



The Florida Surveyor

Volume XXVI, Issue I

January 2018

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A publication of the Florida Surveying and Mapping Society since 1992

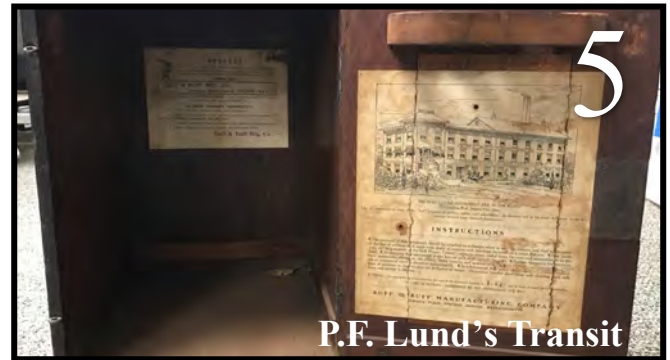
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President's Message



Happy New Year to everyone and may this year bring prosperity, personal achievements and blessings to you and the surveying & mapping profession.

Looking back at 2017, it was a year of change. We must not dwell on the past, but absolutely learn from it. The one thing I take from 2017 is that negative thoughts and perceptions does nothing but bring about negative responses and actions. Starting each and every day with a positive affirmation and then sustaining that attitude

in our daily business and challenges will make us all healthier, happier and set us on the right path to achieving our daily personal and professional goals.

2018 will be a year of productive work and commitments. Yes, all of us here in Florida had some setbacks due to our very active hurricane and storm season this past fall, but now it's time to really get on track and get the agenda moving at FSMS.

First and foremost is getting our dues paid for this year, and spreading the word about FSMS to bring everyone working in Florida in the geospatial field to join our mission to oversee, preserve and support everyone in our businesses and livelihoods. We have restructured and changed the cost of dues this year, to give more back to the members and businesses that join FSMS. It's a small price to pay to have the volunteer support of our members and committees working on our behalf. It only cost pennies a day to have a great support staff, a lobbyist and the FSMPAC in Tallahassee to ensure the future of the surveying & mapping profession.

Atop the agenda this year is to increase membership in FSMS, and to increase the overall numbers joining our profession. As Directors Rick Pryce and Randy Tomkins have brought up in recent meetings and emails, 2018 must be the year to market, attract and recruit future surveyors and mappers. FSMS must take up this challenge and be the champions in order to start pushing this in the right direction. I believe the changes we have implemented in 2017 have set the stage, but now its curtain time, and all of us volunteering or otherwise helping out need to whole heartedly buy into helping grow our profession.

The future of the economy in Florida for 2018 looks bright. Let's portray that prosperity, growth and great job opportunities to our young surveyors and mappers, and highly encourage others to join us. We must all make the commitment to give back our time and money to the surveying profession through FSMS and build this professional organization so that we can in turn begin to lay-out and build up the next generation of surveyors and mappers.

"The Only Limit To Our Realization Of Tomorrow Will Be Our Doubts Of Today."- Franklin D. Roosevelt

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Executive Director's New Year Message

As we start the New Year, I wanted to make a few comments and share some thoughts.

The beginning of every year is a good time to reflect on the past, however, it is a better time to plan for the future. I always look forward to the beginning of the year. It is a new start, a new beginning where I can set new goals and new objectives. I find it to be an exciting time where I have no limitations except those that I place on myself.

Overall, as a Society, I feel that we were productive and made some great decisions in 2017 that improved the operation of the organization. We are focused on more improvements that will set the Society on a path to further success and unification in 2018.

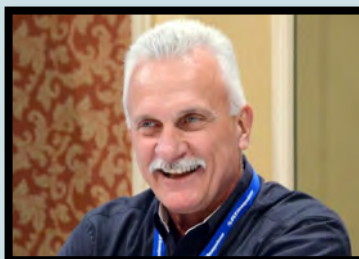
Personally, here are my Top 10 Resolutions for 2018:

- 1) Spend more time with my family and not in front of an electronic device.
- 2) Take time to strengthen my relationships with my friends.
- 3) Look for ways to help others.
- 4) Continue to improve my workplace.
- 5) Express gratitude for what I have and thank others for their contributions.
- 6) Clean out my closet.
- 7) Focus on priorities and not give in to distractions.
- 8) Like many others - improve my overall health and well-being.
- 9) Go to church more often.
- 10) Make a difference in 2018. (video)

In closing, thanks for letting me be a part of your Society.

May everyone stay healthy, and find peace and prosperity in 2018.

Tom A. Steckler



Surveyors in Government



Richard Allen, PSM, CFM

I would like to start this article off by wishing everyone a Happy New Year and I hope everyone had a wonderful time over Christmas and the holidays. Now we are back to the grind! I am not sure about your area, but in the Central Florida area, new construction is humming along. We are seeing strong and continued growth in permits for development and redevelopment of commercial and residential properties. This includes a large number of plats and replats that continue to come in.

Land development review makes up a large portion of our duties, generally about 40-50% of office staff time. This has continued since the previous economic downturn and looks to continue with a healthy economy. One issue on our end is the ability to add staff that is needed to keep up with growth and our essential duties, such as providing vertical control. We continue to try and keep up with our vertical needs in respect to the number of annexations that take place each year, but it has been a juggling act. This, coupled with our staff taking over all as-built surveys for Stormwater Capital Improvement Projects, has stretched our staff very thin. I intend to make a budget request to add at least two field survey staff members this fiscal year, but I'm not sure how it will be received, as there are rumblings that any requests for additional employees will be rejected.

I am not sure if other government entities are experiencing the same issues with adding staff or keeping up with workloads, but it has been interesting seeing our transformation from solely project-based surveying to now providing projects and playing a larger part in asset collection and management. I look for this trend to continue,

"I am not sure if other government entities are experiencing the same issues with adding staff or keeping up with workloads, but it has been interesting seeing our transformation from solely project-based surveying to now providing projects and playing a larger part in asset collection and management."

hopefully with additional staff to meet the demands of services.

Finally, I would like to finish the article by requesting that any government surveyors send me their contact information to be added to a database, so I can reach out to each of you on important issues and to ask for feedback on legislative issues. I would also like for any contract government surveyors to reach out, so you can be added to the list as well. I have an older list that I want to update, and if you are in correspondence with any other government surveyors in Florida, I would appreciate any of their contact information that you can share!

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

Early 20th-Century Transit Donated to FSMS

Transit used to survey historic Palm Beach is on display in FSMS Museum

We want to thank Vickie Pryor, who donated the transit to FSMS and compiled this history of the instrument.

Philip Frank (P.F.) Lund 1889-1978

Born in Connecticut, P.F. Lund worked as a carpenter in Hartford. He traveled to Florida with a friend, and was hired by Henry Flagler on December 29, 1910, to work on Flagler's hotels in Palm Beach. He worked as a carpenter on the Royal Poinciana Hotel and Whitehall, and served as the "in-residence" carpenter in Whitehall.

He later worked for Chalker and Lund Construction in Palm Beach, and built many of the original homes in Palm Beach. In the 1940s, he formed Lund Construction Company, and began to build homes on Jupiter Island. Lund Construction built custom homes for many of the wealthiest residents in Palm Beach and Jupiter Island. This transit was owned and used by P.F. Lund in the construction of these homes.

After his sons Phillip (Bill) and Robert (Bobby) returned home from military service in WWII, they joined their father in Lund Construction Co. Bill was a carpenter and Bobby was the draftsman, accountant, and office manager. After P.F.'s death, the transit was handed down to Bobby, and was on display in his home for many years.

I inherited the transit from his son and my cousin, John Lund. Bill was my father, and John knew that I would appreciate this piece of Florida history. I am honored to donate it to the Florida Surveying and Mapping Society. I hope others will be able to see it for many years to come.

Vickie Lund Pryor
12/8/2017



The transit on top of its original tripod.



Left: The transit (which has since been mounted to a base). **Middle:** The original transit box. **Right:** The inside of the box, which contains instructions for packing and for use. The transit was made by Buff & Buff Manufacturing Company, based in Boston, Massachusetts.

Boundaries

How the Mason-Dixon Line Settled a Family Feud & Divided a Nation

Book Synopsis Part II: Chapters 4-6

Editor's Note:

This is the second of four installments that presents the entire history of the Mason-Dixon Line through a synopsis of "Boundaries", by Sally Walker.

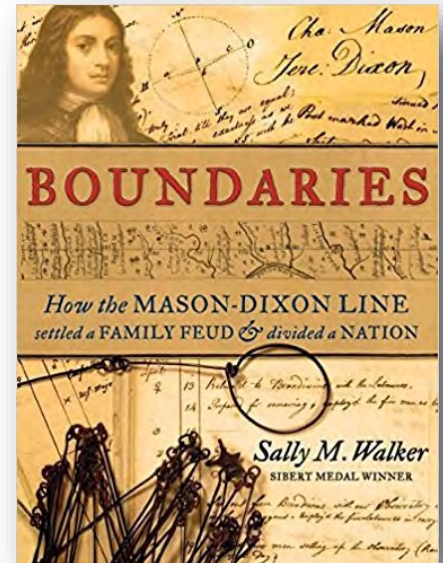
Today, the Mason-Dixon Line is used to reference the boundary between Southern states and Northern states. This present-day application began during the Civil War. However, the Mason-Dixon Line was actually completed nearly 100 years before the start of the Civil War, and originally served as the boundary line delineating Maryland and Pennsylvania.

The story of the Mason-Dixon Line begins over a century before its completion, in 16th century England. It involves two aristocratic families, the Calverts and the Penns. Across the Atlantic in the New World, the families would find themselves in perhaps the most infamous land dispute in history.

At the time, the Mason-Dixon Line was the largest and most ambitious survey project in history to ever be attempted.

To read previous installments, click below:

[Part I - George Calvert founds Maryland and William Penn's Youth](#)



Throughout the 1670's, Quakers had been immigrating to America to escape religious persecution in England. Hence, in 1680, William Penn asked King Charles II for a colony in America, with the intent of making the colony a refuge for Quakers. Granting the request was a no-brainer for the King: he was indebted to the Penn family. Penn's late father, Sir William Penn, had loaned the Crown 16,000 pounds during the war when the King's coffers were low.

Penn received the charter for a new colony on March 4, 1681. It was to be named Pennsylvania, in honor of the Penn family. Pennsylvania, which is a combination of "Penn" and "Sylvania" – the Latin word for wood or forest – literally translates into "Penn's Wood." The new charter laid out the bounda-

ries of the new colony: it was to "...to extend Westwards [from the Delaware River] five degrees in longitude...to be bounded on the North, by the beginning of the three and fortieth degree of Northern latitude, and on the south, by a circle drawn at twelve miles distance from New Castle, and by a straight-line Westwards, to the limits of the longitude above mentioned" along the fortieth degree north parallel of latitude.

Over a year later, in August 1682, the Duke of York granted Penn an area known as the Three Lower Counties, which was actually the eastern half of the Delaware Peninsula. The Western half of the peninsula belonged to Maryland. However, by now, Penn's land grants dwarfed Maryland.

Penn instructed his agents

to select land on the West bank of the Delaware River to build a capital city. The city would be named Philadelphia, which was a combination of two Greek words that meant "brotherly love". Penn stated that he wanted the area to be the seed of a nation. In 1680, fewer than 700 colonists lived in Pennsylvania, but between 1681 and 1682, 23 ships came from England, and the colony began to grow exponentially. However, one issue was beginning to fester: the boundary line between Pennsylvania and Maryland was disputed, and it was beginning to cause problems.

By 1681, it had been 49 years since George Calvert first received the charter for the colony of Maryland. However, the exact boundary of the fortieth degree of latitude – the border be-

tween Maryland and Pennsylvania - was still unclear. Naturally, issues began to arise among the colonists who lived in the disputed territory. The settlers did not know which colony to pay taxes to, or which laws to follow. The unrest among the colonists caused continued ill will between the leaders of both colonies.

Penn and Charles Calvert (the 4th Lord Baltimore) finally met in 1682, but the meeting did not accomplish much. The territory was still disputed, and it was evident that outside help would have to be utilized in order properly delineate the boundaries. Penn made an effort at drawing an accurate map of the colonies, but he erroneously drew Pennsylvania's border 50 miles too far south.

The error that Penn made did not matter until over 50 years later in 1732. The sons of the now-deceased William Penn met with Charles Calvert (the 5th Lord Baltimore), with the goal of resolving the border dispute once and for all. Quite the opposite

occurred: Calvert accidentally ceded to the Penns all the land that their late father had erroneously demarcated on his inaccurate map from 1682.

Tensions between colonists reached its peak in the 1730s during an ongoing incident known as Cresap's War. Thomas Cresap, of Maryland, purchased land along the Susquehanna River in the disputed territory and often ferried passengers and livestock across the river. Some Pennsylvanians alleged that Cresap had burned down the homes of friendly Native Americans and imprisoned them without cause. One day, while crossing the river on his ferry, three Pennsylvanians drew their guns on Cresap and tossed him overboard. From there, the "war" escalated amongst the colonists, and the ensuing incidents included: arrests and imprisonments, horse killings, the burning of houses, and murder.

The governors of both colonies became intimately involved until finally the King him-

self intervened. In 1735, King George II ordered that England's Court of Chancery resolve the matter, which it did not do until 1750. The resolution ordered both colonies to appoint men to a joint boundary-line survey commission and delineate the colonies according to the 1732 agreement. The commission agreed that the courthouse in New Castle would serve as the center for the circle that was to be drawn around the city.



A map showing the Twelve Mile Circle, which is Pennsylvania's southeastern border, and Delaware's northern border. To this day, it is the only circular state boundary line in the United States.



A map displaying the disputed boundaries of Maryland and Pennsylvania, with the area of conflict in light yellow. The Pennsylvania claim line was the line that Penn inaccurately demarcated on his map in 1682.

Finally, in 1751, surveying of the boundary line began. However, the surveyors faced a variety of obstacles, including harsh swampland and inadequate surveying tools. Many of the workers went on strike. The commission could not accurately run a tangent line to the center point in New Castle, and several other attempted surveys were inaccurate. Funding for the project dried up, and animosity continued to grow. The commission eventually disbanded in 1763, out of frustration and a lack of progress. It seemed that all hope for resolving the boundary dispute was lost.

Frederick Calvert (the 6th Lord Baltimore) and Penn's two youngest sons, Richard and Thomas, caught word of a young English duo—Charles Mason and



Mason and Dixon's observatory at the Cape of Good Hope was constructed of canvas, wood, and bricks and did more than just shelter their instruments. It also provided them with a stable base from which to make their observations and measurements. The observatory pictured here is similar to the one they built.

Jeremiah Dixon—who had garnered praise in the scientific community for their celestial observations. Having a pair of astronomers on the survey commission would be a game-changer, as the utilization of the stars would greatly increase the chances of producing an accurate survey.

Charles Mason was born in 1728 in Sapperton, England. He studied mathematics his entire life, with the goal of becoming an astronomer. And he did just that: in 1756, he joined the staff of the Royal Observatory in Greenwich.

Jeremiah Dixon was born in 1733 in Bishop Auckland, England. He, too, was interested in mathematics and astronomy from an early age, and was mentored by John Bird, a famous instrument maker. Dixon also studied surveying and was a talented draftsman.

In 1760, the Royal Society in London selected Mason and Dixon to observe the transit of Venus. This event – in which Ve-

nus passes between Earth and the Sun – occurs only twice every 100 years. The objective of the mission was to use information gathered from the transit to help calculate the distance between Earth and the Sun. The Society decided that Sumatra, Indonesia, would be the best location to observe the transit during the day.

The duo boarded the gun-

ship *Seahorse* in January of 1761, in order to arrive in Sumatra on time to observe the transit in June. However, less than 48 hours after departing, a French warship attacked them. 11 men died and 37 were wounded, and the *Seahorse* had to dock in Plymouth for repairs. Mason and Dixon asked the Royal Society to consider a location closer than Sumatra, but the Society threatened to prosecute them if they did not rejoin the ship. They reluctantly agreed, and set sail once again in February.

Mason and Dixon quickly realized they would not reach Sumatra in time, as they originally expected. They ordered the ship to dock at the Cape of Good Hope in South Africa, and they constructed a makeshift observatory, complete with a pendulum clock, telescopes, and Hadley's quadrant. Their mission was a resounding success, as they were able to gather valuable information from the transit. They were showered with praise upon returning to England, where word spread of their feat all the way across the Atlantic to the colonies. It was there, in 1763, that Mason and Dixon met with the Penns and Frederick Calvert. The stage was now set for the most ambitious survey project ever attempted.



Mason and Dixon were supposed to observe the transit of Venus from Sumatra, Indonesia, but because of a delayed departure, had to settle for the Cape of Good Hope.

Holiday Photos



Santa made an appearance at Maser Consulting's annual Christmas party. And yes, Santa's true identity is John Liptak.



The Campanile Family: Nick and Cathy with sons Nick (left) and A.J.



Jeremiah Slaymaker's daughter Aubrey and son A.J. were all smiles on Christmas morning.



Greg Rieth's birthday is on Christmas, and every year his grandkids hold up their fingers in a picture to show his age. (We will let you figure out the rest).



Shane Christy and his family.



The Collier-Lee Chapter continued their annual tradition of sponsoring two families for Christmas. **From left:** John Pacetti, Tate, Hyla, and Bella Danaher, Megan Bishop, Jennifer Sheppard, and Stefanie Marker.



Mike Whitling's one-year-old granddaughter, Ellery.

Did YOU Ever WONDER Why?

Michael Whitling, PSM

Why is a constant harassing of someone to do something called “nagging?”

“Nagging” came into use in the 1800’s but of course has been going on since mankind began. “Nagging” is of Scandinavian origin from the word *nagga* meaning to gnaw or irritate. Studies have found that nagging is viewed to be more of a feminine form of interpersonal communication than masculine but equal number of men and women nag; however, studies have shown that women are more likely to nag both men and women, while men are more likely to nag only men. During the Middle Ages, a scold’s bridle, also called a brank, was an instrument of punishment used primarily on women that were accused of “nagging” excessively. The device was an iron muzzle in an iron framework that enclosed the head. A bridle-bit about 2 inches long and 1 inch broad, projected into the mouth and pressed down on top of the tongue. The bit was frequently studded with spikes, so that if the offender moved her tongue, it inflicted pain and made speaking impossible. Ouch!



Why when we find something extremely funny do we “bust a gut?”

I just recently experienced a gut busting moment with family, which my wife will appreciate not discussing. When a person laughs really hard, for a long time, it can often hurt their abdominal muscles. This is because these muscles clench during heavy laughter. Therefore, it can feel like the stomach is breaking, or the gut is bursting, when a person is laughing hysterically. It was such a good moment my stomach muscles hurt the next day.

Why do you sometimes see a green tint on potato chips?

These are just from potatoes in which chlorophyll had started to form. This can happen when potatoes, which grow underground, are exposed to too much light in the field or factory, in storage, on the store shelf, or in your home. The USDA’s “Standards for Grades of Potatoes” consider a potato that’s more than 5 percent green to be damaged, and potato lots that contain them will be graded below US Grade #1. That means most green potatoes never even make it to market. You’ll still see some every now and again, either in whole or chip form, if conditions in the potato chip plant, the grocery store, or your kitchen are right. By itself, chlorophyll is nothing to be worried about; it’s tasteless and nontoxic. In the process of a potato going green, though, conditions are also right for it to synthesize more of a poison called solanine, which potato plants produce in their leaves, stems, sprouts and flesh as a defense against insects and other predators. Ingesting solanine can cause nausea, diarrhea, vomiting, stomach cramps, burning sensations in the throat, dysrhythmia, headaches, fever, hallucinations, jaundice, paralysis and death. Toxic levels for people are around one one-hundredth of an ounce for a 200-pound person, who would have to eat about 20 pounds of normal whole potatoes in one day to get sick. With very green potatoes, where the solanine level can increase ten-fold, only two pounds of spuds could leave you ill. As for potato chips, solanine formation is localized near the potato’s skin, usually no deeper than 3 mm. As they’re peeled for processing, most of the flesh making up those three millimeters is typically removed. Whatever flecks of green are left are not going to be enough to do anything to you. So, go ahead - finish the whole bag if you want.



Why is homemade alcoholic liquor known as “hooch?”

The origin of the term hooch is said to come from the Hoochinoo Indians of Alaska. This tribe, in the 19th century, had a reputation for drunkenness and as a source for illicit liquor, which they distilled themselves from molasses and other ingredients. It is doubtful that they learned how to make this spirit on their own and it was probably passed to them by Americans of European descent, probably soldiers, who taught them how to distill alcohols using metal coils. Still, the drink became associated with the tribe and was shortened to “hooch.” Note: The origin of “liquor” and its close relative “liquid” was the Latin verb *liquere*, meaning “to be fluid”. Its use as a term for “an intoxicating alcoholic drink” appeared in the 16th century.

Quick Facts:

⇒ The longest place name in the world (without hyphens) is Taumatawhakatangihangakoauauotamateaturipukakapikimaungahoronukupokaiwhenuakitanatahu, New Zealand. This is a name of a hill near Porangahau in the southern Hawke's Bay in New Zealand. It is a name given in the Moari language. This hill is 305 meters tall. It's famously known for its long name. The meaning of the name has been translated to mean "the place where Tamatae, the man who had big knees, the climber of mountains, the slider, the land-swallower that traveled about, played the nose flute that he had to the loved ones." With 85 characters making this word, it represents the world's longest place name according to the Guinness World Records. This name has other versions are even longer, but these other versions contain hyphens.



⇒ The longest place name in United States is Chagoggagoggmanchauggagoggchaubunagungamaugg, a lake found in Webster, Massachusetts. It is also referred to as Lake Webster. This name is from the Nipmuc, which is an Algonquian language. It translates to "fishing point that's at the boundaries and which is a neutral meeting point." Located near the border of Connecticut, it has a surface area of a 5.84 square kilometers. The name is made up of 45 letters and is believed to be the longest place name in the United States, as well as the third longest in the world.

⇒ Winchester-on-the-Severn, Maryland, and Washington-on-the-Brazos, Texas are the longest hyphenated place names in the U.S. (21 letters)

⇒ The U.S. state with the longest name is Rhode Island, which officially is named "the State of Rhode Island and Providence Plantations."



⇒ The longest place name in Florida is Pops Hammock Seminole Village, the shortest is Lee.

⇒ Florida has more golf courses than any other state, more than 1,250. Palm Beach County has more golf courses than any other county in the country.



⇒ "1661" is slang for an older woman who dresses in young women's clothes. The sexist male term comes from the observation that some women look 16 years old from the back but 61 years old from the front.

⇒ The number 714 is an odd touchstone in American culture. It's the badge number of cop Joe Friday in the TV show *Dragnet*. It's Babe Ruth's career home run total. It's the number of the *Friends* episode when Jennifer Aniston's character turns 30. It's a slang term for *Quaaludes*, because the number was marked on the tablets. And it's the area code for Disneyland.

⇒ The eyes of an owl are not true "eyeballs." Their tube-shaped eyes are completely immobile, providing binocular vision which fully focuses on their prey and boosts depth perception. They look around by rotating their necks. Owls can rotate their necks 270 degrees. A blood-pooling system collects blood to power their brains and eyes when neck movement cuts off circulation.



⇒ It would take about 41 hours of continuous reading to read every word in the dictionary.

⇒ Aldous Huxley who wrote *Brave New World* and C.S. Lewis who wrote *The Chronicles of Narnia* both died on November 22, 1963, but their deaths were overshadowed by a more sensational death that day: the assassination of John F. Kennedy.





JACKSONVILLE, SUNDAY, OCTOBER 22, 1961



—Times-Union Photo

NEW OFFICERS' SLATE

The final order of business yesterday for a three-day convention of the Florida Society of Professional Land Surveyors, which met at the Roosevelt Ho-

tel, was installation of 1962 officers. They include (seated) Russell H. DeGrove of Jacksonville, president, and (from left, standing) Perry C. Mc-

Griff of Gainesville, president-elect; James A. Thigpenn III of Jacksonville, vice president; and Carl J. Johnson of Fort Myers, secretary-treasurer.



Russell H. DeGrove's President's Portrait.

From October 1961: An article in *The Florida Times-Union* announcing the installment of FSMS's new officers at the FSMS annual conference. Russell H. DeGrove, seated in the picture, was elected as president. The conference was held at the Roosevelt Hotel in Jacksonville, which was the site of an infamous fire just two years later in 1963.

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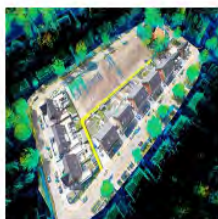
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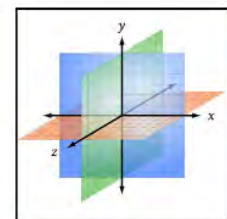
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Mean High Water
Observations &
Computations Course
#8262 (6 General CEC)

\$ 120⁰⁰



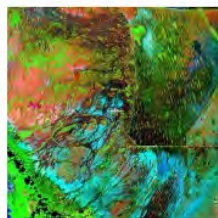
Practical Geometry for
Surveyors Course #7141
(6 General CEC)

\$ 120⁰⁰



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

\$ 120⁰⁰



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

\$ 120⁰⁰



Writing Boundary
Descriptions Course
#8362 (3 General CEC)

\$ 70⁰⁰



Correspondence Courses



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

Step 2: Choose Member Type

☐ **FSMS Member**

EMAILED		Quantity			
6 CEC	\$115 Per Course	x	_____	=	\$ _____
3 CEC	\$58 Per Course	x	_____	=	\$ _____
MAILED					
6 CEC	\$125 Per Course	x	_____	=	\$ _____
3 CEC	\$68 Per Course	x	_____	=	\$ _____
TOTAL			_____		\$ _____

☐ **Non-Member**

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

☐ **Non-Licensed in ANY State**

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

Step 3: Payment Information

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

Firm: _____ Sustaining Firm: ____ YES ____ NO

Address: _____

City/State: _____ Zip Code: _____

Email Address: _____ Work Phone: _____

Payment Information: _____ Check Enclosed (Payable to FSMS) _____ VISA/MasterCard/American Express

Card #: _____ Exp. Date: _____ Card CVV Number (3 or 4 Digits) _____

Billing Address for Credit Card: _____

Signature: _____

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

IF PAYING BY CREDIT CARD - EMAIL FORM TO education@fsms.org or FAX TO 850.877.4852

QUESTIONS? CALL 800.237.4384

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davidpga@bellsouth.net

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(850) 682-5306
bobndee1@cox.net

Gulf Coast

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

Chipola Area

Lee Anderson
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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

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(352) 304-9534
hpeters@gpinet.com

UF Geomatics

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(352) 272-1835
ericdidion@ufl.edu

District 3

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(407) 896-0594
aquickel@drmp.com

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Joew.fsms@gmail.com

Volusia

Anthony Sanzone

District 4

Ridge

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kthompson@platinumsurveying.com

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cwild@drmp.com

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Justin "Boots" Garner
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boots@florida-eas.com

Collier-Lee

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Scott Britt
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msb@msbsurveying.com

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rpryce@craventhompson.com

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kbeckpsm@comcast.net

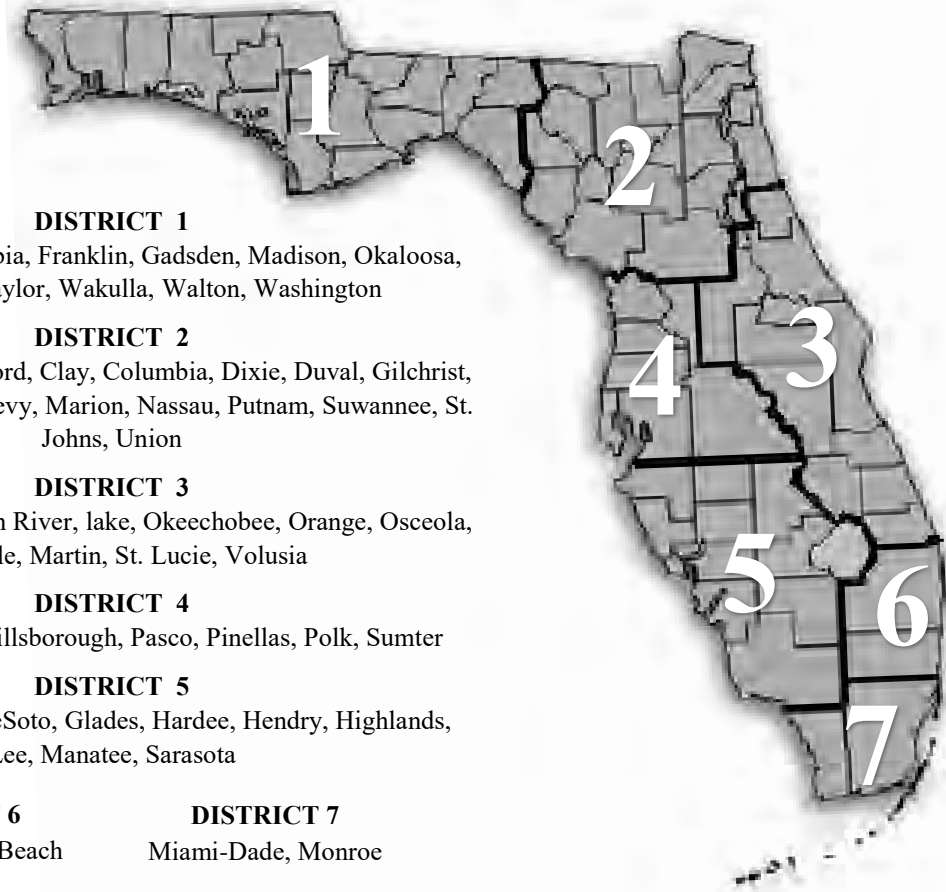
FAU Geomatics

Da'Neil Campbell
dcampb11@fau.edu

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Miami-Dade

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



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Justin Ferrans
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Justin@polaris-survey.com

NSPS Director

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

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Strategic Planning Committee	Dianne Collins
Ethics and Professional Practice Committee	John Liptak
Constitution and Resolution Advisory Committee	Art Mastronicola

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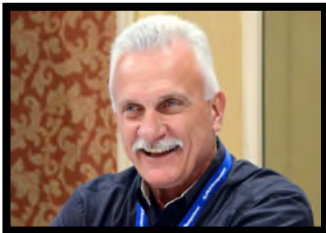
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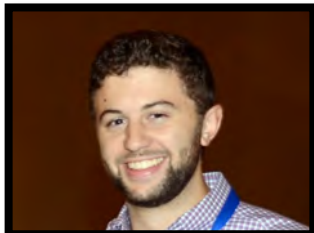
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Rebecca Culverson



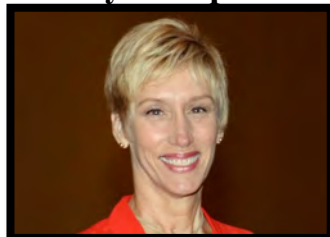
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Tom's Tip of the Month

Make A Difference Everyday

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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.

2017-2018 Sustaining Firms

A M Engineering, Inc.	941-377-9178	Caulfield & Wheeler, Inc.	561-392-1991
Accuright Surveys Of Orlando, Inc .	407-894-6314	Causeaux Hewett & Walpole, Inc.	352-331-1976
Aerial Cartographics Of America, Inc.	407-851-7880	Central Florida Surveys, Inc.	407-262-0957
Aim Engineering & Surveying, Inc.	239-332-4569	Chastain-Skillman, Inc.	863-646-1402
All County Surveyors, Inc.	800-860-9119	Choctaw Engineering, Inc.	850-862-6611
Allen & Company, Inc.	407-654-5355	Civilsurv Design Group, Inc.	863-646-4771
Allen Engineering, Inc.	321-783-7443	Clary & Associates, Inc.	904-260-2703
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 Estate Service, LLC	239-963-2245	Control Point Associates FL, LLC	908-668-0099
American Surveying, Inc .	813-234-0103	Controlcam, LLC	904-758-2601
Amertritt, Inc.	813-221-5200	Countywide Surveying, Inc.	850-769-0345
ARC Surveying & Mapping, Inc.	904-384-8377	Cousins Surveyors & Associates, Inc.	954-689-7766
Associated Land Surveying & Mapping, Inc.	407-869-5002	CPH, Inc.	407-322-6841
ATS Land Surveying, LLC	386-264-8490	Craven-Thompson & Assoc, Inc.	954-739-6400
Avirom & Associates, Inc.	561-392-2594	Cross Surveying, LLC	941-748-8340
Bannerman Surveyors, Inc.	850-526-4460	Culpepper & Terpening, Inc.	772-464-3537
Barraco And Associates, Inc.	239-461-3170	Dagostino & Wood, Inc.	239-352-6085
Bartram Trail Surveying, Inc.	904-284-2224	Deal Land Surveying LLC	407-878-3796
Baseline Engineering And Land Surveying, Inc.	561-417-0700	Degrove Surveyors, Inc.	604-722-0400
Bay Area Sinkhole Investigation & Civil Engineering, LLC	813-885-4144	Dennis J. Leavy & Associates	561-753-0650
Bay Area Surveying And Mapping, Inc.	727-271-0146	Deren Land Surveying LLC	352-331-0010
BBLS Surveyors, Inc.	239-597-1315	Diversified Design & Drafting Services, Inc.	850-385-1133
Bean Whitaker Lutz & Kareh, Inc.	239-481-1331	DMK Associates, Inc.	941-475-6596
Banks Engineering	239-939-5490	Donald F. Lee & Associates, Inc.	386-755-6166
Bello & Bello Land Surveying Corporation	305-251-9606	Donald W. McIntosh Associates, Inc.	407-644-4068
Benchmark Land Services, Inc.	239-591-0778	Donoghue Construction Layout LLC	321-248-7979
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Biscayne Engineering Company, Inc.	305-324-7671	E.R. Brownell & Associates, Inc.	305-860-3866
Boatwright Land Surveyors, Inc.	904-241-8550	Echezabal & Associates, Inc.	813-933-2505
Bock & Clark Corporation	330-665-4821	Eda Engineers-Surveyors-Planners, Inc.	352-373-3541
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Burkholder Land Surveying, Inc.	941-209-9712	ESP Associates PA	803-802-2440
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		Ferguson Land Surveyors, PLC	727-230-9606
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Fortin, Leavy, Skiles, Inc.	305-653-4493	Mapping Resource Group, Inc.	386-439-4848
Franklin Surveying & Mapping, Inc.	407-846-1216	Marco Surveying & Mapping, Inc.	239-389-0026
Ganung-Belton Associates, Inc.	407-894-6656	Mark Dowst & Associates, Inc.	386-258-7999
Gary G. Allen, Regis Land Surveying, Inc.	850-877-0541	Maser Consulting P.A.	813-207-1061
Geodata Consultants, Inc.	407-732-6965	Massey-Richards Surveying & Mapping LLC	305-853-0066
Geoline Surveying, Inc.	386-418-0500	Masteller, Moler & Taylor, Inc.	772-564-8050
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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
HSA Consulting Group, Inc.	850-934-0828	Pennonni Associates, Inc.	215-222-3000
Hutchinson, Moore & Rauch	251-626-2626	Pickett & Associates, Inc.	863-533-9095
Hyatt Survey Services, Inc.	941-748-4693	Platinum Surveying & Mapping LLC	863-904-4699
I.F. Rooks & Associates, Inc.	813-752-2113	Point To Point Land Surveyors, Inc.	678-565-4440
Inframap Corp.	804-550-2937	Polaris Associates, Inc.	727-461-6113
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Johnson, Mirmiran & Thompson, Inc.	813-314-0314	Pulice Land Surveyors, Inc.	954-572-1777
Johnston's Surveying, Inc.	407-847-2179	Q Grady Minor And Associates, PA	239-947-1144
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Upcoming Events

February 9-10, 2018

Board of Directors Meeting
Tallahassee

March 18-24, 2018

National Surveyor's Week

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John P. Goggin
R.H. Jones

1960

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Carl E. Johnson
James A. Thigpenn, III
Harold A. Schuler, Jr.
Shields E. Clark
Maurice E. Berry II
William C. Hart
Frank R. Schilling, Jr.

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James M. King
Broward P. Davis
E.R. (Ed) Brownell
E.W. (Gene) Stoner
Lewis H. Kent

Robert S. Harris

Paul T. O'Hargan
William G. Wallace, Jr.
Robert W. Wigglesworth

1980

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William B. Thompson, II
John R. Gargis
Robert A. Bannerman
H. Bruce Darden
Buell H. Harper
Jan L. Skipper
Steven M. Woods
Stephen G. Vrabell
W. Lamar Evers

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Robert L. Graham
Nicholas D. Miller
Loren E. Mercer
Kent Green
Robert D. Cross
Thomas L. Conner

Gordon R. Niles, Jr.

Dennis E. Blankenship
W. Lanier Mathews, II
Jack Breed

2000

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Michael H. Maxwell
John M. Clyatt
David W. Schryver
Stephen M. Gordon
Richard G. Powell
Michael J. Whitling
Robert W. Jackson, Jr.
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