



THE FLORIDA SURVEYOR

January 2020
Volume XXVIII, Issue 1

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Around the State: Pasco
County & Orange County
Chapters!
Surveyors in Government

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WHEN:

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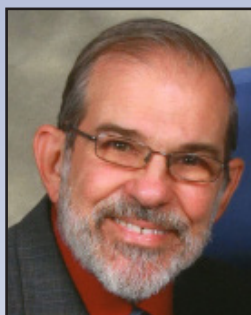
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PRESIDENT'S message

Greetings and Happy New Year! I hope you all had a wonderful holiday season and managed to spend some time away from work with the people and pursuits you care the most about. Since this is my first message as the President of FSMS, I want to thank our members for granting me the responsibility, privilege, and honor of service to our Society. Right off the bat, I would like to draw your attention to two challenges for 2020 that I'm making to every FSMS member.

The first challenge is that to have every member recruit a new member, whether that member is a Full, Associate, Affiliate, Government member, or a Sustaining Firm. Membership is at the core of our strength in advocacy for surveyors and mappers, and every member matters. The math is simple – If each of us brings at least one new member in, our membership will double.

The second challenge is that every member needs to support FSMPAC. The regulatory and legislative world is always evolving and the need to proactively protect the public good and defend the profession is very real.

Supporting the PAC is not about choosing to support a particular political party. The PAC gives us a collective voice and allows our lobbyist and leadership to better develop positive relationships with lawmakers who are educated about the importance of what we do and support constructive policy accordingly.

Donating to the PAC is even easier now than in past years, as contributions can be made directly through a link on this web page: <https://fsms.memberclicks.net/fmpac>. Compared to other industries, surveyors are not a large group, which makes the support of our PAC by every member that much more critical. Our membership and our PAC are the dual reservoirs from which the Society draws its strength, and these two forces weave through virtually every endeavor we undertake. I cannot overemphasize how important these two elements are for each of us individually and all of us collectively as professionals.

Currently, FSMS is working hard on multiple endeavors, including combatting the rising plague of armed robbery of survey equipment, acquiring increased recurring funding for geomatics education, steering the transition to a new datum in 2022, and working on updating Chapter 177 to address the datum change, among other things. Those items are a small but important cross section of what we have going on, and in the coming months I will have the opportunity to detail other significant things we are working on.

Much of what we do is made possible by a wonderful collective of volunteers at the local and state levels. Whether the role is one on the Board of Directors, serving on a state committee, or helping lead a local chapter, we each owe an ongoing debt of gratitude to everyone who steps up to make a difference.

Our tremendous administrative staff in Tallahassee has done great things for us in their efforts to modernize and streamline Society operations, and their functional and fiscal prudence has improved our agility and ability to get the best value out of our resources for our members.

Finally, 2019 was a year of many firsts and transitions for FSMS under the outstanding leadership of Dianne Collins. Her determined commitment to the advancement of the Society has made and continues to make the profession better for us all, and I really can't adequately thank her for what she has put into her Presidency. She's a tough act to follow, but I am going to do my very best to meet the high bar she has set.

Here's to a great and profitable year ahead!



President

Don Elder

(850) 354-9665

donelderpsm@gmail.com

FSMS SHOUT OUT



Photo by: Mike Lucas

*In honor of our
Immediate Past
President,
Dianne Collins,
thank you for your
service and
dedication to FSMS!*

*THANK
YOU
FOR
YOUR
SERVICE
TO
FSMS*



Photo by: Brandon Mowinkel

Happy New Year and welcome to the year 2020, I was thinking I was going to be seeing flying cars and teleportation devices by now, what happened Scientific America? I kid on this topic somewhat, but things are continually evolving and changing with technology and at what I see as a pretty decent pace. This article will continue on with the topic of professionals and their current stature in government agencies. I must preface once again, these are my observations and opinions only and not the organization I work for or the society for which I am a member and liaison.

As stated previously, state agencies have been impacted by a lack of increases for many, many years. If an increase was given it was at a low percentage or other benefit costs increased or even the loss of benefits made the increase a net zero or less. I know most people think that government surveyors or employees get annual increases every year, but that is not always the case, and if it is, it may not be what you think. As stated previously recent governors have held the cost of living increases and other raises back to use towards other services. State and government employees have been looked upon as a waste of taxpayer funds, as if they are paid too much already. The problem is that is not the case, I have seen the salaries of state employees and it is sad, especially with their knowledge and stature in the profession. I know there are bad seeds in every facet of a profession, but most I know in state government love the profession in which they are working, if not they would leave the state! We all could make so much more on the private side, and I know I always contemplated it, especially when I see other positions being reclassified, not surveyors. Now this is my experience in my organization, I am not sure if it is the same on the state level or with other governmental agencies.

The stigmatism of a government employee is that you are lazy or that you have ample support, too much in fact. That is not the case in most of the situations I have seen, we are all running lean and often cannot provide enough support to where it is needed. Especially now with it being difficult to find qualified professionals and support staff in both the public and private sectors. Those who are working in the government positions now are likely there because they either like what they are doing or held up by the benefit system, for state employees that would be the FRS (Florida Retirement System) system. It takes years to get vested or covered by a retirement system.

SURVEYORS IN government

By: Richard Allen, PSM, CFM

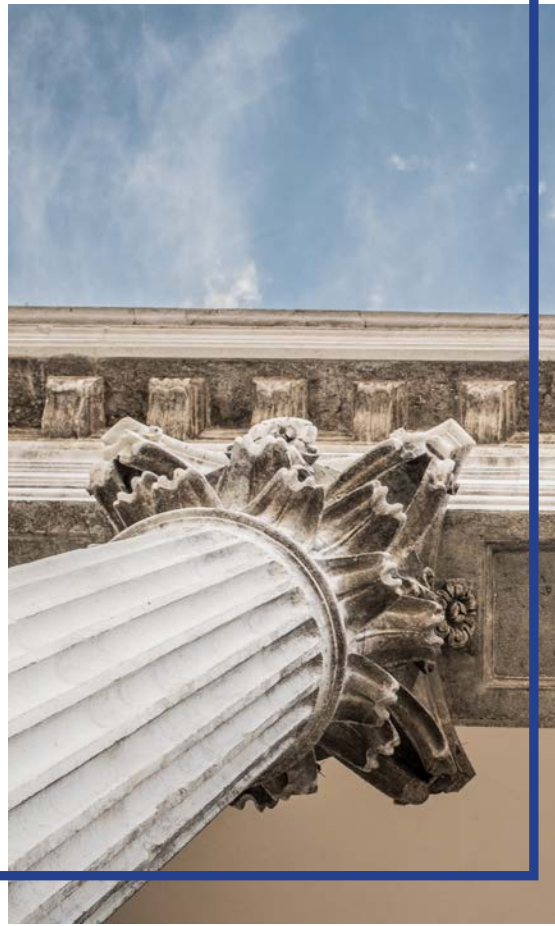


Photo by: Macu Ic

There may be a personal investment option as well but I am not sure as it relates to the state. The City of Orlando used to have a pension plan but that was changed several years ago and was replaced by a 401 savings plan. It takes six years to become vested with the City, whereas on the state level it takes eight years to become vested in the FRS. Once you're vested it becomes difficult to leave it as you see this as your retirement income. The number of years it takes to secure a sufficient retirement income can be numerous and if a new administration takes over after you have been in the system you are impacted by the changes made, that is the problem for many of the state staffers who have been with the state for more than 15 or 20 years. They are staying to make 25 or 30 years to make the higher retirement amount that they would lose if they left the FRS. They want to continue on to meet the number of years requirement and enter the drop program. That is until the drop program is changed while you are looking forward to making it to drop. DROP is where you retire but continue to work. Your retirement disbursements go into an interest bearing account that you get upon your specified years of continued employment, which is at most five years. This has been a good chunk of change in the past, but is too changing. Another issue is that one may work and retire in the FRS retirement plan and depending on what plan was selected may not be able to leave their family anything from their years of service. Don't get me wrong, no one is going to get rich working for a government agency as a surveyor, that is not the point of this article or series of articles I am working on. This point is to state that a fair and decent wage should be paid to a professional, especially when compared to other professions, as there is great responsibility when it comes to being a land surveyor, geomatics professional or what other term that is used or will be used. We need to make sure that these professionals are paid for their knowledge and stature in the profession, government surveyors cannot just go to their boss and say, I need a raise or I am leaving. It does not work that way in government.



Photo by: David Beale

With budgeting and unions there is little the agency will do to retain an employee as their hands are tied. There used to be a merit based system for increases but that has been removed or scuttled in many agencies, mine included. So now everyone gets the same increases, not really good for morale when a bad or lazy seed does not have to put forth effort to keep their position. They just need to do the minimum, which is very frustrating as in many cases this employee is usually the problematic or constantly complaining employee, and one of the many issues of government operations as it is much more difficult to get rid of a bad seed in government position than at a private company in a right to work state.

I am writing these articles to bring awareness to the issue currently experienced by governmental agencies, but especially on the state level, I as most of the private side, lean on state employees for assistance and guidance on matters on a regular basis. They are some of the most talented and knowledgeable surveyors and something needs to be done to correct many years of a lack of financial support to them individually that I fear will become a greater issue as the graying professionals retire. We need to ensure qualified and experienced professionals are fairly compensated so we can continue to keep them where they need to be, I fear the day when the agency is no longer represented by qualified staff but many for profit businesses who have a bottom line to reach. I make no knock on the for profit companies that work for the agencies now, as I know of many highly respected companies that are working for the agencies and have the public's best interest at hand, I fear that the more privatization that occurs the likelihood this will diminish with less and less oversight and the saturation of larger multistate companies secure these contracts create an issue where the financial incentive is bottom line and not the protection of the public. That is not to say the multistate companies would not have the public's interest at hand but there is a point where potential conflicts of interests should be avoided if possible. There needs to be qualified individuals who are guiding and reviewing the work of those contracted to do work for an agency. This should be an ethical responsibility for any agency to have proper oversight of contracted activities. That is not to say that contractors are not beneficial and do an excellent job, they do a great job.

SURVEYORS IN government

By: Richard Allen, PSM, CFM

Privatization or contracting of position occurs for a reason to have employees for ebbs and flows of work, my concern is the discussion that pokes it head up every once in a while, further contracting out of services to the point where the oversight and direction become strained. We have seen where entire agencies have scuttled their survey operations, that nearly occurred here at the City but we were given a last minute reprieve in the cutting of positions and programs back during the economic downturn. The funny thing with the use of private contractors is that their employees are likely paid a higher wage in many cases than the permanent employees in that position type are paid.

As public officials we are required to maintain fiscal responsibility to our constituents and protect the public. When you enter the public sector it is made clear that the public is your employer, you may have a director, mayor or commission you answer to, but you ultimately work for the taxpayer. They pay your wage and your efforts are on behalf of them in masse. That is why our roles continually change in times of disaster or need, we all may have to work in response to storm damage or prepare for impending disaster, we are there to help and protect the public, that is our responsibility. Additionally, we must represent them while adhering to strict requirements of not having any conflicts of interest or having any personal gain in our positions. With privatization is that concern going to be met?

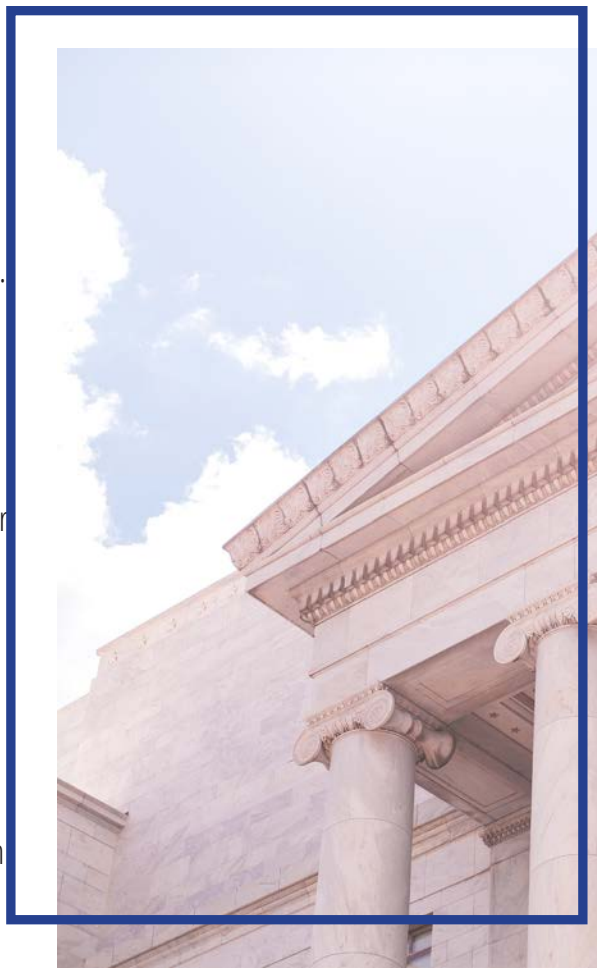


Photo by: Katie Moum

"We need to ensure qualified and experienced professionals are fairly compensated so we can continue to keep them where they need to be."

RICHARD ALLEN, PSM, CFM

I appreciate your time in reading this and hopefully this will bring some insight into what I see and hear and the profession can get behind these professionals and make a change for them. I am trying by virtue of this article and in speaking to others, but one voice is not enough, it will take many!

You can reach me at Richard.Allen@orlando.gov or 407.246.2788.

FROM THE



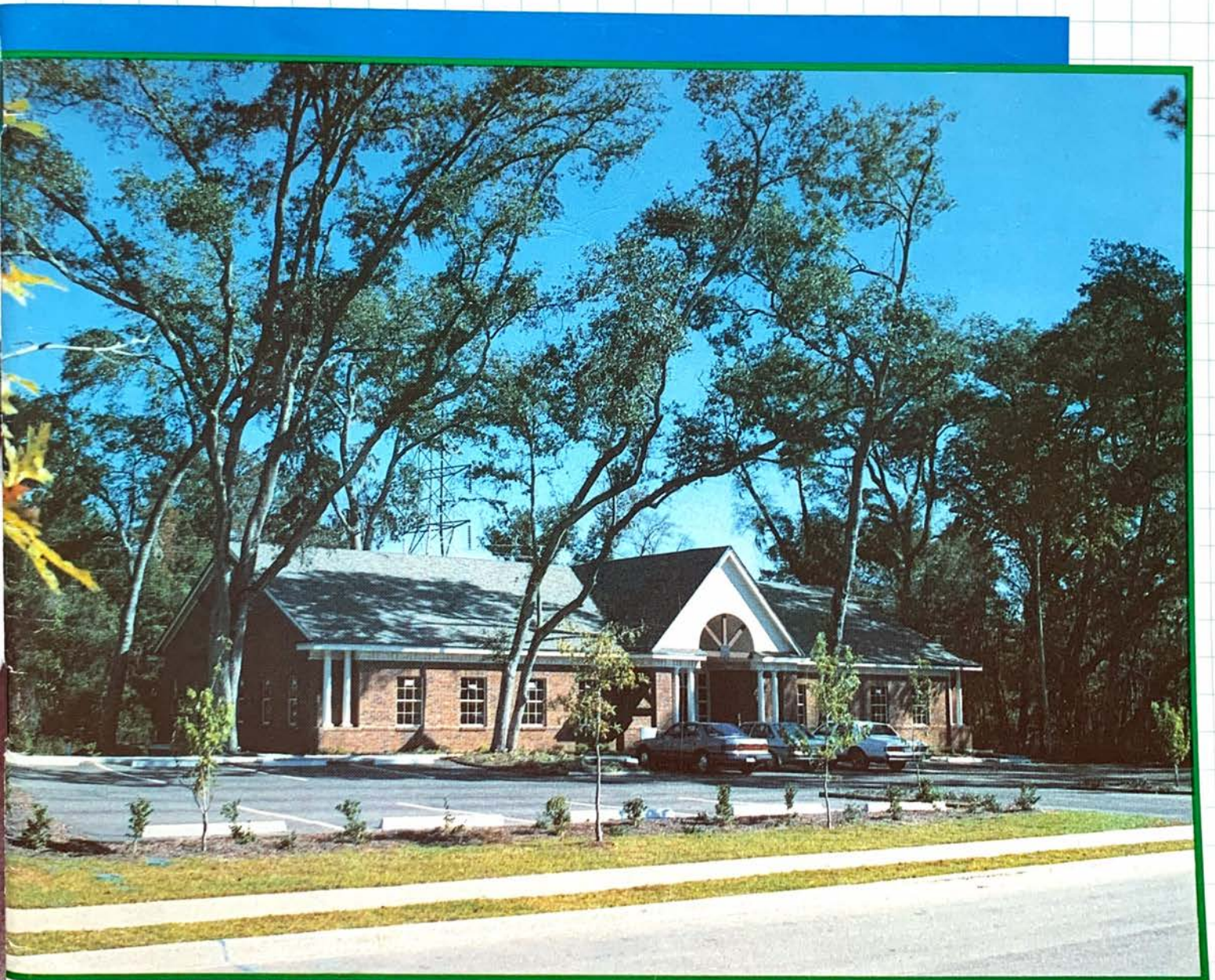
ARCHIVES



BACKSIGHTS & FORESIGHTS

FOURTH QUARTER 1989

Our New Home



The New FSPLS Headquarters



by Steve Vrabel

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

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

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

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

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

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

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

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

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

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

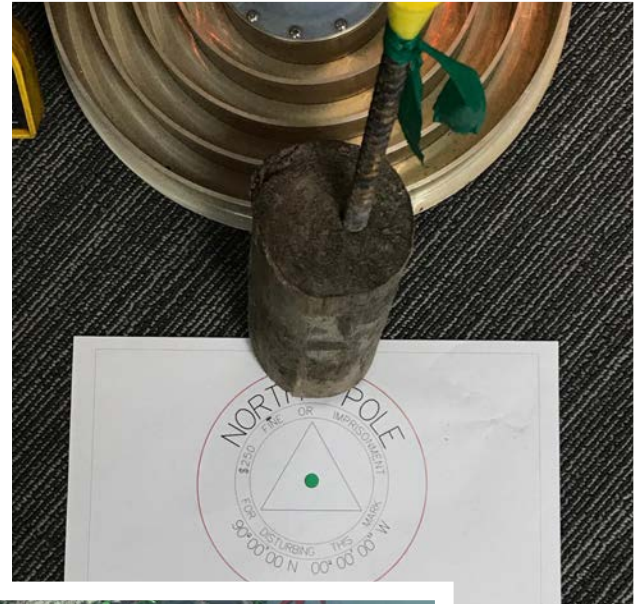
THEN... 1990





NOW...2020

Around the State



Check out this Surveying & Mapping themed holiday tree by Pasco County Surveying & Mapping!

With Raichel Perez , CP, GISP, Anthony Orlandi Guzmán, SIT, Forrest Smith, Michael Cook, PSM, FAA UAS, Linda Clay, and Alex Wolfe Parnes, PSM.

Photos submitted by: Alex Wolfe Parnes



This year's Orange Crush Classic sporting clays tournament was bigger and better than last year! 16 teams, great weather, awesome food, and we raised almost \$9k for FSMS initiatives!



Photos & text submitted by: Shane Christy

NEWS ANNOUNCEMENTS



The Florida Department of Agriculture and Consumer Services have appointed Liz Compton as the new Executive Director of the Board of Professional Surveyors and Mappers.

A Certified Public Manager, Liz started with the department in 1997 as Public Information Director. She worked with the media on issues of public concern, wrote press releases, conducted media interviews, conducted presentations to consumer groups and was on site during wildfires, animal and plant disease outbreaks. She subsequently was appointed as Chief of the Bureau of Compliance in the Division of Consumer Services where she oversaw regulatory authority over 13 program areas including auto repair, health studios, charities, sellers of travel, LP Gas, pawnshops and weight and measure devices. Prior to joining the department Liz was an AP award winning television journalist with the Tallahassee CBS affiliate covering state, city and county governments, and spot news. Liz is excited to be working with the surveyors and mappers and will use her regulatory and public information experience to assist in licensing and outreach efforts with this profession.

Pentagon urges FCC to reject Ligado applications for 5G network

By John Hendel

11/20/2019 06:25 PM EST

The Defense Department is urging the FCC to reject satellite firm Ligado Networks' applications to light up a proposed 5G network, citing airwaves interference concerns, according to letters obtained by POLITICO.

The department has recommended the rejection multiple times this year, first in a June letter from former acting secretary Patrick Shanahan and then again this week in a similar letter from Secretary Mark Esper. Both cited 2018 Transportation Department research suggesting the network would disrupt GPS functions.

"I believe there are too many unknowns and risks are far too great to federal operations to allow Ligado's proposed system to proceed," Esper wrote in his letter, using the same language as Shanahan. "All independent and scientifically valid testing and technical data shows the potential for widespread disruption and degradation of GPS services from the proposed Ligado system."

Ligado has disputed the DOT interference projections that DOD is relying on, as past filings with the FCC show.

"These letters simply repeat the same thing opponents of Ligado have been trying to convince the NTIA and the FCC of for years," a Ligado spokesperson told POLITICO. "The FCC understands the implications on current and future spectrum bands if the framework that DOD is pushing were to be adopted, which is why the Commission has rejected it."

An FCC spokesperson declined comment on the letters. A DOD spokesperson confirmed Esper's letter but declined further comment.

FCC Chairman Ajit Pai faced pressure to approve the long-languishing Ligado applications by year's end in an October letter from Sens. Marsha Blackburn (R-Tenn.) and Mark Warner (D-Va.). The Competitive Carriers Association, representing smaller wireless carriers, also wrote the FCC this week urging Pai "to bring the long-pending" Ligado proposal "to a close" and let the company use those airwaves.



Joel Evans was born in 1796 to Jonathan and Hannah Evans in Marple, Pennsylvania. He grew up on the family farm. He married Hannah Rhoads in 1848 and fathered four sons and three daughters with her. Prior to his marriage to Hannah, Joel took charge of the maintenance and running of the family farm.



Photos & Text by: Bob Heggan, Jr., PSM, PLS

As evidenced by the census and his journal, it appears that his primary source of income was by way of farming but also worked as a surveyor and conveyancer. His later studies appeared to be centered on surveying and geometry. He was a student of Playfair's Elements of Geometry; citing in his notes the first 20 propositions in Euclid's First Book contained therein. His surveying abilities were lauded by his peers from which he sought verification of his computations. One such peer remarked on the accuracy of Evans computations noting that they were carried out to more decimal places than found in the traverse tables of Gummere's treatise on surveying.

“His surveying abilities were lauded by his peers from which he sought verification of his computations. One such peer remarked on the accuracy of Evans computations noting that they were carried out to more decimal places than found in the traverse tables of Gummere's treatise on surveying.”

BOB HEGGAN, JR., PSM, PLS

As a surveyor, he was appointed as one of the commissioners by the General Assembly during the 1835-1836 session to view, mark and layout a State road from Chadd's Ford to the Maryland State line heading towards Baltimore. Additional appointments came by way of the General Assembly.

During the 1837-1838 session, he was appointed as one of the commissioners to supervise the grading of the Philadelphia, Chadd's Ford and New London Turnpike. During this session, he was also appointed commissioner of the Philadelphia and Taylorsville Railroad as well as the Kensington and Penntownship Railroad.

One particular surveying instrument used by Evans was a vernier compass made by Benjamin Stancliffe of Philadelphia. It is a unique instrument in of the fact that it has a transiting telescope mounted to the side. While it did not incorporate the use of a horizontal limb to read angles independent of the compass needle; it is certainly an early attempt to make an instrument with a transiting scope capable of reading vertical angles. It is quite possible that this instrument was made prior to Stancliffe's partnership with Edmund Draper in 1828. Evans held various other position including Delaware County Auditor in 1840 and 1852, Director of the Poor in 1848 as well as a member and an elder of the Springfield Particular Meeting (Quaker) and Clerk of the Philadelphia Yearly Meeting (Orthodox). Joel Evans died in 1865 at 69 years of age and is buried in Mt. Zion Cemetery in Springfield, a portion of which he had platted the plots.

Text by: Bob Heggan, Jr., PSM, PLS

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DID YOU EVER WONDER WHY ??

By: Michael Whitling, PSM

;;

WHY
WONDER
EVER
DON
DID

Why does it feel so good to rub your eyes?

Whether motivated by tiredness, boredom or just an itch, there's a certain sense of relief that can only be achieved with a satisfying eye rub. Rubbing stimulates tears to flow, lubricating dry eyes and removing dust and other irritants. Pressing down on your eyeball can stimulate the vagus nerve, which slows down your heart rate, relieving stress. However, if you rub your eyes too often or too hard, you can cause damage in a number of ways. It can cause tiny blood vessels to break, resulting in blood-shot eyes, and those dark circles under your eyes. If something is in your eye, rubbing against it can scratch the cornea. Rubbing is most dangerous to people with certain eye conditions and can worsen their eyesight. And last but not least, eye rubbing can lead to a thinning of the cornea. So while rubbing your eyes is a natural reaction to factors like tiredness and dry eye, there's not much to be gained from giving into the temptation besides very temporary relief. Doctors recommend using a cool, damp washcloth laid across the eyes to relieve itching, stay up-to-date on allergy medications if you're prone to pollen-induced problems and take a time out instead of rubbing eyes when stressed.

Why does garnish mean to add a little extra but can also mean to take a little something away?

A "garnish" is that little something on your plate of food that adds a little color and delight to the dish. A not so delightful "garnish" also can ruin your mood when opening your pay envelope and finding, not a bonus, but a deduction of your pay. That can add a little color to your face! "Garnish" is a word old enough to have developed both meanings. The root of "garnish" is the Old French "garniss," the stem of the word "garnir," meaning "to defend, prepare, furnish." (The same "garnir," a various times spelled "guarnir" and "warnir," is related, via its Germanic root, to our modern English "warn.") "Garnish" first appeared in English in the 13th century meaning "to defend or arm oneself," but also "to decorate, ornament or embellish."

At first this meant to make nearly anything more attractive, but by the late 17th century “garnish” had come to mean “decorate a dish for the table” (“Roasted antelopes, garnished with their horns,” 1886), and the parsley garnish of today’s lunch special was planted (possibly literally). Meanwhile, the ghost of the Germanic root of “garnish” that had also given us “warn” was still lurking in the wings, and, by the 16th century, “garnish” was appearing in legal documents meaning “to warn or serve notice on a debtor attaching money owed” (i.e., warning the debtor not to spend the money elsewhere). Today, of course, courts usually take the money directly out of the “garnishee’s” paycheck.

Why is the place you have to report to after an overseas trip called “customs?”

When “custom” first appeared in English around 1200, it meant “the common or usual practice or behavior; habit, fashion” (“It is a custom, more honored in the breach, than in the observance.” Shakespeare, Hamlet, 1603). English adopted “custom” from the Old French “costume” (“custom, practice, style of dress”), which was formed from the Latin “consuescere,” meaning “to become accustomed.” A “customer” (first appearing around 1480) was originally someone who habitually shopped in a given store, etc. “Customer” eventually took on the informal meaning of “person one has to deal with,” giving us the “ugly customers” of noir crime films. By the mid-14th centuries the “customary” (i.e., regular, established) rents paid by feudal tenants to their lords were known as “custom.” Commodities imported to or exported from the dominion of the king or similar authority were also subject to standardized “custom” taxes or levies, and eventually the part of the Civil Service in Britain that levied those duties became known as “the Customs.” The term “customs” in the “search your luggage” sense has since come to be used, obviously, all over the world. Incidentally, “custom” as an adjective meaning “specially made or modified to order” is a fairly recent (1830) US invention. The British synonym (now less commonly heard) is “bespoke,” from “bespoken” (ordered or commissioned to be made).

Quick Facts:

In Germany, you need a license to play golf. The process even includes a driving test. You have to cover 18 holes in no more than 108 shots and pass a written test on golf etiquette.

If you stack one million US \$1 bills, it would be 361 feet high and weigh exactly 1 ton.

Bees have different dialects. A German bee cannot understand an Italian bee.

The National Weather Service only classifies a snowstorm as a blizzard if it meets certain requirements. The blowing snow must reduce visibility to one quarter mile or less for at least three hours.

At any given time, snow covers approximately one quarter of the surface of the earth.

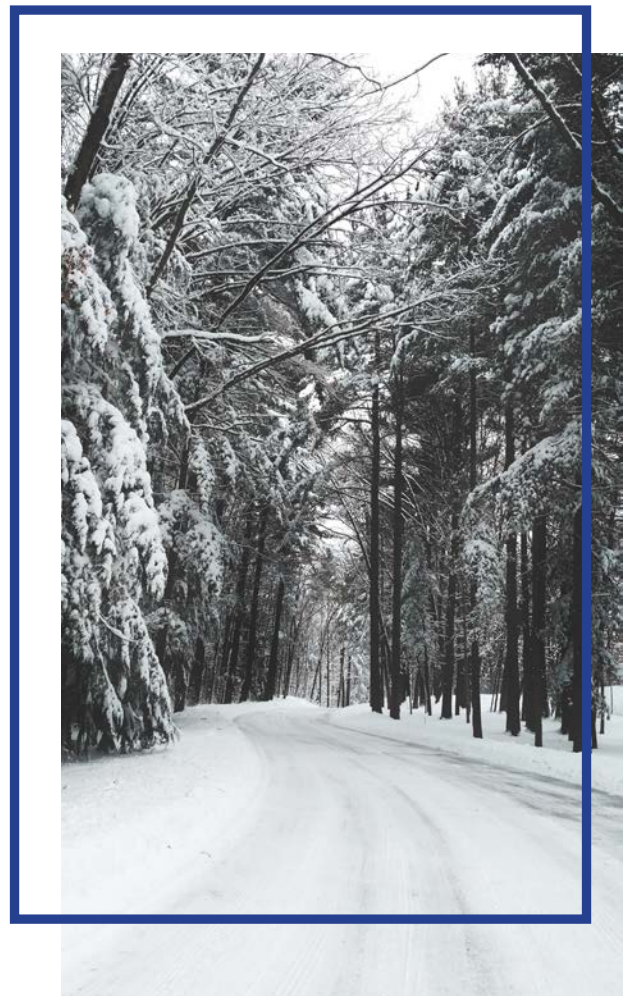


Photo by: Emily Toyce

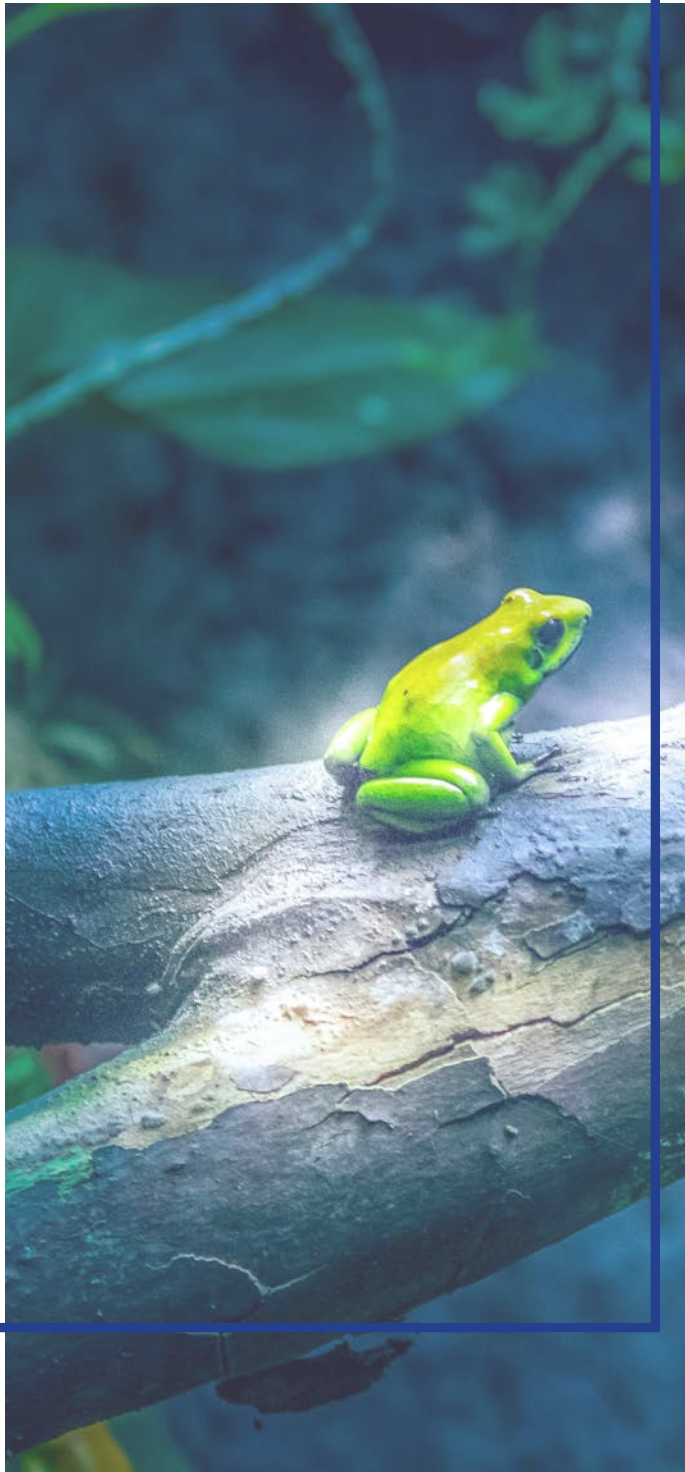


Photo by: Roberto Lopez

You can suppress your appetite by applying pressure to a point near your ear, acupuncturists say.

Between TV's, computer's, speakers, microwave ovens and other items of consumer electronics, the average house contains about 150 magnets.

Frogs like to eat fireflies, sometimes to the point where the reptiles themselves begin to glow.

In case you were curious, that bit of fleshy skin around a turkey's neck is called snood. And, according to an oft-cited 1995 study in *Animal Behavior*, the longer the snood on a male turkey, the more likely he is to find a mate.

According to the Lung Foundation Australia, the average person breathes around 22,000 times each day. However, women and children have a higher breathing rate, which means that they breathe more times than men.

Stan Lee always intended for the Hulk to be grey-and so he was, in the very first issue of the series *The Incredible Hulk* in 1962. However, due to the fact that there were major problems with the inconsistency of the printing, they ended up having to choose a color instead. One of the most consistent colors in print at the time was green, so they opted for that.

Immigrants at Ellis Island were served ice cream as part of the welcoming to America.

Sonny Bono is the only member of U.S. Congress to have scored a number one single on the *Billboard Hot 100* ("I Got You Babe" in 1965).

The human body may seem minuscule compared to the size of the Earth. But adults have so many blood vessels that if you laid them end to end, they could circle the planet's equator, which is 24,901 miles, four times.

For those who scowl often, you frequently engage the muscles of the glabella—or the space between the eyebrows.

Send your thoughts to drmjjw@aol.com

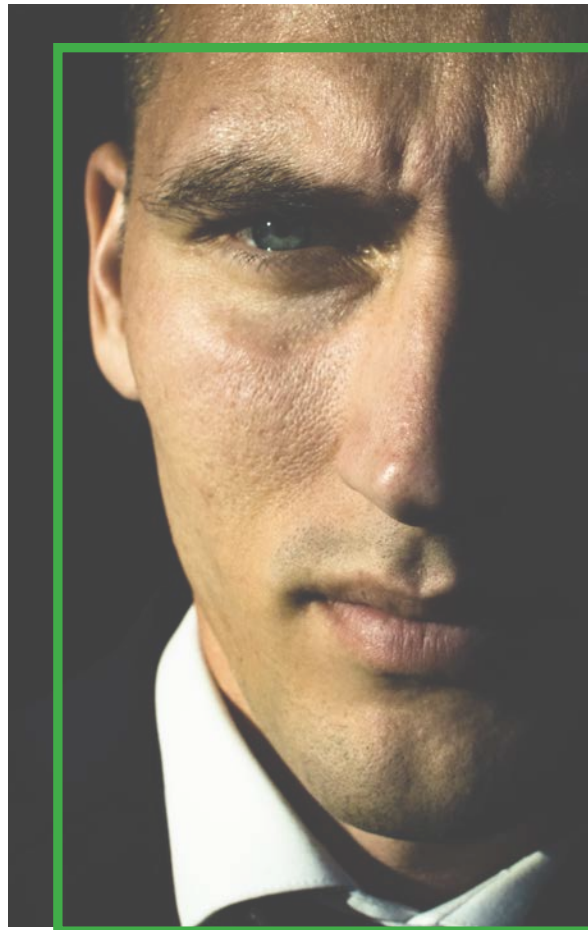


Photo by: Michael McAuliffe



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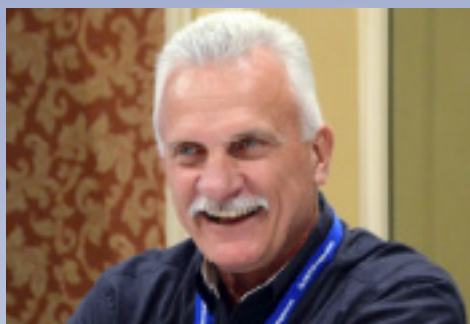
Liaisons

CST Program	Alex Jenkins
FDACS BPSM	Howard Ehmke
Surveyors in Government	Richard Allen
Academic Advisory UF	Bon Dewitt
FES	Lou Campanile, Jr.

Practice Sections

Geospatial Users Group	Matt LaLuzerne
-------------------------------	----------------

ADMINISTRATIVE staff



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director@fsms.org



Education Director

Rebecca Culverson
education@fsms.org



Communications Director

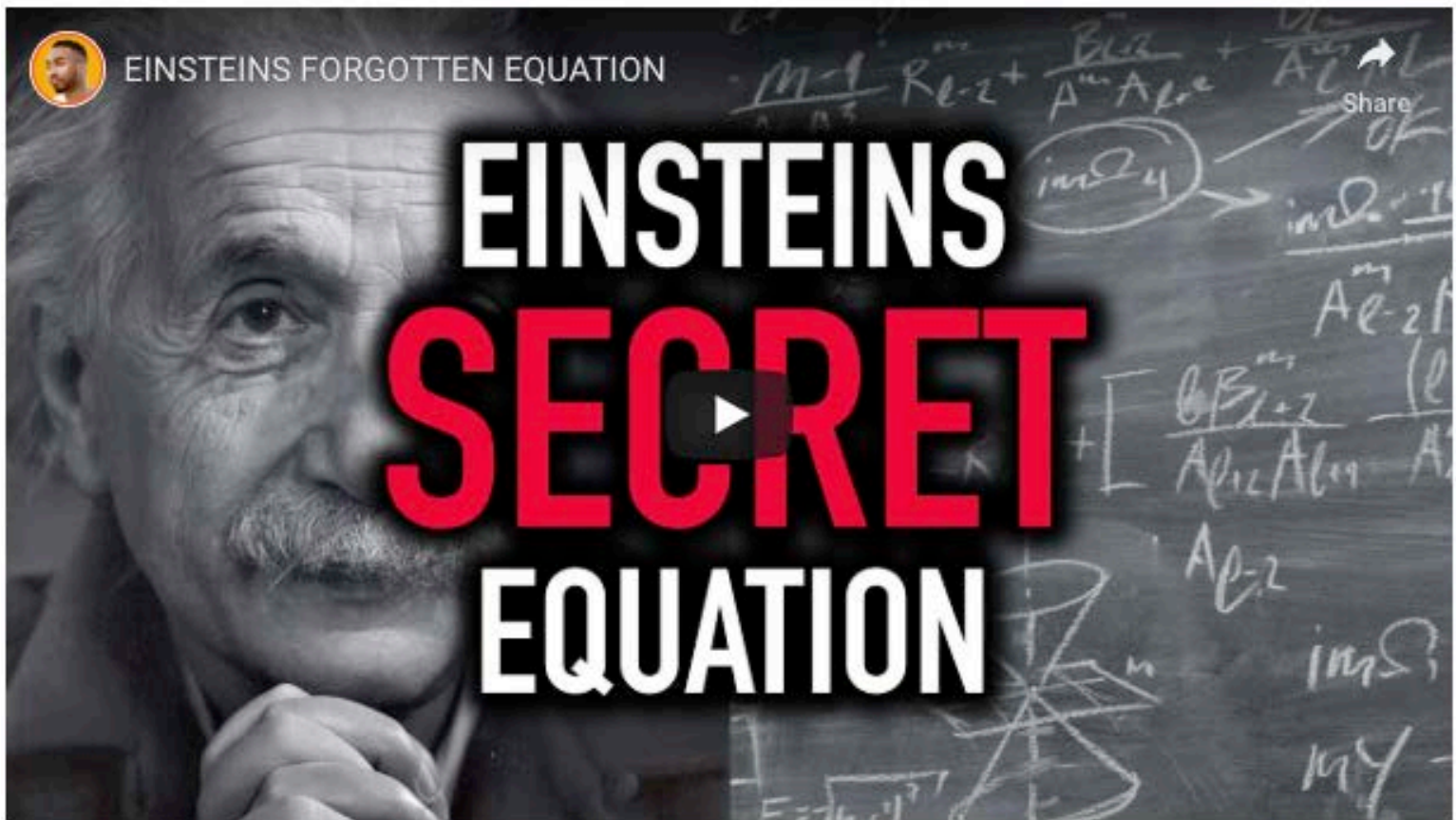
Laura Levine
communications@fsms.org



Regional Coordinator

Cathy Campanile
seminolecc84@gmail.com

Albert Einstein's theory of happiness was written on a hotel notepad in 1922 and recently sold for 1.5 million dollars.



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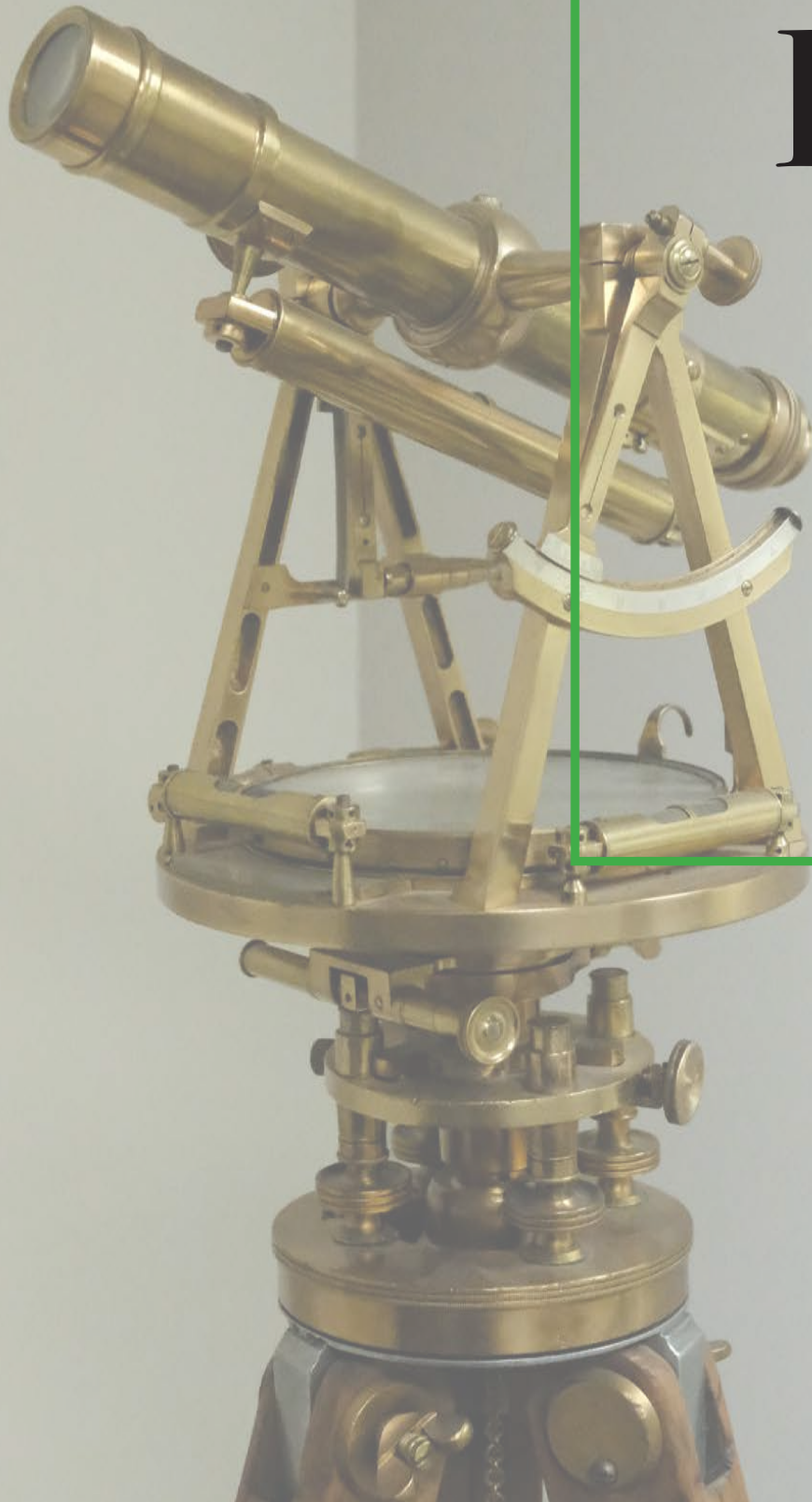
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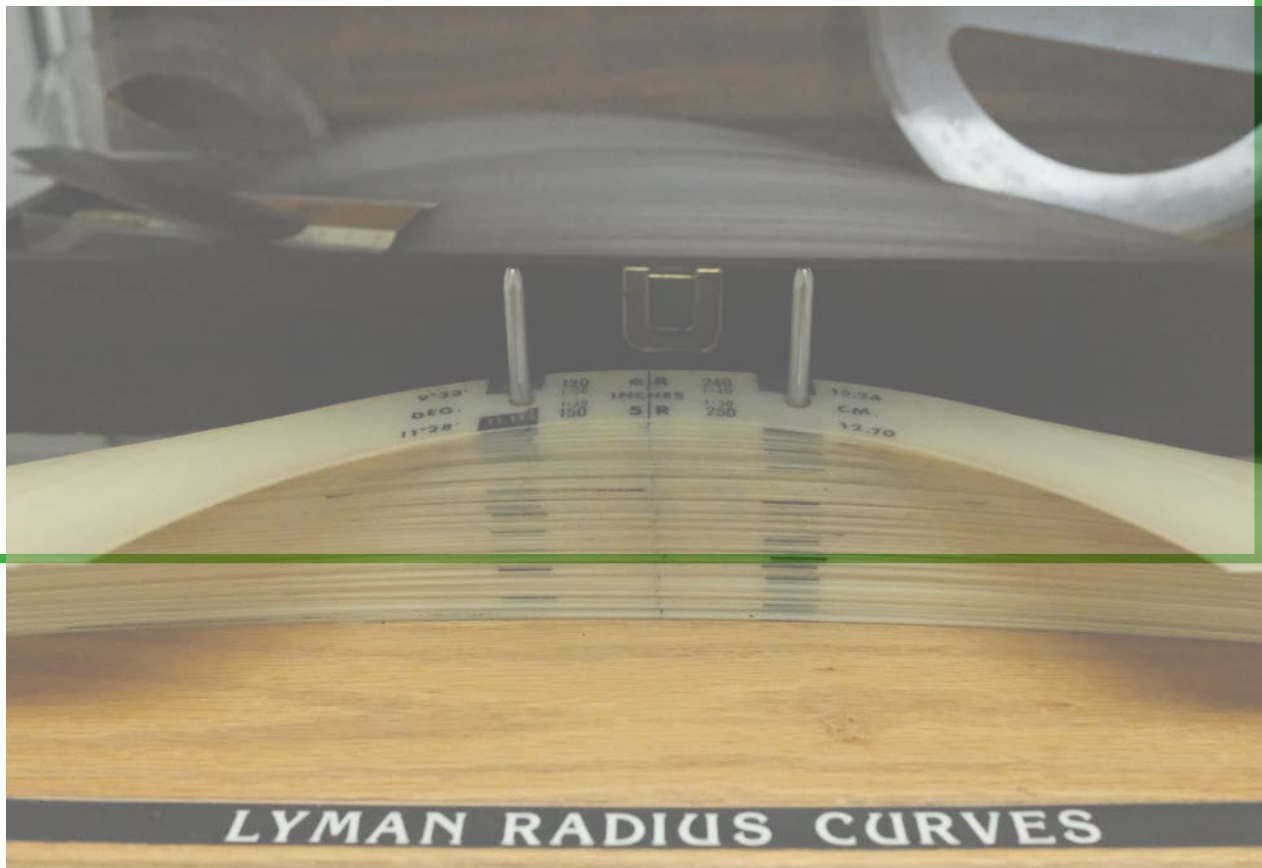
Einstein's happiness theory is simply that pursuing a calm and modest life will bring you more happiness than chasing success. I tend to agree with Einstein as I feel like if you're constantly striving to achieve or obtain something better than you have you will always be in a restless mood and somewhat unhappy. If you enjoyed this video then you might also like to watch [What Is Happiness?](#).

The Florida Surveyor is the official publication of the Florida Surveying and Mapping Society, Inc. (FSMS). It is published monthly for the purpose of communicating with the professional surveying community and related professions who are members of FSMS. Our award winning publication informs members eleven months of the year of national, state, and district events and accomplishments as well as articles relevant to the surveying profession. The latest educational offerings are also included.

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F.R. Aleman & Associates, Inc.	305-591-8777
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PEC Surveying & Mapping, LLC.	407-542-4967
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Q Grady Minor & Associates, PA	239-947-1144
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R.M. Barrineau & Associates, Inc.	352-622-3133
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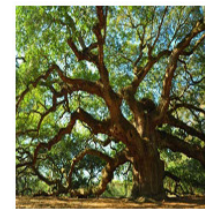
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Standards for Property
Surveys Course #8554 (6
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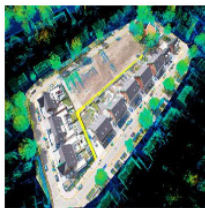
History of Surveying
Course #7140 (6 General
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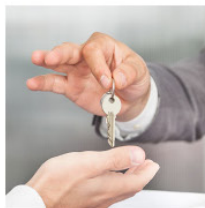
Identification of Native
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Florida Course #8132 (6
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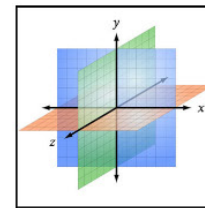
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Observations &
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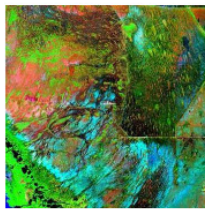
Practical Geometry for
Surveyors Course #7141
(6 General CEC)

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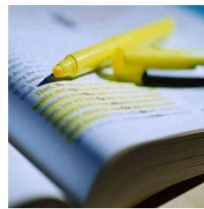
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System Course #7147 (6
General CEC)

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Applications to Surveying
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- ☐ **Contracts for the Professional, #8411, 3 CEC**
- ☐ **Digital Signatures for Surveyors, #8491, 3 CEC**
- ☐ **Elevation Certificates and the Community Rating System, #8257, 3 CEC**
- ☐ **Introduction to Photogrammetry, #7887, 3 CEC**
- ☐ **Quality Assurance/Quality Control for the Design Professional and Technical Staff, #9293, 3 CEC**
- ☐ **Writing Boundary Descriptions, #8361, 3 CEC**

6 Hour Courses Available

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- ☐ **Chapter 177, Platting (Plat Law), #6970, 6 CEC**
- ☐ **Client Satisfaction Excellence for Surveying and Mapping Professionals, #7229, 6 CEC**
- ☐ **Critical Communication for Surveying & Mapping Professionals, #7228, 6 CEC**
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- ☐ **Florida Laws, #6966, 6 CEC**
- ☐ **Florida Surveying Law and Rule Changes, #9573, 6 CEC**
- ☐ **Georgia Technical Standards for Property Surveys, #8553, 6 CEC**
- ☐ **Geographic Information Systems (GIS), #7107, 6 CEC**
- ☐ **History of Surveying, #7108, 6 CEC**
- ☐ **Identification of Native and Non-Native Trees in Florida, #7874, 6 CEC**
- ☐ **Land Tenure and Cadastral Systems, #7829, 6 CEC**
- ☐ **Map Projections and Plane Coordinate Systems, #7669, 6 CEC**
- ☐ **Mean High Water Observations and Computations, #8220, 6 CEC**
- ☐ **Practical Geometry for Surveyors, #7109, 6 CEC**
- ☐ **Public Land Survey System, #6979, 6 CEC**
- ☐ **Remote Sensing Applications to Surveying & Mapping, #6972, 6 CEC**
- ☐ **Stress Management for Surveyors & Mappers: How to be Productive Under Pressure, #6902, 6 CEC, ONLY AVAILABLE BY MAIL**
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snelgrovesurveying.com

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Charlie Arnett
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comcast.net

Collier-Lee

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earl@gpserv.com

Palm Beach

Clyde Mason
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FAU Geomatics

Gerardo Rojas
grojas2017@fau.edu

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Miami-Dade

Frank Pauas-Suiero
fparuas@gpinet.com

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eric.stuart@sam.biz

Chad Thurner
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chad.thurner@sam.biz

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(863) 344-2330
ndigruttolo@pickettusa.com

Randy Tompkins
(904) 755-4235
randytompkins1@outlook.com

District 3/East Central

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Al Quickel
(407) 395-3518
aquickel@drmp.com

Howard Ehmke
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hehmke@sfwmd.gov

District 4/ West Central

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Greg Prather
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gprather@pickettusa.com

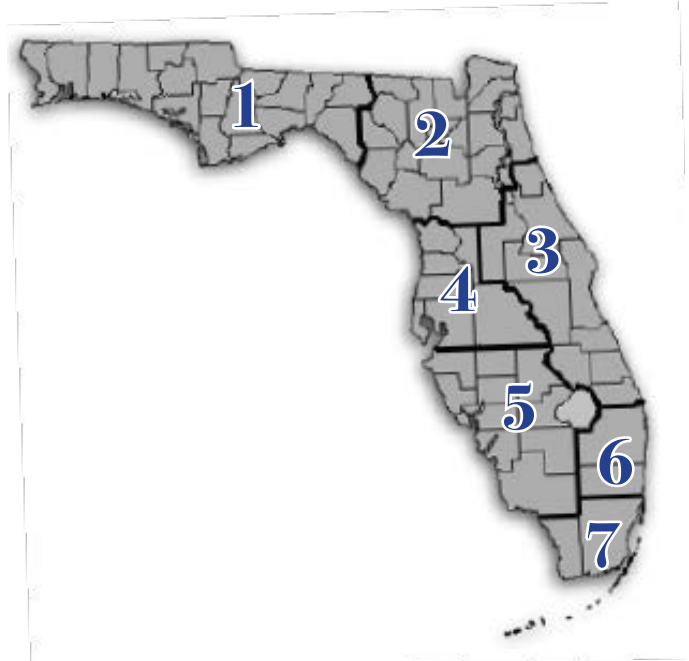
Justin Ferrans
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justin@polaris-survey.com

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(941) 748-4693
shane@hyattsurvey.com

Jeffrey Cooner
(239) 829-7016
jeff.cooner@cardno.com



District 6/Southeast

Broward, Palm Beach

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(561) 687-2220
ken.buchanan@wginc.com

Dodie Keith-Lazowick
(954) 788-3400
dkeith@keithteam.com

District 7/South

Miami-Dade, Monroe

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

Lou Campanile
(954) 980-8888
lou@campanile.net

NSPS Director

Russell Hyatt
(941) 748-4693
russell@hyattsurvey.com

Additional Information

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John P. Goggin
R.H. Jones

1960

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Russell H. DeGrove
Perry C. McGriff
Carl E. Johnson

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Harold A. Schuler, Jr.
Shields E. Clark
Maurice E. Berry II
William C.. Hart
Frank R. Schilling, Jr.

1970

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James M. King
Broward P. Davis
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E.W. (Gene) Stoner
Lewis H. Kent
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Paul T. O'Hargan
William G. Wallace, Jr.
Robert W. Wigglesworth

1980

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Robert A. Bannerman
H. Bruce Durden
Buell H. Harper
Jan L. Skipper
Steven M. Woods
Stephen G. Vrabel
W. Lamar Evers

1990

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Loren E. Mercer
Kent Green
Robert D. Cross
Thomas L. Conner
Gordon R. Niles, Jr.
Dennis E. Blankenship
W. Lanier Mathews, II
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David W. Schryver
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Richard G. Powell
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Pablo Ferrari
Steve Stinson

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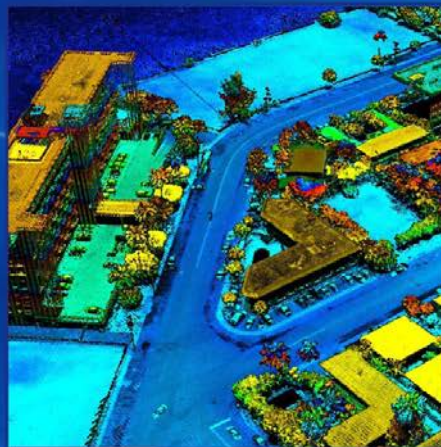
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