-training requirements, please contact the Safety Training Coordinator at 407.246.2255.



Reminiscences of an Old Surveyor

Measuring Angles & Directions

Part II

Knud E. Hermansen, PLS, PE, PhD, Esq.

Click to read Part I

Switching to the transit, I must first introduce the tripod the transit set upon. It was wooden, made from heavy wood such as oak. The legs of the transit tripod could not be adjusted in length. It was using great skill that a transit was placed over a point upon a hillside and still be leveled. The fastening ring for the transit upon the tripod was large and often as not gave me some difficulty in getting the threads to start. My difficulty oftentimes being caused by the small chain and hook that hung from the bottom of the transit upon which the plumb bob was hung. It seems this chain was always in the way of the thread when first placing the transit upon the tripod.

Without adjustable legs, a good deal of pushing and prodding of the legs into the ground took place in order to position the suspended plumb bob over the point. Having been a Marine, a few cuss words were used as well to gain some cooperation from the tripod legs. Numerous minutes of time were lost during the work day on this endeavor. A little grace was provided in this procedure by loosening one leveling screw in each of the two directions thereby allowing the transit to be shifted around an inch or so without wrestling with the tripod.

Having positioned the transit over the point, the next task was to level the transit. Some of the last transits commercially produced had three leveling screws but the ones I used had four leveling screws. Great care had to be exerted to balance opposing screws during the process of leveling the transit. Failure to exert the care required would leave one screw too loose resulting in the instrument wobbling along the axis. Too tight and there was a torque introduced or the brass threads were stripped. As I was often told, the screws had to be snug when the leveling process was complete. The transits I used had two plate bubbles, their axis perpendicular to the other, revealing the level of the transit in perpendicular directions.

Once the transit was leveled, the instrument plates had to be set to zero. This involved releasing the upper and lower motions of the transit and spinning the plate around using the fingers until a zero was approximately reached on the plates. The upper motion was then locked and the upper slow motion used to set the zero to a tolerance possible with the instrument. The lower motion remained loose until the instrument was sighted on the backsight target. The lower motion was used to put the cross-hairs on the target since the lower motion did not affect the reading on the plates.

In mentioning the upper and lower motions, I have introduced a common mechanism that has disappeared from the modern instrument

that I do not wish to explore to a great extent. Both the upper motion and lower motion had a release knob and a slow motion knob. Both knobs control the horizontal rotation of the transit. The lower knobs would do so without changing the reading on the plates. The upper knobs would change the reading of the plates. The lower knobs were used to point to a target without changing the angle reading. No one who used the transit can say they did not use the wrong knob from time to time. The problem arises because the person is looking through the optics while wishing to move the crosshairs on to the target. Their hands grasp for a knob while they look through the scope. Of course either slow-motion knob will move the scope. The mistake is realized when they have aligned the crosshairs on the target and look at the plates. The mistake is usually discovered at this time and some cuss words often escaped from the lips. This mistake always seemed to occur when attempting to double the angle, requiring the instrument operator to begin the tedious process of measuring the angle all over again.

The angle on the transit was read using one of two windows found around the ring of the transit. One was known as the A Vernier and the second known as the B Vernier. The windows were 180 degrees opposite or should be if the instrument was in good temper - the letters A or B being found in the window at the Vernier scale. Looking into the window, two rings of etched lines and numbers could be viewed. There was an inner ring and outer ring. The outer ring was the Vernier.

I will avoid attempting to describe the process of reading the transit plates and Vernier. I do not believe I could do the process any justice unless the reader was looking in the window of the transit while an explanation is made. The process involved remembering in which direction the instrument is rotated and finding where a line on the inner plate coincides with a line on the outer plate. Lines and spaces are counted. The reading from the inner plate is added to the outer plate to arrive at an angle. The lines and spaces had different values depending on the 'least count' of the instrument.

If a surveyor spent their entire career reading the transit, I expect one eye would be bigger than the other eye given the strain on the eye spent finding a coincident line between the primary and Vernier plates. Even in my younger days when my eyes were in the peak of fitness, I often employed the magnifying glass that was tied by a string to the transit standard.

One employer was very

proud of the fact his transit could read to the nearest 15 seconds. I think it is easier to follow a spider's tracks than determine which of the numerous lines on a 15 second transit coincides. Needless to say the effort spent obtaining an angle took considerably more time than current practice with modern instruments.

Many modern instruments will not give a reading if the instrument is not leveled. I can say without hesitation, from numerous testings that I have partaken, that there was no impediment in reading a transit that was not level. I will not admit to making that mistake but I have observed numerous instrument persons do so.

I should also mention that the transits I used had a compass within the center of the transit that could be very helpful when retracing old boundaries or giving a magnetic direction to start a traverse.

I will close my reminisce about the transit by saying it also had a direct and Vernier plate allowing the instrument to read a vertical angle. For the surveyor that wished to use their transit as a level, there was a large plate level parallel with the scope. Once this was leveled, the scope was level, assuming there was no instrument deficiency.

I wish to point out that contrary to measuring a zenith angle, the vertical angle required the instrument operator to include a plus or minus sign to be associated with the angle. The plus or minus sign would indicate if the scope was pointing up (+) or down (-) from the horizontal when the vertical angle was read.

I remember expressing my surprise to a survey crew chief after he returned from a topographic survey. My surprise came about when I presumed that he had managed to find the lowest spot to set up the instrument on that particular day since every vertical angle that was recorded in the field book was positive. Unfortunately, the instrument was not at the lowest spot. It was a day wasted since his memory was not sufficient to differentiate the negative angles from the entire list of positive angles that were recorded in the field book.

I will close this reminisce without delving into procedures that were employed to double the angle that should have been done, but was often omitted in an effort to hurry the completion of the survey.



FSMS Pioneers

A series that honors the legends of surveying in the state of Florida

By Dominic Levings

Charles Fred Deuel III

With professional integrity and personal generosity, Deuel helped his hometown evolve

A resident of St. Petersburg for nine decades, Charles Fred Deuel III has seen the city that was once a small railroad town morph into a vibrant hub exploding with development.

"He never believed he'd see the day where there were three cranes in downtown St. Petersburg at the same time," his daughter, Tracy, said.

"He's got a lot of old pictures where there's nothing at the beach."

But then again, Deuel certainly knows that he played no small role in transforming the city.

Over his 55-year career as a surveyor and engineer, Fred Deuel contributed his time and effort to numerous developments in St. Petersburg and established a name and reputation that is now well-known throughout the city.

Born on February 24th, 1927, Deuel

grew up in St. Petersburg and attended St. Pete High, the only high school in the area at the time. After high school, he attended the Colorado School of Mines in Denver. His grandfather had been a mining engineer and encouraged him to consider attending the school.

"When it came time to go to school, I thought I would like to go out there and my folks made it possible," Deuel recalled.

Deuel graduated with a degree in mining engineering. However, it was during his time at the Colorado School of Mines that he was first exposed to the possibility of becoming a professional surveyor.

"One of my fraternity brothers told me, 'If I could make a living surveying, that's what I would do,"" Deuel said.

That idea stuck with Deuel, and a few years after moving back home to St. Petersburg after college, he obtained his official survey license on March 26th, 1951. The rest, they say, is history.

The Boom Days of Florida

Deuel's first surveying job was with George F. Young, a prominent Florida surveyor who oversaw many projects in the central and southern parts of the state throughout the mid-1900s. When Deuel began working for him in the early 1950's, a development and construction boom was well underway in Florida, and subdivisions and townships sprouted up throughout the state.

Young was one of a handful of surveyors of the time who could accurately calculate a new type of suburb layout: curve-drive subdivisions.

"Back in those days, there weren't a lot of people who did curve-drive subdivisions," Deuel said. "George had a hand in it because no one



It was evident from early on that Fred Deuel would become a surveyor and engineer.

else knew how to calculate curves."

And so, the young Deuel learned from one of the surveying luminaries of the state, and soon became an excellent calculator of curve-drives himself. His first years as a surveyor were mostly spent in the office, making calculations longhand.

"I used to have a book of log tables from the government to do all of my calculations, and an old Monroe adding machine was my calculator," Deuel recalled.

He still remembers his first major project with Young, back when St. Petersburg was still a tiny Florida town. It was Tyrone Gardens, the sort of shopping mall that became a symbol of America's post-war boom in the 1950's. Within time, this project would be just one of many that Deuel would have a hand in developing.

C. Fred Deuel and Associates

Deuel eventually went into business with a colleague of his at Young, Gordon Day. Their firm was named Deuel & Day and served the St. Petersburg area. After Day moved to North Florida to work with relatives, Deuel decided to keep the company open and operate it alone.

C. Fred Deuel and Associates was founded in 1954. With a relaxed

management style and a dedication to abiding by ethical standards, he built his company into a formidable enterprise. At one point, he had additional offices in Ocala, Clearwater, New Port Richey, Zephyrhills, and Hudson, as well as over 100 employees.

"He loved his work and put everything into it. He treated everyone fairly, and he was compassionate, and he had employees who he treated well. He gave everybody a fair shake," Tracy said.

Tracy remembers that his commitment to the job often extended beyond the work day and work week. Along with her sisters, Lynn and Leslie, she would often accompany her father to look at projects on the weekends.

"He loved to drive around and look at his jobs. He would maybe check something out, or if he needed to, would measure something," she said.

She also remembers that his job resulted in the adoption of more than a few pets at their house when they were younger.

"We remember having tortoises because him and his crews would find them out in the field and bring them home, and we'd have them as pets," she said, laughing.

Walt Casson, Jr. first met Deuel in the summer of 1954. Casson's father owned a surveying firm in New Port Richey, and after his father passed away unexpectedly, Casson leased the company to Deuel. Casson would work for Deuel for several years, and he recalls the unrelenting integrity of his former boss.

"He was a professional in all respects. He was a registered engineer and surveyor. He had the highest ethics," Casson said.

"This was before minimum technical standards existed. We developed our own code of ethics – the state didn't have anything to do with it – it was just our company."

Harley Gilmore also met and began working for Deuel in 1954. Gilmore identified Deuel's ethical standards as one of his defining qualities, sometimes going so far as to spend money to correct a previous survey that wasn't done right.

"I do know of some cases when I was working for him, that it was determined later that the survey wasn't done right, and he spent the money and the time to correct it and make it right," Gilmore said.

"He never did a job half-way and said, 'Well, they'll forget about it, I'm not making any money.' He



Deuel with his old Monroe adding machine, which he used early in his career. He is wearing a Colorado School of Mines shirt.



Deuel with a transit in the late 1940's.

always made sure he did it right."

Gilmore and Casson – who remain friends with Deuel to this day – also identify Deuel's management style as a reason for his success.

"He wasn't a forceful person. He was not the type of person that would create stress and try to get you to meet a demand or something of that nature," Casson said.

Deuel was also a considerate and understanding boss, who did not dismiss the input of his employees.

"There are some surveyors who won't listen to you. Fred was always one who might have an idea, might have a feeling for something, but he was always willing to listen to anyone else and listen to what their thoughts were," Gilmore said.

"As far as I'm concerned, that is a certain part of being a good surveyor."

Even as the founder of the company, Deuel was very involved in day -to-day operations, often personally overseeing jobs and joining the crew in the field.

"I felt and still feel that Fred was a

solid day-by-day surveyor. We have some who are book surveyors but weren't in the field – he would be out there when needed, supervising the field crew through the job itself," Gilmore recalled.

"He was involved and well respected by everyone," Casson said.

"He's Just a Good Guy"

Aside from his easy-going demeanor as a boss and his friendly personality, those who know him best say that Fred Deuel is an exceptionally generous man with a big heart.

Casson remembers that after the death of his father, his family was struggling to make ends meet. He was planning to go back to college at Vanderbilt, but considered staying home to support his mother and his three younger siblings – that is, until Deuel stepped in.

"Mother had never done anything but take care of the family. How was she going to support the family and me go off to college?" Casson said. "Mr. Deuel hired my mother as his receptionist, and she was taken care of."

In 1963, after several years working for Deuel in the New Port Richey office, Casson was ready to go his own way. But his devotion to Deuel was causing him distress.

"Then I started wanting to be in business for myself. But I didn't want to hurt Deuel's feelings – he had been so good to me after all," Casson said.

However, the saga would end well, albeit in a coincidental fashion. By chance, Deuel was ready to scale back operations, and closed the New Port Richey office. The office closed on a Friday, and Casson opened it back up on the following Monday is his own name.

"Over the years, we became even closer friends. And I always tried to express to him how grateful I was, because he made it possible for me to go back to college, and he really changed my life. I think the world of him," Casson said. "He's a wonderful, wonderful person."

Gilmore recalls one story that he says best highlights Deuel's character. In the 1980's, there was a period of time when business was extremely slow, and the firm did not have enough consistent jobs in order to compensate employees with money generated by job contracts. Deuel then did a most unusual thing.

Instead of laying off any of the surveyors or field crews, Deuel initiated an extensive internally-funded project. He authorized the development and creation of concrete corner monuments for over 100 different sections of land.

"Fred Deuel ate that costs himself instead of laying off the crews. All that work was not charged to any client – all of the employees still had a 40-hour work week. He was always concerned about the people that were employed by him," Gilmore said.

"He's just a good guy. It may be the best compliment I could tell you. He's just a good guy."

A Sailor's Life

When he wasn't on the job, Fred Deuel could be found somewhere by the coast, sailing or fishing.

"He was maybe 8 years old when he got his first sailboat, and he sailed it out on the bayou here in St. Pete. Always had boats, always on the water. And when we were kids, it was the same thing – we always had a boat, and we were always out on the water," Tracy said.

When Deuel decided to retire in 2006, Gilmore remembers speaking with him about the decision, and after seeing a smile on his face, he

asked Deuel why he was smiling.

"Fred said 'Well, you know, it was just too hard to survey and sail the boat. I could only choose one, so I chose sailing the boat!"" Gilmore recalled.

But Deuel's passion for sailing goes beyond that of the average recreational boater. Rather, Deuel was every bit of a modern-day sailor, competing in various regattas, and serving as Commodore of the St. Petersburg Yacht Club in 2007. He owned a 31-foot Swedish sailboat named "Madonna".

He competed an astounding 25 times in the Regata del Sol al Sol, an annual 456-mile race across the Gulf of Mexico that starts in St. Petersburg and ends at Isla Mujeres, an island off the coast of Cancun, Mexico.

He competed in the inaugural race in 1969, and just recently visited Isla Mujeres with Tracy to attend an event commemorating the 50th anniversary of the race

"He was there from the beginning when they started the regatta. They gave him a recognition plaque," Tracy said.

"That's another place you can mention Señor Deuel and they know who you're talking about."

The Deuel Legacy

Deuel retired 12 years ago, after operating C. Fred Deuel & Associates for 52 years, from 1954 to 2006. Deuel & Associates still exists today with an office in Clearwater, under the management of Compass Engineering & Surveying.

The Deuel name looms large in St. Petersburg. That can be expected, as he played a role in developing several of the city's landmarks over a span of six decades, including Eckerd College in the southwest corner of the city, and countless subdivisions.



Lifelong friends Fred Deuel (right) and Harley Gilmore at the St. Petersburg Yacht Club.

"People always see my last name and say, 'What makes you a Deuel...any relation to Fred?' And when I tell them he's my dad, they say 'Oh my god!" Tracy exclaimed.

"He's well known and well respected in the community. He always got along really well with everybody and they respected him."

Deuel was married for 62 years to Mary Lou, of New York, after meeting her on a blind date on New Year's Eve in 1952. She passed away in 2014.

Mary Lou was the head nurse in the ICU at Mound Park Hospital, which is now Bayfront Health St. Petersburg. She worked the night shift when her daughters were growing up, which figured well, because her husband's job was by nature a daytime-only job.

"You know they say behind every good man, there is a good woman. They supported each other...she would come home and sleep until we got home from school," Tracy said.

Walt Casson, Jr. and Harley Gilmore are still close friends with the man who helped their fledgling surveying careers nearly 65 years ago. "Both Walt Jr. and myself have kept very close with Fred Deuel all the way through the years and consider him as one of the prominent surveyors that we've known," Gilmore said.

"If he hadn't been a good surveyor, I wouldn't tell you that we're still friends," he added, laughing.

Casson still has the contract from when Deuel leased his father's company. It dates August 30th, 1954.

"That's how long he's meant everything to me," Casson said.

Now 91 years old, Deuel can no longer get on a sailboat. A few years back, he was undergoing physical therapy to try and do so, but unfortunately could not accomplish the feat.

But according to Tracy, it's not too much of a problem.

"He lives on the water. He's got a beautiful view," she said.

"He loves to just sit out back and go down on the dock and look out at the water."

Family Photos



Ia Hall with daughter Charlize on her Pre-K graduation day.



Seniors in the UF Geomatics program performing a tide study in Cedar Key.



Michael O'Brien with his daughter Shannon and wife Frances at the Cliffs of Moher in Ireland.



Jeff and Nona Young at a Mayan temple in Belize. They found a survey marker at the top of the temple - approximately 110' above sea level!



Jim Mazurak with wife Brenda and son Nick at an underground salt cave at the Austrian/German border, celebrating Nick's college graduation.

FSMS Endorses Adam Putnam for Governor

Outgoing Commissioner of Agriculture seen as best candidate to benefit profession



May 23rd, 2018

Tallahassee, FL - FSMS has formally endorsed Adam Putnam in his bid to become Florida's next Governor. The Board of Directors voted unanimously last week to support Putnam as the 2018 campaign season heads into the summer months. The following is a letter from FSMS President Bob Strayer:

"It is with great pride and pleasure that I announce that the Florida Surveying & Mapping Society officially endorsed Adam Putnam for Governor by unanimous vote at its Board of Directors meeting on May 18, 2018 in Tallahassee. With this vote, the Board pledged to support Commissioner Putnam in his bid for the Governor's seat.

In my opinion, there is not a finer, more qualified candidate running for the Governor's office. A 5th-generation Floridian and Bartow native, Putnam grew up on the family cattle ranch and citrus groves, where he learned the value of a hard day's work. He understands the type of men and women we employ and the necessity to keep our profession strong.

As the Commissioner of Agriculture, Commissioner Putnam has been our profession's regulator for the last eight years. He has an indepth knowledge of our profession and respects the value of our services to the growth and future of Florida. Commissioner Putnam's "Florida First" agenda will aid the surveying and mapping profession far more than the agendas of the other gubernatorial candidates. He pledges to focus on growing the technical programs throughout the state, which we desperately need now and into the future.

There has never been a greater opportunity for us to stand behind and support a better candidate for Governor, who, if elected, would mean a great deal to our profession in Florida.

Please join me and the rest of the Florida Surveying and Mapping Society in supporting and endorsing Commissioner Putnam for Governor!

Proudly and Respectfully,

Bob Strayer FSMS President

If you would like to contribute, please make your initial contribution before June 11th to: Florida Grown PC, and mail it to Smith, Bryan & Myers, Attn: David Daniel, 311 E Park Ave., Tallahassee, FL 32301.

FSMS will be holding an event with Commissioner Putnam on Thursday, June 21st in Lakeland, FL. The event will be held at the Sun 'n Fun Campus (4175 Medulla Road, Lakeland, FL 33811) in the Cessna Building from 1:30 p.m. – 3:30 p.m.

Photo: www.adamputnam.com



Why is an animal acting nervously said to be "skittish?" "Skittish" comes from the Old Norse (9th -13th century) word *skjota,* meaning to shoot, launch, or move quickly. Around the 14th century, "skittish" referred to a human characteristic of frivolity or excessive liveliness. A century later, it was applied to horses that were unruly and likely to run away when startled, especially when something nearby was shot, launched, or quickly moved. Note: From that same base came the word *skit*, used to designate a parody or satirical comedy. In those presentations, the writer would metaphorically take shots at the subject of ridicule.

Why is a wall anchor sometimes called a "molly?" "Molly" has become an old school term in just a short time. You can still look it up on hardware websites, but once there nothing says "molly." Now it's just wall anchors and toggle bolts. A "molly" is/was a name for a specialized screw fastener that would reliably fasten objects to plaster or gypsum board hollow walls where no stud could be found. In 1934, George Frederick Croessant patented the "molly." Although his patent acknowledges that expandable fasteners of this general kind were already known, Croessant's patent intended to provide "an improved and adequate anchoring grip that may be retightened if necessary and that will permit repeated withdrawals and reengagements of the associated bolt."



Why is a song to help a baby fall asleep called a "lullaby?"

The 16th century English term "lullaby" is most likely from 'lu lu' or 'la la', the sound made by mothers or nurses to calm babies, and 'by by' or 'bye bye', another lulling sound to get them to sleep for the night. Another more ominous thought is that "lullaby" comes from 'Lillith-bye.' In Jewish folklore, Lillith, sometimes referred to as the "howling one", was a demon responsible for the death of babies.

Why do we cross our fingers for good luck?

Crossing ones fingers was a way of secretly making the sign of the cross. It was done by early Christians to ask for divine assistance without attracting the attention of pagans.





Quick Facts:

⇒ The Seuss classic, 'Green Eggs and Ham' published in 1960, was a result of a wager between the author and his editor at Random House. Could Dr. Seuss, using 50 words, write an intelligent, entertaining children's book? In a word, yes (which is one of the 50 words). The U.S. writer and cartoonist, whose full name was Theodor Seuss Geisel, won the bet and \$50, one dollar for each word.



- ⇒You can literally call someone a fathead. About 60 percent of the human brain is made of fat.
- ⇒A chef's tall hat traditionally is made with 100 pleats, meant to represent the "hundred ways to cook an egg."
- ⇒ Every one hundred years, the Moon adds approximately 1.7 milliseconds to a day. While this may be minuscule, it does add up: Over the past 350 million years, the Earth's rotation has slowed by about an hour.
- ⇒Because the cycle of evaporation, condensation, and precipitation is closed, the same water that existed on the earth millions of years ago is still on Earth today.
- ⇒To keep their whiskey stills from being spotted, moonshiners during prohibition would often wear "cow shoes"—shoes with special blocks attached to the bottoms—which would make their footprints look like a cow's.



⇒Hot water freezes faster than cold water. Crazy, right? A number of explanations have been suggested for "the Mpemba effect," including one that suggests that warm containers conduct heat more efficiently, and another that warm water evaporates faster. ⇒ Though one of the UK's most famous leaders, wartime prime minister and career politician Winston Churchill has deep U.S. roots. His mother, Lady Randolph Churchill, was born Jennie Jerome in Cobble Hill, Brooklyn. As daughter of financier and sportsman Leonard Jerome, she was born into significant wealth.



- ⇒ Horses don't need as much sleep as you might expect for an animal so large. Altogether, they sleep about three or four hours a day, and that is done in 10 and 15 minute bursts, often locking their joints and standing while they do.
- ⇒ No wonder horses do so well in battle. Horses' eyes are larger than any other mammals (at about 2 inches in diameter) are able to move independently and due to their placement on the sides of their heads they can get a near-360-degree view of their surroundings (outside of a pair of blind spots directly in front and behind them).
- ⇒The blob of toothpaste that sits on your toothbrush has a name. It's called a "nurdle."
- ⇒Any puncture wound, including one from a rusty nail, can lead to a tetanus infection — but not because of the rust. Tetanus infections happen when dirt, soil or manure that is contaminated with the Clostridium tetani bacteria becomes embedded in wounds. Oxidized metal, or rust, has no impact whatsoever.
- ⇒ Generations of children managed to leave school believing blood is blue until it touches oxygen, when it turns red. Blood is always red. Veins appear blue only because of how light is filtered as it penetrates the skin.
- ⇒One of the most common and easy-to-remember rhyming spelling lessons is "I before 'e' except after 'c' or when sounding like 'a' as in 'neighbor' or 'weigh.'" The rule is wrong at least 25 percent of the time. Need some proof? Science. Forfeit. Weird. Glacier. Albeit. Fancier.
- \Rightarrow You can't see your ears without a mirror.



Send your thoughts to drmjw@aol.com







From 1960-1966: The programs for the 4th through 10th Annual FSPLS Conferences.





FSMS INDIAN RIVER CHAPTER CHARITY SPORT CLAY SHOOT REPORT/RECOGNITIONS

Our inaugural Sports Clay Shoot Fundraiser at <u>Quail Creek Plantation</u> in Okeechobee County on March 2nd, 2018 was a "GREAT" success.

Over 18 teams participated enjoying a fantastic day of competition, fun and comradery while raising funds for the Chapters Community Service Initiatives. See page two for event photographs.

Substantial funds were raised which will be allocated to this year's Public Services causes such as, the <u>Red Cross/White Dove Holiday Projects.</u>

Sponsorship was "KEY" to success of the event.

The Chapter recognizes all the following **SPONSORS** for their contributions and participation. *Visit Company Links below!*

<u>Avirom</u> – Gold, 4 teams <u>WGI –</u> Silver, 3 teams <u>Bowman</u> – Bronze, 2 teams <u>Lotus Gunworks</u>- Great Pricing guns & prizes <u>GCY</u> – Carts <u>GCY</u> – Gun, 1 EDC – Gun, 1 <u>Stephen Brown</u> – Gun, 1 <u>GPServe</u> – Coffee <u>FLT</u> – Donuts Ace Hardware – Prize discounts Liquors Store – Prize discounts (NE corner of Prima Vista and US1)

Special appreciation also goes out to Chapter volunteers and Committee Chair Bryon Yancy for organizing the event.

"SAVE THE DATE"

<u>The Charity Clay Shoot was such as success the Chapter is already planning the second event</u> <u>on March 2nd, 2019</u>

> FLORIDA SURVEYING & MAPPING SOCIETY Association of Geospatial Professionals



"Like Us" Chapter Face Book Page: https://www.facebook.com/IndianRiverChapterFSMS





MANASOTA & CHARLOTTE HARBOR CHAPTERS-F.S.M.S.

ANNUAL GOLF TOURNAMENT AND BBQ!

LAKE VENICE GOLF CLUB 1801 South harbor Dr., Venice

Just Past Venice Airport on Harbor Drive Date: June 16, 2018

Rain date: JUNE 17, 2018

Entry Deadline: June 14, 2018

BEST BALL SCRAMBLE

\$65.00 PER GOLFER (LUNCH ONLY \$15.00)

Sign in-7:00 a.m., Shot Gun start-8:00 a.m. REGISTRATION INCLUDES: CONTINENTAL BREAKFAST, RANGE BALLS, BEVERAGES ON THE COURSE, GOLF ROUND & CART, BBQ LUNCH FOLLOWING GOLF AND PRIZES. AWARDS TO THE TOP 3 FOURSOMES, GREAT DOOR PRIZES AND RAFFLE. LONGEST DRIVE, CLOSEST TO THE PIN, SPECIAL EVENT HOLES AND HOLE-IN-ONE PRIZES EVERY PAR 3

	ENTRY FORM	PLAYERS LIST
NAME		1.
COMPANY		2.
ADDRESS		3.
		4.
PHONE		
FAX		
METHOD	o CASH	o Individual: \$65.00
OF PAYMENT:	• CHECK (Payable to: Manasota	o Foursome: \$260.00
	Chapter FSMS)	 Hole Sign Sponsor: \$75.00
		 Foursome and Hole Sponsor: \$300.00
SPONSORSHIPS:	o Beverage \$400.00	 Breakfast Sponsor \$250.00
(please check one)	o Lunch \$200.00	 Specialty Event \$100.00
HOLE SPONSOR:	o \$75.00	Please check all that apply
		Total Amount: \$

Fax, mail or email entry form to: Joe Kelly c/o Stantec 6900 Professional Parkway east Sarasota, FL 34240 Phone: 941-907-6900 Fax: 941-907-6910 Email: joe.kelly@stantec.com Alcoholic Beverages are provided on a "Donation Only" policy and only to adults 21 and over. Proceeds raised from the tournament will be donated to aid FSMS. The Chapters and the Florida Surveying and Mapping Society are not responsible for and cannot be held liable for any of the accidents or incidents during or after this tournament.

PLEASE DRINK RESPONSIBLY!

Annual Collier-Lee Golf Tournament



When: Saturday, July 21st at 8:30am (sign in at 7:30am)

Where: Bonita National Golf & Country Club (17001 Bonita Beach Road SE, Bonita Springs, FL 34135)

Cost: \$85 per person; \$340 per foursome

Click here to download the registration form. Entries must be received by July 13th.

For more information, contact Jennifer Sheppard (jsheppard@bankseng.com) or Curtis Marshall (cmarshall@bwlk.net). National Geodetic Survey

Positioning America for the Future

geodesy.noaa.gov



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

Blueprints

ATMOS

NOAA

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Upcoming NOAA Technical Report, "*Blueprint for 2022, Part 3: Using the Modernized NSRS*" has been delayed for a few months as NGS works to standardize all of its internal and external rules regarding the collection, processing, storage, and dissemination of time-dependent geodetic control data.

Upcoming Outreach

The ASCE-UESI conference in Pomona, California held a two-part session entitled *NSRS Modernization* from 1:45 to 2:40 and 3:30 to 4:50 on April 23.

Progress in Ongoing Projects

There are currently 18 ongoing projects directly related to NSRS modernization around NGS. Here are highlights from a select few:

• Intra-Frame Velocity Model Project Manager: Dr. Daniel Roman

A Request for Interest (RFI) has been announced to elicit feedback from the industry to identify alternative solutions that address NGS operational and budgetary requirements and inform interested parties of the planned acquisition of Intra-Frame Velocity Model capabilities. Further information is available at https://www.fbo.gov/spg/DOC/ NOAA/EASC/18-00729/listing.html.

• State Plane Coordinates for 2022 Project Manager: Michael Dennis

A Federal Register Notice published April 18, 2018 announced that draft SPCS2022 policy and procedures are available for public comment through August 31 at https://www.federalregister. gov/documents/2018/04/18/2018-08141/ policy-and-procedures-documents-for-the-state-plane-coordinate-system-of-2022.

On April 12, NGS presented a SPCS2022 webinar titled "Building a State Plane Coordinate System for the Future" as a follow-up to the popular "The State Plane Coordinate System: History, Policy and Future Directions" webinar presented on March 8. Recorded video and slides for both webinars are available at https://geodesy.noaa.gov/web/science_ edu/webinar_series/2018-webinars.shtml.

• GRAV-D

Project Manager: Monica Youngman

In February 2018, the Gravity for the Redefinition of the American Vertical Datum (GRAV-D) project completed a 50 flight hour survey on the NOAA G-IV aircraft from the NOAA Aircraft Operation Center in Lakeland, Florida. This was the first time this aircraft was used in an airborne gravity survey. Its success is critical to completing the Pacific Islands in FY19 and, fortunately, this test survey went very well. The G-IV aircraft collects high quality gravity data with greater speed than other aircraft, and its use prepares NGS for the logistics of operating the aircraft in a remote location.

GRAV-D is scheduled to begin collecting data for the Pacific Islands, including Hawaii, Guam, and American Samoa, with the G-IV aircraft in December 2018.

GRAV-D progress last quarter: up 1.4% to 66.6% Ahead of Schedule!



National Oceanic and Atmospheric Administration

National Geodetic Survey

Florida Surveying & Mapping Society 63rd Annual Conference



August 15 - 18, 2018 St. Pete Beach, Florida

Footprints Behind . . . Horizons Ahead



Footprints Behind . . . Horizons Ahead

Conference Schedule 2018

Wednesday, August 15th

7:30 am - 5:00 pm 8:00 am - 8:30 am 8:30 am - 3:00 pm	Conference Registration Desk Open Seminar Registration Wednesday Seminar (<i>separate registration-NOT included in packet</i>) Boundary Retracement, Processes and Procedures 6 CEC Hours - Course #9384 Instructor: Don Wilson, PSM	Conv. Office 2 Jac. Foyer East Glades/Jasmine
10:00 am - 10:15 am	Break	Jac. Foyer East
11:45 am - 1:00 pm 6:00 pm - 10:00 pm 8:00 pm - 10:00 pm	Lunch on Own Welcome Barbecue (<i>ticket required</i>) Corn Hole Tournament	Pavilion Pavilion
Thursday, August	<u>16th</u>	
7:00 am - 12:00 pm 6:30 am - 1:30 pm 7:30 am - 5:00 pm 7:30 am - 10:30 am 8:00 am – 8:30 am 8:00 am – 3:00 pm 8:30 am – 11:00 am	Fishing Tournament (separate registration required) Golf Tournament (separate registration required) Conference Registration Desk Open Exhibit Hall Set-Up Seminar Registration Exhibitors Breakout Sessions Thursday Seminar I (separate registration-NOT included in packet) Legal Descriptions 3 CEC Hours - Course #9390	Offsite Offsite Conv. Office 2 Pavilion Jac. Foyer East Palm Glades/Jasmine
8:30 am – 3:00 pm	Instructors: Todd Boyle, PSM / David Schryver, PSM Thursday Seminar II (<i>separate registration-NOT included in packet</i>) FEMA Flood Map Changes for Surveyors 6 CEC Hours - Course #9345 Instructor: David Melvin, PSM	Banyan/Citrus
9:00 am - 12:00 pm	FDOT Town Hall Meeting (Open to all)	Blue Heron
11:00 am - 12:30 pm 11:00 am - 3:00 pm	Lunch on Own Exhibitor/Vendor Set-Up	Pavilion
12:30 pm - 3:00 pm	Thursday Seminar III (<i>separate registration-NOT included in packet</i>) Land Tenure, Boundary Surveying, and Cadastral Systems 3 CEC Hours - Course #9385 Instructors: Don Wilson, PSM / George Cole, PSM	Glades/Jasmine
1:30 pm - 2:30 pm 2:30 pm - 3:00 pm 3:00 pm - 4:30 pm 2:30 pm - 3:00 pm 3:00 pm - 4:30 pm 4:30 pm - 6:00 pm 6:30 pm - 8:30 pm 9:00 pm - 11:59 am	Surveying & Mapping Council Meeting Executive Committee Surveying & Mapping Council Meeting Executive Committee Meeting Geospatial Users Group Meeting Exhibitor's Reception Legislative Reception (<i>Ticket Required</i>) Game Night	Blue Heron President's Suite Royal Palm 8 President's Suite Snowy Egret Pavilion Banyan/Citrus Bird/Indian

Friday, August 17th

7:00 am - 8:00 am	Breakfast	Horizons East
7:30 am - 5:00 pm	Conference Registration Desk Open	Conv. Office 2
8:00 am - 12:00 pm	General Business Session	Horizons West
8:00 am - 4:00 pm	Spouse Hospitality	Banyan
9:30 am - 10:30 am	Exhibit Hall Grand Opening; Break from GBS	Pavilion
9:30 am - 4:00 pm	Exhibit Hall Open	Pavilion
12:00 pm - 1:30 pm	Exhibitors' Lunch (Food Ticket Required)	Pavilion
2:00 pm - 5:00 pm	NSPS Meeting	Citrus
4:00 pm - 5:00 pm	Exhibitor Teardown	Pavilion

Footprints Behind . . . Horizons Ahead

4:00 pm - 5:00 pm 5:00 pm - 6:00 pm 6:30 pm - 7:00 pm 7:00 pm - 10:00 pm	Surveyors in Government Meeting Young Professionals Group Cocktail Reception Recognition Banquet	Snowy Egret Red Beard's Tavern Long Key Tarpon/Sawyer
Saturday, August 1	<u>8th</u>	
7:00 am - 12:00 pm 8:00 am - 5:00 pm 8:30 am - 10:10 am	Conference Registration Desk Open Certified Survey Technician (CST) Exam Saturday Tech Sessions Tier I <i>(registration required)</i>	Conv. Office 1 Royal Tern
0.00 din 10.10 din	Track I Florida Laws & Rules Affecting Professional Surveyors and Mappers 6 CEC Hours - Course #6966	Banyan/Citrus
	Panel Discussion Track II Emerging Technology 2 CEC Hours - Course #8664 Instructors: Earl Soeder, PSM / Allen Nobles, PSM	Glades
	Track III QA/QC for the Design Professional, etc. 2 CEC Hours - Course #9294 Instructor: Dianne Collins, PSM	Jasmine
	Track IV Field Safety 2 CEC Hours - Course #9391 Instructor: Don Elder, PSM / Greg Prather, PSM	Palm
10:10 am – 10:30 am	Morning Break	Jac. Foyer West
10:30 am – 12:10 pm	Saturday Tech Sessions Tier II (registration required) Track I Florida Laws & Rules Affecting Professional Surveyors and Mappers Continues	Banyan/Citrus
	Panel Discussion Track II New State Plane Coordinates 2 CEC Hours - Course #9392 Instructor: Allen Nobles, PSM / Rick Pryce, PSM	Glades
	Track III Workers Compensation Requirements 2 CEC Hours - Course #9387	Jasmine
	Instructor: State of Florida Representative Track IV GPS for the Technician - Best Field Practices 2 CEC Hours - Course #9388 Instructor: Sam Hall, PSM	Palm
12:10 pm – 1:30 pm	Lunch <i>(on your own)</i>	
1:30 pm – 2:55 pm	Saturday Tech Sessions Tier III (registration required) Track I Florida Laws & Rules Affecting Professional Surveyors and Mappers Continues Panel Discussion	Banyan/Citrus
	Track II Best Practices in Running an Accurate & Profitable Drone Survey Program 2 CEC Hours - Course #9386 Instructor: Daniel Katz	Glades
	Track III Professionalism and Ethics 2 CEC Hours - Course #8358	Jasmine
	Instructor: Lou Campanile, PE, PSM / Chad Thurner, PSM Track IV Field Notes 2 CEC Hours - Course #9389 Instructor: James Godfrey, PSM	Palm
3:15 pm – 5:00 pm	Board Meeting	Blue Heron

Conference Seminars

Wednesday, August 15th



8:30 am —

3:00 pm

Boundary Retracement, Processes & Procedures Course #9384 - 6 CECs Don Wilson, PSM

Boundary Retracement, which [set of] footsteps to follow, and why. Based on Mr. Wilson's latest book, the program will include Boundary retracement, the concept and the law; a review of land titles and conveyancing; corners, lines and surveys; protraction, description elements; errors; evidence; procedural considerations; lost corners; and rectangular surveys outside the PLSS.

Donald A. Wilson, president of Land & Boundary Consultants, has been in practice for over 50 years, consulting to groups throughout the United States and Canada. He is both a licensed land surveyor and professional forester, having conducted more than 500 programs on a variety of topics, including description interpretation, boundary evidence, law, title problems, and forensic procedures.

Mr. Wilson has more than 200 technical publications in several areas, and has been involved with over 60 books, which include titles on Maine history and several books on fishing. Besides being co-author of *Evidence and Procedures for Boundary Loca-tion* and *Boundary Control and Legal Principles*, he is author of *Deed Descriptions I Have Known....But Could Have Done With-out, Easements and Reversions, Interpreting Land Records* and *Forensic Procedures for Boundary and Title Investigation*. His latest titles are *Easements Relating to Land Surveying and Title Examination, Boundary Retracement, Processes and Procedures* and a co-authorship entitled, *Land Tenure, Boundary Surveys and Cadastral Systems*.

Thursday, August 16th



FEMA Flood Map Changes for Surveyors Course #9345 - 6 CECs David Melvin, PSM

This course focuses on how to change FEMA flood maps. The ability to handle floodplain problems is very important. Since surveyors are typically involved in the land development process, it makes sense for surveyors to learn more about floodplain issues, particularly the correction of flood zone locations on FEMA maps. Improperly mapped flood zones on FEMA Flood Maps cost property owners and developers a great deal of money.

David Melvin, PSM, s a Professional Land Surveyor with professional registration in Florida, Alabama, and South Carolina. He is owner of Land Pro Seminars and is also a consultant specializing in land boundary problems, floodplain issues, wetland mapping, and land surveying regulations.

Seminar II	
8:30 am —	
11:00 am	

Legal Descriptions Course # 9390 - 3 CECs David Schryver, PSM & Todd Boyle, PSM



Descriptions and Sketches are not just one of the tasks surveyors provide; in a fundamental way they are the very foundation of the profession. As technology and other professions encroach or challenge the practice of Land Surveying, it is essential that Surveyors give the respect and priority the Description (and Sketch) is due.

David Schryver, PSM, is currently the County Surveyor for Indian River County, Florida. David began his survey career in 1980 and obtained professional registration in 1990. His work experience includes work in the private sector from rodman to business owner, and he has been working in the government sector since 2011. David is currently the Vice President of the Indian River Chapter and has held many offices at the State level including President of the Florida Surveying and Mapping Society.



Todd Boyle, PSM, started surveying part-time in 1979 and became licensed in 2000. My work was in private practice up until 2007. Since that time, I have had the privilege and honor to serve as the Manatee County Surveyor.

I have been a member of FSMS since becoming licensed and have had the opportunity to serve as the Manasota Chapter President in 2014-15 and again in 2016-17.

Thursday, August 16th

Seminar III	Land Tenure, Boundary Surveying & Cadastral System Course #9385 - 3 CECs
12:30 pm -	Don Wilson, PSM & George Cole, PSM
3:00 pm	This course provides an introduction to land tenure, cadastral systems, and boundary surveying, including an under standing of the interrelationship of these areas and their role in land tenure and real property law. This is especially true considering the advent of georeferenced cadastral maps reflecting the location of land parcels relative to man other components of the physical and legal infrastructure. Although intended as a basic text for college-level sur- veying courses, this book should also be of significant value to cadastral mappers, real property attorneys, land title professionals, and others involved with land transactions.
	Donald A. Wilson, president of Land & Boundary Consultants, has been in practice for over 50 years, consulting to groups throughout the United States and Canada. He is both a licensed land surveyor and professional forester, having conducted more than 500 programs on a variety of topics, including description interpretation, boundary evidence, law, title problems, and forensic procedures.
	Mr. Wilson has more than 200 technical publications in several areas, and has been involved with over 60 books which include titles on Maine history and several books on fishing. Besides being co-author of <i>Evidence and Procedures for Boundary Location</i> and <i>Boundary Control and Legal Principles</i> , he is author of <i>Deed Descriptions Have KnownBut Could Have Done Without, Easements and Reversions, Interpreting Land Records</i> and <i>Foren sic Procedures for Boundary and Title Investigation</i> . His latest titles are <i>Easements Relating to Land Surveying and Title Examination, Boundary Retracement, Processes and Procedures</i> and a co-authorship entitled, <i>Land Tenure, Boundary Surveys and Cadastral Systems</i> .
	George M. Cole is a professional surveyor and engineer with over 50 years of experience as a land surveyor. Beginning his career conducting hydrographic surveys of the Chukchi Sea as a commissioned officer of the U.S. Coast & Geodetic Survey, he has had a wide variety of assignments including participation in the nation's first satellite geodesy program, as the State Cadastral Surveyor for Florida, and as President of a surveying and map- ping firm with projects in both the United States and Latin America. Recently, he has concentrated on surveying education with service as a visiting professor at the University of Puerto Rico (which was the inspiration for this book) and currently as an adjunct professor at both the University of Puerto Rico and Florida State University.
	Saturday, August 18th
3:30 a.m.— 3:00 p.m.	Florida Laws and Rules Affecting Professional Surveyors and Mappers Course #6966 - 6 CECs Panel
	This course will focus on Florida Laws affecting professional surveyors and mappers. The practice of surveying and mapping is affected by many evolving laws and rules. This course will cover regulatory issues related to unlicensed practice, and will also address some of the implications of the various recent changes to Florida Statutes Chapter 472 and Florida Administrative Code 5J-17. Panel Discussion

Saturday	
August 18th	Tier I Courses
Track II 8:30 a.m.— 10:10 a.m.	Emerging Technology Course # 8664 - 2 CECs Allen Nobles, PSM & Earl Soeder, PSM
	 This course will educate the attendee on the emerging technologies for surveying and mapping. Information on the type of hardware and software and their uses will be discussed. This course will contain examples of emerging technology trends and how it is changes everything. Mr. Nobles is President of a Surveying firm with four offices in North Florida since 1980. Mr. Nobles, was a member of the ASTM E-57 Standards Committee writing the national standards for terrestrial scanning and has been a speaker at the industry's leading user groups. He has provided classes on LiDAR, photogrammetry, GPS, LAMP, laser scanning and boundary surveying for many professional groups (including the University of Puerto Rico, the University of Florida, FAU and Troy University). Earl Soeder is a licensed Professional Surveyor & Mapper and Registered in Florida and has been surveying for 31 years. Earl has been deeply involved in many aspects of surveying from GPS/Hydrographic to ControlSurveys. His unique experience led him to teaching surveying at University of Miami 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 products from Surveying/Engineering Systems to Mapping grade products
Track III 8:30 a.m.— 10:10 a.m.	QA/QC for the Design Professional Course #9294 — 2 CEC's Dianne Collins, PSM
	This course defines the meaning and purpose of Quality Assurance and Quality Control for both the Design Professional and Tech- nical Staff. The procedures and processes for developing and implementing a QA/QC plan that can be utilized in both field and office will be explored through discussion and use of examples. The importance of record keeping and documentation will be discussed as well as the positive aspects of the effects on your business operation. Ms. Collins has over 46 years of experience surveying in Florida, spending 13 years with the Surveying and Mapping Department of the Florida Department of Transportation District 7 as a technical reviewer, documents coordinator and District Right of Way Sur- veyor. Private sector experience ranges across Florida performing and managing many types of projects including, boundary, topo- graphic, wetland, control survey and right of way mapping as well as property title analysis and determination of property interests. Since starting her own firm in 2010, Ms. Collins has focused on performance of Quality Control/Quality Assurance reviews, Mapping and Litigation Support for both public and private sector clients.
Track IV 8:30 a.m.— 10:10 a.m.	Field Safety Course #9391— 2 CEC's Don Elder, PSM & Greg Prather, PSM A dropped survey instrument can be replaced with next day shipping. Creating a trained survey industry worker takes months at mini- mum, and usually requires years. First aid courses teach you how to react once someone is already injured. In this course, we will discuss approaches to our daily work which reduce the possibility of injury proactively. We will review common apparent and hidden risks to
	surveyors, formal and informal job safety planning, and we will introduce the topic of safety enhancement through Human Performance tools and principles. The objective of this course is the improved defense of a surveying enterprise's most valuable assets – its people . Don Elder, PSM, GISP is a professional surveyor and mapper licensed in Florida, Alabama, and Mississippi, and has over 20 years of survey- ing experience. He is a certified GIS professional, and holds a Master's degree from the University of Florida Geomatics program and a Bachelor's degree in Information Engineering Technology from the University of West Florida. Mr. Elder is currently employed by Gulf Power Company, where he performs a diverse range of surveying and land information systems services. Don Elder has served on the FSMS Board of Directors in multiple capacities since 2014, and he is currently the FSMS Secretary.
	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 part- ner in 2003. Gregory has extensive field and office experience with Trimble GPS software, receivers, and data collectors and is a hands-on leader. He has held several positions at the Chapter level of FSMS and has served as a District 4 Director. He remains an active member of FSMS and sits on the Ethics and Professional Practice Committee

active member of FSMS and sits on the Ethics and Professional Practice Committee.

Conference Seminars

Saturday **Tier II Courses** August 18th **New State Plane Coordinates** Track II Course # 9392 - 2 CECs 10:30 a.m.-Allen Nobles, PSM & Rick Pryce, PSM 12:10 p.m. Boundary Retracement, which [set of] footsteps to follow, and why. Based on Mr. Wilson's latest book, the program will include Boundary retracement, the concept and the law; a review of land titles and conveyancing; corners, lines and surveys; protraction, description elements; errors; evidence; procedural considerations; lost corners; and rectangular surveys outside the PLSS. Mr. Nobles is President of a Surveying firm with four offices in North Florida since 1980. Mr. Nobles, was a member of the ASTM E-57 Standards Committee writing the national standards for terrestrial scanning and has been a speaker at the industry's leading user groups. He has provided classes on LiDAR, photogrammetry, GPS, LAMP, laser scanning and boundary surveying for many professional groups (including the University of Puerto Rico, the University of Florida, FAU and Troy University). Mr. Pryce has over forty years of experience surveying in South Florida and is the current Director of District 6 (Broward County) of the Florida Surveying & Mapping Society. He has specialized in all aspects of the land surveying & mapping profession and has also utilized ESRI GIS software since 1990. Rick has specialized training in BLM PLSS retracement surveys, legal research and resolving boundary disputes. Most recently Rick has been fully trained on Leica 3D Laser Scanners and 3D Modeling for use in High Density Surveying of Commercial, Historical and Utility Sites. He has also been developing ways to analyze Aerial & Terrestrial Lidar data for City-wide Storm water and Drainage studies. Rick prides himself on always staying on the forefront of surveying and mapping technology. Workers Compensation Requirements & Workplace Safety Track III Course #9387— 2 CEC's 10:30 a.m. -Avsia Elliott 12:10 p.m. This course is designed to provide the student with the opportunity to become familiar with the Florida Workers' Compensation laws and their coverage requirements under the law in order to remain in compliance. It also describes the Enforcement provisions under the law and the activities of the Division of Workers' Compensation, Bureau of Compliance. Aysia Elliott serves the State of Florida, Department of Financial Services, Division of Workers' Compensation, Bureau of Compliance as a Training Specialist. In this role she provides new employee training to all personnel in the bureau. Ms. Elliott also provides and coordinates employer training throughout the State of Florida. Ms. Elliott has been a state employee for 5 years, and served as a compliance investigator for four years prior to transitioning into her training role. Her background consists of dual bachelor's degrees in Criminal Justice and Forensic Studies from Florida Gulf Coast University. Her background in Investigations with the Bureau and her educational background bring a well-rounded view of the issues surrounding workers' compensation compliance in both the construction and non-construction industries. GPS for the Technician—Best Field Practices Course #9388 - 2 CEC's Track IV 10:30 a.m. -Sam Hall, PSM



12:10 p.m.

The course provides a broad overview of the Global Positioning System and Real Time surveying through a series of field and classroom exercises. Topics include: how GPS is used for surveying; RTS fundamentals, equipment configuration, initialization methods, GPS Site calibration and general RTS field techniques.

Sam Hall, PSM, has nearly 20 years of surveying and mapping experience and currently serves as Vice President of Geospatial Services at WGI, a Florida-based engineering and consulting firm. After graduating from the University of Southern Maine with a degree in Geography, Sam obtained post-graduate Master's Certification in GPS Satellite Surveying and Conformal Mapping from the University of Maine. He then served as a consultant to the NGS and NRCAN on geodetic control surveys throughout the northeast and Canadian Maritimes. Since relocating to Florida in 2005, he has provided oversight, management, and data processing on large GPS networks to FDOT, the South Florida Water Management District, FDEP, the National Parks Service, and the U.S. Army Corps of Engineers.

Conference Seminars

Saturday	Tier III Courses		
August 18th			
Track II 1:30 p.m. — 2:55 p.m.	Best Practices in Running an Accurate & Profitable Drone Survey Program Course #9386 - 2 CEC's Daniel Katz		
	Flying a drone is easy, but creating a successful drone surveying program is complex. Drone technology is enabling many surveyors to grow their bus nesses despite a nationwide shortage of hireable survey staff. However, surveyors need to be sure they are getting the best accuracy and return on investment from their drone survey programs. In this seminar, Daniel Katz of Aerotas will share lessons from implementing drone programs for hundreds of surveyors nationwide and completing thousands of data processing projects. Key topics include: an benchmarks for a successful drone program, analysis of the current state of drone technology, and best practices in drone survey project workflow.		
	Daniel Katz is co-founder of Aerotas, where he has helped hundreds of surveyors nationwide start surveying by drone with industry-leading accurace Daniel regularly speak at survey conference across the country, and is a regular contributor to Point of Beginning and state survey association maga zines.		
Track III	Professionalism & Ethics Course #8358 - 2 CEC's		
:30 p.m. — :55 p.m.	Chad Thurner, PSM & Lou Campanile, PSM		
p	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.		
	Mr. Chad Thurner is the Vice President and Operation Manager for Nobles Consulting Group, Inc. in Tallahassee, Florida. As the Operations Manager, he studies and assists in the research and development of state-of-the-art technology as well as manages the daily responsibilities of the company. He has over 20 years of experience using the latest technology and software for various Geographic Information System (GIS) and Professional Surveying and Mapping projects. Much of his experience has been for large-scale mapping projects for various State/Federal agencies, municipalities, and private developers throughout Florida, Alabama, Georgia, and Mississippi. Mr. Thurner earned his Bachelors of Science (BS) degree in Geomatics from the University of Florida in 2000. He has his surveying and mapping license in Florida, Alabama, Mississippi, South Carolina, Louisiana, Georgia and Texas. In addition to surveying credentials, he is a certified GIS Professional (GISP). Mr. Thurner has served as the Emerging Technologies Chair and is currently District 1 Director for Florida Surveying and Mapping Society.		
	Lou was born in Miami. He "began" his surveying career at the age of 9 calculating lot areas for his dad on plats and continued working part time and summers in the field and office during junior high, high school and college. He attended the Georgia Institute of Technology and graduated with a Bachelor of Civil Engineering degree in 1981. After college, he began his responsible charge surveying career with his dad's firm in Miami. He received his surveying license in January of 1987 (PLS #4338).		
	Lou has been a member of FSMS since 1972 and has progressed from Student Member (1972-1981) to Associate Member (1981-1987) to Full Member (1987-2007) to Fellow Member (2007-2014) to Life Member (2014-Present). All this time he has been a member of the Miami -Dade Chapter and has served as Chapter Director, Secretary, Treasurer and President. He has served as Chapter President 4 times and the other positions more times than he can recall.		
Track IV :30 p.m. —	Field Notes Course #9389 — 2 CEC's		
:55 p.m.	James Godfrey, PSM		
6	This course will cover the basic fundamentals of collecting field notes on a survey project. Why field notes are important and what should be included in survey field notes. Also covered will be the different sources of error that can occur in our field measurements and how to avoid these errors using checks we can make before we leave the field.		
S	Mr. Godfrey's 40 year surveying career includes performing surveys for Federal, State, County and private sector clients and is licensed in 5 southern states including Florida with over 30 years as a licensed surveyor. For the past 14 years, Mr. Godfrey has served as adjunct professor in the college of engineering at University of South Florida where he instructs engineering students is curveying arianing surveying the currently source as the branch manager for Cardon's Tampa office sucreasing the		

SUE and Survey groups and has been an active member in the Tampa chapter of the FSMS for over 25 years.

in surveying principles used in engineering. He currently serves as the branch manager for Cardno's Tampa office overseeing the

Welcome BBO & Corn Hole Tournament



Lots of Fun Delicions Food



FSMS Conference Fishing Tournament



8:00am to 12:00pm Target Species and Awards: Longest Snook Longest Redfish Longest Sea Trout

Experienced **Captain Frankie Diaz** from **In Shore Rush Fishing Charters** will be coordinating the additional captains scheduled for this event. 4 anglers to a boat. Number of boats will be set a month prior to the event to ensure that enough captains are available. If fishing alone, enter only your name and cell phone number and you will be paired with other anglers.

Angler 1:	Cell Phone #:	Shirt Size:
Angler 2:	Cell Phone #:	Shirt Size:
Angler 3:	Cell Phone #:	Shirt Size:
Angler 4:	Cell Phone #:	_Shirt Size:

____Angler (s) X \$150.00 = \$_____ Total Entry Fee

Cancellations are allowed up to 1 month (July 19th) prior to the event

*Should an angler need to cancel after this date, contact the tournament director. It is possible we can find a substitute.

Payment Method:	Check (Payable to FSMS)		VISA/MC/AE
CARD #:		_ Expiration Date:	
Billing Address for CC:			

If paying by check please mail form and payment to the following address:

FSMS P. O. Box 850001 Orlando, FL 32885-0245

If paying by Credit Card email a PDF version of this form to: <u>education@fsms.org</u> Tournament Director: <u>Chad Boggs</u> Cell #: <u>813-468-2750</u> email: <u>cboggs23@bellsouth.net</u>

<u>Meet in the lobby of the resort @ 7:00am to register and coordinate</u> <u>transportation to ramp.</u>

GOLF TOURNAMENT

Thursday, August 16th

6:30 a.m.—1:30 p.m.



www.isladelsolycc.com 6000 Sun Blvd. St. Petersburg, FL 33715

Transportation Not Provided

(Golf course is only three miles from resort)

Shotgun Start @ 7:30 a.m.

Best Ball Scramble, Individuals & Teams Invited Breakfast & Lunch Included Awards:

- •Top 3 Foursomes
- •Closest To The Pin
- •Longest Drive
- •Putting Contest

Entry fee includes continental breakfast, lunch, range balls, bag service, goodie bags, and sponsor recognition.

Team (\$360)	Individual (\$95)
1	1
2	Preferred Partner(s):
3	
4	
Tournament Chair: Matt Si	mpson / matt@macsurvey.com / (205) 410-2951
Payment Information:	Check (Payable to FSMS)VISA/MC/AE
Card #	Expiration Date
Billing Address on Credit Ca	rd

IF PAYING BY CHECK, MAIL FORM TO: FSMS, P.O. Box 850001-243, Orlando, FL 32885 IF PAYING BY CREDIT CARD, EMAIL FORM TO: education@fsms.org

LEGISLATIVE RECEPTION

TradeWinds Island Grand Resort Banyan/Citrus Room Thursday, August 16th 6:30 p.m. - 8:30 p.m.

> Dinner Selections / Cash Bar (Ticket Required)



Guest Speaker State Representative Joe Gruters, Sarasota Running for State Senate Seat in 2018

The Florida Surveying and Mapping Society's legislative team works year round to defend the profession. They are dedicated Professionals who work tirelessly throughout the year to promote, protect and enhance the Surveying and Mapping Profession.

Most of us do not consider the effects of politics on our everyday working lives and businesses. This is due, primarily, to the vigilance and actions of the FSMS Legislative Committee Members, both pro-active (and very often) re-active, working all year and not just during the three month annual Legislative Session.

It is vital that we support our profession and protect our interests, and that is why we strongly encourage you to attend this year's Legislative Reception and welcome our guest speaker.


FSMS GAME NIGHT

TEXAS HOLDEM POKER TOURNAMENT

Thursday, August 16th 9:00 pm - 11:59 pm Tarpon Key Room

Donations accepted
Space limited to 30 players
Top three players awarded trophies
Top player receives traveling medal for one year

-Registration begins at 8:45 pm -Players must be 18 years of age







Click here to download form

Conference Registration

August 15th – August 18th, 2018 **TradeWinds Island Grand Resort** 5500 Gulf Blvd., St. Petersburg Beach, FL

Name

PSM #

Packet 1 – Full Registration/Best Value

Member (Registration)	\$320
Member (After July 15 th)	\$420
Non-Member	\$430
Non-licensed/Associate (In ANY State)	\$290
(Includes one (1) Wednesday Barbecue ticket,	
Friday Exhibitors' Lunch ticket, one (1) Friday	
Recognition Banquet ticket, six (6) Saturday S	eminar
CECs/all course materials)	

Packet 2 – Partial Registration

Member (Registration)	\$270
Member (After July 15 th)	\$330
Non-Member	\$360
Non-Licensed/Associate	\$250
(Includes one (1) Friday Exhibitors' Lunch ticket, on	e (1)
Recognition Banquet Ticket, six (6) Saturday Semir	ar
CECs/all course materials)	

Packet 3 – Saturday Only

Member (Registration)	\$140
Member (after July 15 th)	\$150
Non-Member	\$170
Non-licensed/Associate (in ANY State)	\$100
(Includes six (6) Saturday Seminar CECs and all	course materials)

Saturday Seminars

Indicate below each seminar you will be attending - please circle only ONE course per tier. You do NOT have to pick a course in the same track/color.

[Track I 8:30 am–2:55 pm (ALL day course)								
-	Course name: Florida Laws and Rules Affecting Professional Surveyors and Mappers (6 CEC's - Course #6966)								
	Instructor: Panel								
	Tier I Courses (8:30 am–10:10 am)	Tier II Courses (10:30 am – 12:10 pm)	Tier III Courses (1:30 pm – 2:55 pm)						
ik II	Course name: Emerging Technology (2 CEC - Course #8664)	Course name: New State Plane Coordinates (2 CEC – Course #9392)	Course name: Best Practices in Running an Accurate & Profitable Drone Survey Program (2 CEC - Course #9386)						
Track	Instructors: Allen Nobles, PSM & Earl Soeder, PSM	Instructors: Allen Nobles, PSM & Rick Pryce, PSM	Instructor: Daniel Katz, PSM						
жШ	Course name: QA/QC for the Design Professional (2 CEC - Course #9294)	Course name: Workers Compensation Requirements & Workplace Safety (2 CEC - Course #9387)	Course name: Ethics and Professionalism (2 CEC - Course #8358)						
Track	Instructor: Dianne Collins, PSM	Instructor: Aysia Elliott	Instructors: Chad Thurner, PSM & Lou Campanile, PSM						
kl<	Course name: Field Safety (2 CEC – Course #9391)	Course name: GPS for the Technician - Best Field Practices (2 CEC – Course #9388)	Course name: Field Notes (2 CEC - #9389)						
Track IV	Instructors: Don Elder, PSM & Greg Prather, PSM	Instructor: Sam Hall, PSM	Instructor: James Godfrey, PSM						

Cancellation Policy: Over 60 days: Full refund minus \$50 processing fee Over 30 days: 50% refund Less than 30 days: No refund



63rd Annual FSMS Conference

Name:		_PSM#:		_ FSMS Member:	YES	NO
Guest Name(s):						
Emergency Contact (Print Name):				_ Emergency Phone:		
Firm:				Sustaining Firm:	YES	NO
Address:		Work	Phone:			
City/State:	_ Zip Code:		Email Addre	ess:		

Additional Seminar Offerings

Wednesday Seminar (Separate Registration Required)	
August 15, 2018	
8:30 am – 3:00 pm	
Boundary Retracement, Processes & Procedures	
(6 CEC's Course #9384)	
Instructor:	
Don Wilson, PSM	
Thursday Seminar (Separate Registration Required)	
August 16, 2018	
Seminar I: 8:30 am – 3:00 pm	
Legal Descriptions	
(3 CEC's Course #9390)	
Instructors:	
David Schryver, PSM & Todd Boyle, PSM	
Seminar II: 8:30 am – 11:00 am	
FEMA Flood Map Changes for Surveyors	
(6 CEC's Course #9345)	
Instructor:	
David Melvin, PSM	
Seminar III: 12:30 pm – 3:00 pm	
Land Tenure, Boundary Surveying & Cadastral System	
(3 CEC's Course #9385)	
Instructors:	
Don Wilson, PSM & George Cole, PSM	

Complete payment information on the following page of the registration form.



63rd Annual FSMS Conference

Name: _			_ PSM#:	FSMS Member:	YES	NO
Guest N	ame(s):					
Emerger	ncy Contact (Print Na	me):		Emergency Phone	:	
Firm:				Sustaining Firm:	YES	NO
Address	:		Work Phor	ne:		
City/Stat	e:	Zip Code:	Ema	il Address:		
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Billing Addres	s of Credit Card:					
Signature:						



Florida Surveying and Mapping Society

2018 eLearning Courses



Basics of Real Property Course #8360 (3 General CEC)

\$ 7000



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



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 Courtesy** FULL Video Course





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



#8363 (6 General CEC)

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









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



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)



\$ 7000



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Step 1: Choose Course(s)

- □ 5J-17 Standards of Practice (SOP), #6962, 6 SOP/L&R CEC
- A History of the Prime Meridian Marker, #8403, 3 General CEC
- Basics of Real Property, #8359, 3 General CEC
- □ Boundaries in Florida, #7667, 6 SOP/L&R CEC
- Chapter 177, Platting (Plat Law), #6970, 6 SOP/L&R CEC
- Client Satisfaction Excellence for Surveying and Mapping Professionals, #7229, 6 General CEC (Only available by mail)
- Contracts for the Professional, #8411, 3 General CEC
- Critical Communication for Surveying & Mapping Professionals, #7228, 6 General CEC (Only available by mail)
- Digital Signatures for Surveyors, #8491, 3 General CEC
- □ Elevation Certificates and the Community Rating System, #8257, 3 General CEC
- □ Ethics for the Design Professional, #8620, 6 General CEC
- □ Florida Laws, #6966, 6 SOP/L&R CEC
- Georgia Technical Standards for Property Surveys, #8553, 6 General CEC
- Geographic Information Systems (GIS), #7107, 6 General CEC
- History of Surveying, #7108, 6 General CEC
- Identification of Native and Non-Native Trees in Florida, #7874, 6 General CEC
- □ Introduction to Photogrammetry, #7887, 3 General CEC
- Land Tenure and Cadastral Systems, #7829, 6 General CEC
- □ Map Projections and Plane Coordinate Systems, #7669, 6 General CEC
- □ Mean High Water Observations and Computations, #8220, 6 General CEC
- Practical Geometry for Surveyors, #7109, 6 General CEC
- Public Land Survey System, #6979, 6 General CEC
- □ Remote Sensing Applications to Surveying & Mapping, #6972, 6 General CEC
- Stress Management for Surveyors & Mappers: How to be Productive Under Pressure, #6902, 6 General CEC (Only available by mail)
- □ Time Management for Surveyors & Mappers: How to be Productive & Exercise Time Mastery in A Hectic World, #6901, 6 General CEC (*Only available by mail*)

Writing Boundary Descriptions, #8361, 3 General CEC



Correspondence Courses Order Form

EMAILED			Quantity			
6 CEC	\$115 Per Course	х		=	\$	
3 CEC	\$58 Per Course	х		=	\$_	
MAILED						
6 CEC	\$125 Per Course	х		=	\$	
3 CEC	\$68 Per Course	Х		=	\$_	
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6 CEC	\$135 Per Course	х		=	\$_	
3 CEC	\$78 Per Course	Х		=	\$_	
MAILED						
	\$145 Per Course	х		=	\$	
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6 CEC 3 CEC	\$88 Per Course	Х				

EMAILED	Fee		Quantity		Amount
6 CEC	\$100 Per Course	х		=	\$
3 CEC	\$60 Per Course	х		=	\$
MAILED					
6 CEC	\$110 Per Course	х		=	\$
3 CEC	\$70 Per Course	Х		=	\$
	TOTAL				\$

Step 3: Payment Information

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	PSM#:					
Firm:			Sustaining Firm: _	YES	NO	
Address:						
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Email Address:		Work Phone:				
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Card #:	Exp. Date:	Exp. Date: Card CVV Number (3 or 4 Digits)				
Billing Address for Credit Card:						
Signature:						
IF PAYING BY CH	ECK, MAIL FORM TO: FSMS, P.O. Bo EDIT CARD - EMAIL FORM TO educat QUESTIONS? CALL 800.2	x 850001-243, 0 ion@fsms.org				
Provider No. CE11				fsms.org	ļ	

District 1

Panhandle

David Glaze (850) 434-6666 davidpga@bellsouth.net

Emerald Coast Robert Johnson (850) 682-5306 bobndee1@cox.net

Gulf Coast Frederic Rankin (850) 571-1194 erankin@dewberry.com

Chipola Area Lee Anderson (850) 638-0790 landerson@southeasternsurveying.com

> Northwest Florida Chad Thurner (850) 200-2441 chad@ncginc.com

District 2

Florida Crown Bill Faust (904) 641-0123 cfaust@drmp.com

North Central Florida Hal Peters (352) 304-9534 hpeters@gpinet.com

UF Geomatics Chris Morin (786) 897-3104 chrismorin1593@ufl.edu

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> Space Coast Joe Williamson (407) 873-3837 Joew.fsms@gmail.com

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District 5

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Collier-Lee John Pacetti (239) 389-0026 johnpacetti@marcosurveys.com Manasota Scott Britt (941) 341-9935 msb@msbsurveying.com

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FAU Geomatics Gerardo Rojas (561) 297-2658 grojas2017@fau.edu

District 7

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Manny Vera, Jr. (305) 221-6210 mverajr@mgvera.com

John Liptak (305) 597-9701 jliptak@maserconsulting.com

NSPS Director

Ronnie Figueroa (407) 292-8580 rfigueroa@southeasternsurveying.com

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Committees

Standing Committees

Nominating Committee	Dianne Collins
Membership Committee	Joe Perez
Finance Committee	Bon Dewitt
Executive Committee	Bob Strayer
Education Committee	Don Elder
Annual Meeting Committee	Tom Brownell
Legal Committee	Jack Breed
Strategic Planning Committee	Dianne Collins
Ethics and Professional Practice Committee	John Liptak
Constitution and Resolution Advisory Committee	Don Elder

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Awards Committee	Lou Campanile, Jr.
UF Alumni Recruiting Committee	Jeff Cooner
Liaisons	
CST Program	Ronnie Figueroa
FDACS BPSM	Don Elder
Surveyors in Government	Richard Allen

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Administrative Staff

Tom Steckler



Executive Director director@fsms.org

Dominic Levings



Communications Director communications@fsms.org

Rebecca Culverson



Education Director education@fsms.org

Cathy Campanile



Regional Coordinator cathy@fsmsemail.org

Tom's Tip of the Month

Bon Dewitt

The Power of Habit

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.

The Florida Surveying and Mapping Society | 1689-A Mahan Center Boulevard, Tallahassee, FL 32308 | 850-942-1900 | fsms.org

2017-2018 Sustaining Firms

		0	
A M Engineering, Inc.	941-377-9178	Caulfield & Wheeler, Inc.	561-392-1991
Accuright Surveys Of Orlando, Inc .	407-894-6314	Causseaux Hewett & Walpole, Inc.	352-331-1976
Aerial Cartographics Of America, Inc.	407-851-7880	Central Florida Surveys, Inc.	407-262-0957
Agnoli, Barber & Brundage, Inc.	239-597-3111	Chastain-Skillman, Inc.	863-646-1402
Aim Engineering & Surveying, Inc.	239-332-4569	Choctaw Engineering, Inc.	850-862-6611
All County Surveyors, Inc.	800-860-9119	Civilsurv Design Group, Inc.	863-646-4771
Allen & Company, Inc.	407-654-5355	Clary & Associates, Inc.	904-260-2703
Allen Engineering, Inc.	321-783-7443	Clements Surveying, Inc.	941-729-6690
AllTerra Florida, Inc.	954-850-0795	Coffin & Mclean Associates, Inc.	352-683-5993
Alvarez, Aiguesvives & Associates, Inc.	305-220-2424	Collins Survey Consulting LLC	863-937-9052
AM Engineering, Inc.	941-377-7178	Compass Engineering & Surveying, Inc.	727-822-4151
American Consulting Engineers Of FL, LLC	813-435-2600	Compass Point Surveyors PL	954-332-8181
American National Commercial Real	220 062 2245	Control Point Associates FL, LLC	908-668-0099
Estate Service, LLC	239-963-2245	Controlcam, LLC	904-758-2601
American Surveying, Inc .	813-234-0103	Countywide Surveying, Inc.	850-769-0345
Amerritt, Inc.	813-221-5200	Cousins Surveyors & Associates, Inc.	954-689-7766
ARC Surveying & Mapping, Inc.	904-384-8377	CPH, Inc.	407-322-6841
Associated Land Surveying & Mapping, Inc. ATS Land Surveying, LLC		Craven-Thompson & Assoc, Inc.	954-739-6400
Avirom & Associates, Inc.	386-264-8490	Cross Surveying, LLC	941-748-8340
,	561-392-2594 850-526-4460	Culpepper & Terpening, Inc.	772-464-3537
Bannerman Surveyors, Inc.		Dagostino & Wood, Inc.	239-352-6085
Barraco And Associates, Inc.	239-461-3170 904-284-2224	Deal Land Surveying LLC	407-878-3796
Bartram Trail Surveying, Inc.	904-264-2224	Degrove Surveyors, Inc.	604-722-0400
Baseline Engineering And Land Surveying, Inc.	561-417-0700	Dennis J. Leavy & Associates	561-753-0650
Bay Area Sinkhole Investigation & Civil Engineering, LLC		Deren Land Surveying LLC	352-331-0010
	813-885-4144	Diversified Design & Drafting Services, Inc.	850-385-1133
Bay Area Surveying And Mapping, Inc.	727-271-0146	DMK Associates, Inc.	941-475-6596
BBLS Surveyors, Inc.	239-597-1315	Donald F. Lee & Associates, Inc.	386-755-6166
Bean Whitaker Lutz & Kareh, Inc.	239-481-1331	Donald W. Mcintosh Associates, Inc.	407-644-4068
Banks Engineering	239-939-5490	Donoghue Construction Layout LLC	321-248-7979
Bello & Bello Land Surveying Corporation	305-251-9606	Douglass Leavy & Associates, Inc.	954-344-7994
Benchmark Land Services, Inc.	239-591-0778	DRMP, Inc.	407-896-0594
Benchmark Surveying & Land Planning	850-994-4882	DSW Surveying and Mapping, PLC	352-735-3796
Beta Company Surveying, Inc.	941-751-6016	E.R. Brownell & Associates, Inc.	305-860-3866
Betsy Lindsay, Inc.	772-286-5753	Echezabal & Associates, Inc.	813-933-2505
Biscayne Engineering Company, Inc.	305-324-7671	Eda Engineers-Surveyors-Planners, Inc.	352-373-3541
Boatwright Land Surveyors, Inc.	904-241-8550	Edwin G. Brown & Associates, Inc.	850-926-3016
Bock & Clark Corporation	330-665-4821	E.F. Gaines Surveying Services, Inc.	239-418-0126
Bowman Consulting Group, LTD., Inc.	703-464-1000	Eiland & Associates, Inc.	904-272-1000
Bradshaw-Niles & Associates, Inc.	904-829-2591	Element Engineering Group, LLC	813-386-2101
Brown & Phillips, Inc.	561-615-3988	Engenuity Group, Inc.	561-655-1151
BSE Consultants, Inc.	321-725-3674	Engineering Design & Construction, Inc.	772-462-2455
Buchanan & Harper, Inc.	850-763-7427	England, Thims & Miller, Inc.	904-652-8990
Buchheit Associates, Inc.	321-689-1057	ESP Associates PA	803-802-2440
Bussen-Mayer Engineering Group, Inc.	321-453-0010	Evans Land Surveying, Inc.	727-734-3821
Burkholder Land Surveying, Inc.	941-209-9712	Exacta Land Surveyors, Inc.	305-668-6169
C&M Roadbuilders	941-758-1933	F. R. Aleman & Associates, Inc.	305-591-8777
Calvin, Giordano & Associates, Inc.	954-921-7781	Fabre Engineering, Inc.	850-433-6438
Cardno, Inc.	407-629-7144	Ferguson Land Surveyors, PLC	727-230-9606
Carter Associates, Inc.	772-562-4191	First Choice Surveying, Inc.	407-951-8655

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Flanary Surveying and Mapping, Inc.	941-915-8655	Lochrane Engineering, Inc.	407-896-3317
Florida Engineering and Surveying, LLC.	941-915-8055	Long Surveying, Inc.	407-330-9717
Foley/Koloarik, Inc.	941-722-4561	Ludovici & Orange Consulting Engineers, Inc.	305-448-1600
Fortin, Leavy, Skiles, Inc.	305-653-4493	Manuel G. Vera & Associates, Inc.	305-221-6210
Franklin Surveying & Mapping, Inc.	407-846-1216	Mapping Resource Group, Inc.	386-439-4848
Ganung-Belton Associates, Inc.	407-894-6656	Marco Surveying & Mapping, Inc.	239-389-0026
Gary G. Allen, Regis Land Surveying, Inc.	850-877-0541	Marco Surveying & Mapping, inc. Mark Dowst & Associates, Inc.	386-258-7999
Geodata Consultants, Inc.	407-732-6965	Mark Dowst & Associates, me. Maser Consulting P.A.	813-207-1061
Geoline Surveying, Inc.	386-418-0500	Massey-Richards Surveying & Mapping LLC	305-853-0066
Geomatics Corp.	904-824-3086	Massey Mehalos Surveying & Mapping Lee Masteller, Moler & Taylor, Inc.	772-564-8050
GeoPoint Surveying, Inc.	813-248-8888	McKim & Creed, Inc.	919-233-8091
George F. Young, Inc.	727-822-4317	McLaughlin Engineering, Co.	954-763-7611
GeoSurv LLC	877-407-3734	Mehta & Associates, Inc.	407-657-6662
Germain Surveying, Inc.	863-385-6856	Metron Surveying And Mapping LLC	239-275-8575
Global One Survey, LLC	786-486-8088	Millman Surveying, Inc.	330-342-0723
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GRW Engineers, Inc.	859-223-3999	Morris-Depew Associates, Inc.	239-337-3993
Gustin, Cothern & Tucker, Inc.	850-678-5141	Murphy's Land Surveying, Inc.	727-347-8740
H. L. Bennett & Associates	863-675-8882	Northstar Geomatics, Inc.	772-781-6400
Hamilton Engineering & Surveying	813-250-3535	Northwest Surveying, Inc.	813-889-9236
Hanson Professional Services, Inc.	217-788-2450	O'Brien Suiter & O'Brien, Inc.	561-276-4501
Hanson, Walter & Associates, Inc.	407-847-9433	Oceanside Land Surveying LLC	386-763-4130
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Hole Montes, Inc.	239-254-2000	Peavey & Associates Surveying & Mapping, PA	863-738-4960
Honeycutt & Associates, Inc.	321-267-6233	Pec - Survey & Mapping LLC	407- 542-4967
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Hutchinson, Moore & Rauch	251-626-2626	Pickett & Associates, Inc.	863-533-9095
Hyatt Survey Services, Inc.	941-748-4693	Pittman, Glaze & Associates, Inc.	850-434-6666
I.F. Rooks & Associates, Inc.	813-752-2113	Platinum Surveying & Mapping LLC	863-904-4699
Inframap Corp.	804-550-2937	Point To Point Land Surveyors, Inc.	678-565-4440
John Ibarra & Associates, Inc.	305-262-0400	Polaris Associates, Inc.	727-461-6113
John Mella & Associates, Inc.	813-232-9441	Porter Geographical Positioning & Surveying, Inc.	863-853-1496
Johnson, Mirmiran & Thompson, Inc.	813-314-0314	Precision Surveying & Mapping, Inc.	727-841-8414
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King Engineering Associates, Inc.	813-880-8881	Richard P. Clarson & Associates, Inc.	904-936-2623
Kugelmann Land Surveying, Inc.	321-459-0930	Riegl USA	407-248-9927
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L&S Diversified, LLC	407-681-3836	RJ Rhodes Engineering, Inc.	941-924-1600
Landmark Engineering & Surveying Corporation	040 604 7044	Robert A. Stevens & Associates	863-559-1216
	813-621-7841	Robert M. Angas Associates, Inc.	904-642-8550
Leading Edge Land Services, Inc.	407-351-6730	Rogers Engineering LLC	352-622-9214
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Leo Mills & Associates	941-722-2460	SAM Surveying and Mapping, LLC	512-447-0575
Littlejohn Engineering Associates, Inc.	407-975-1273	S&ME, Inc.	407975-1273
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Shah Drotos & Associates, Inc.	954-943-9433	Tradewinds Surveying Services, LLC	863-763-2887
Shannon Surveying, Inc.	407-774-8372	Tuck Mapping Solutions, Inc.	276-523-4669
Sherco, Inc.	863-453-4113	Upham, Inc.	386-672-9515
Sliger & Associates, Inc.	386-761-5385	Wade Surveying, Inc.	352-753-6511
Southeastern Surveying And	407 202 0500	Wallace Surveying Corporation	561-640-4551
Mapping Corporation	407-292-8580	Wantman Group, Inc.	561-687-2220
Spalding DeDecker Associates Inc	248-844-5404	WBQ Design & Engineering, Inc.	407-839-4300
Stephen H Gibbs Land Surveyors, Inc.	954-923-7666		
Stephen J. Brown, Inc.	772-288-7176	Winningham & Fradley, Inc.	954-771-7440
•		Woolpert, Inc.	937-461-5660
Strayer Surveying & Mapping, Inc.	941-497-1290	York & Associates Engineering, Inc.	229-248-0141
Suarez Surveying & Mapping	305-596-1799		
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