

GEORGIA LAND SURVEYOR

FALL 2021



2021 SAMSOG SUMMER MEETING WRAPUP!

Photos & Highlights from the Seminar | 22

© 2019, DPL, Trimble and the Globe & Triangle logo are trademarks of Trimble Navigation Limited, registered in the United States and in other countries and/or otherwise claimed.

High quality products and a trusted partner to help you succeed.

As surveying technologies continue to advance, a trusted and knowledgeable partner can help you stay ahead of the game. For over 70 years, Duncan-Parnell has provided leading-edge products and services to help surveyors succeed.

- Robotic Total Stations • Trimble GNSS Instruments
- Software for Survey and Mapping • Survey Supplies
- Instrument Repair & Maintenance • Technical Training



Norcross, GA: 844-753-8335
duncan-parnell.com



IN THIS ISSUE

NEWSLETTER

The Georgia Land Surveyor is a publication of the Surveying and Mapping Society of Georgia and published six times a year, in the off number months. The articles are not necessarily the position of the society. Articles may be reprinted with due credit.

Address all correspondence regarding advertising, letters to the editor, and exchange of newsletters to:
Editor, the Georgia Land Surveyor,
P.O. Box 1113,
LaGrange, GA 30241
and email ginger_samsog@att.net

Editor: Ginger Jones
Assistant Editors:
Sarah Wang, swang@egps.net
Josh Stice, joshua.stice@dawood.net

SOCIETY OFFICERS

President: Grant Shepherd, Jr., PLS
Vice President: Teeple Hill, PLS
Secretary-Treasurer: Dean Olson, PLS
Immediate Past President:
Phillip O. Brown, PLS
National Governor:
Robert Armstrong, PLS
Executive Director: Ginger Jones
Registered Lobbyist: Steven Neff

DIRECTORS FOR 2020 - 2022

David L. Anderson, PLS
Spencer Johnson, PLS
Roger London, PLS
Gary Nevill, PLS
Roger Purcell, Ph.D. P.E. PLS

DIRECTORS FOR 2021-2023

Steve Coleman, PLS
David May, PLS
Phillip Roberts, PLS
Wesley Weitman, PLS
Chris Young, PLS

SOCIETY OFFICE

Address correspondence to:
Surveying and Mapping Society of
Georgia, Mrs. Ginger Walker Jones,
Executive Director,
P.O. Box 1113,
LaGrange, GA 30241
Telephone: 770-947-1767
Email: ginger_samsog@att.net
Website: samsog.org

PER ISSUE NEWSLETTER ADVERTISING

Full page, 7.1" x 9.3" Color \$500
Full page, 7.1" x 9.3" B/W \$400
Half page, 3.5" x 9.3" Color \$300
Half page, 3.5" x 9.3" B/W \$200
Quarter page, 3.5" x 4.1" B/W \$100

- 04 PRESIDENT'S REPORT
- 06 SAVING SURVEYING
- 11 SUBSIDENCE & THE FL
CONDO COLLAPSE
- 13 UNG SURVEYING
PROGRAM
- 16 NATIONAL TRIG-STAR
- 18 NSPS NEWS
- 20 TRAIL RESTORATION AT
FORT PULASKI
- 20 DID YOU KNOW?
- 21 FROM EXECUTIVE
DIRECTOR
- 22 SUMMER MEETING
HIGHLIGHTS
- 30 SURVEYOR SAYS!
- 30 IN MEMORIAM
- 31 SUSTAINING MEMBERS



22 FEATURED

SUMMER MEETING
HIGHLIGHTS

23 ANNUAL SKI BASHINSKI
GOLF OUTING

24 EQUIPMENT RAFFLE

26 PAST PRESIDENTS'
BREAKFAST

27 eGPS NETWORK
DRAWING

CHAPTER REPRESENTATIVES

Allatoona

Clark Tompkins, PLS
ctompkins@croyengineering.com

Appalachian

Jonathan Rolader, PLS
asc@phobia.net

Atlanta

Josh Lewis, III, PLS
josh.lewis.iii@glssurvey.com

Augusta

John Attaway, PLS
jattaway@cranstonengineering.com

Central

VACANT

Coastal/Savannah

Craig Brewer, PLS
craig@brewersurvey.com

Etowah

VACANT

Foothills

Ron Wikle, PLS
ron@wikleandsurveying.com

Georgia Southern University

Dr. Roger Purcell, PLS
rcpurcell@georgiasouthern.edu

Golden Isles

Peter Durand
peterdurand@bellsouth.net

Gwinnett

Patrick Carey, PLS
patrick@keystonelandssurveying.com

Muscogee

Chad Carpenter, PLS
cwcpls2979@gmail.com

Northwest

David Glass, PLS
dglass1@bellsouth.net

Piedmont

Pat Harris, PLS
1270pat@gmail.com

South Central

VACANT

Southern Crescent

Kevin Brown, PLS
kbrown@fdc-llc.com

KSU Chapter Sponsor

Dan Branham, PLS
dbranha2@kennesaw.edu

Cover Photo: 2019-2021 President Phillip O. Brown passes the gavel to incoming 2021-2023 President Grant Shepherd at the Annual Meeting and Summer Convention on Saturday, July 19, 2021.



PRESIDENT'S REPORT

Grant Shepherd, PLS

As I take the helm of SAMSOG, I first and foremost, want to thank my family, especially Lynne for her support and our children and their families for their support as well. Also, Ginger, "the cornerstone" of SAMSOG" - She keeps us in line.

Like most surveyors, I can tell a good story, so I want to share a true story that opened my eyes and set me on a new course in our profession: The importance of continuing education and professionalism.

Several years ago, I was asked for a land surveying proposal, a boundary, topographic and utility survey, that was needed on a very large project. I visited the planning and engineering department (as it was known back then) to get as-builts of sewers in the area. I knew that Lowe Engineering had as-built most of this area years ago and had very good information. When I arrived at the City, I was informed that there was a new department and that they now had this information. After I made an appointment (another new requirement) to visit the new department, I met with the department head. At this meeting, I was informed that most of the original as-builts had been destroyed, however they had made their own sewer maps. They felt there was no reason to store the old mylars any longer.

I was also informed that land surveying was an "antiquated" profession and new technology had bypassed land surveying and we were being left behind. I responded to that statement And was asked to leave the office and the building.

The maps showed one of the sewer lines running straight from manhole to manhole. However, through my father-in-law, who was Tom Lowe's second employee and had recently retired from there, I was able to get the original as-builts that showed "curved" sewer lines, not straight, as I had suspected from previous work we had done in the City. This information saved a lot of work and possible problems in the future for our client.

I felt surveyors at that time had missed an opportunity with GIS both technically and professionally. At that point in my career, I fully understood the importance of keeping up with the times, both educationally and professionally.

SAMSOG promotes both education and professionalism, and I believe that is our path for the future. We must keep our professionals up to date with the advancing technology. We must continuously educate not only our professional land surveyors but our everyday personnel as well. Our personnel must understand the importance of our profession and help integrate the "advanced technology" into our professional standards. We must remind our personnel and ourselves that we survey the lines, not just locate "end points".

An important part of our job is we must "follow in the footsteps of the previous surveyor" to determine the correct path. Our advanced technology reduces our data and evidence collection, but we cannot let it shortcut our duty of retracing the line. Education and professionalism are the "path of our future."

My primary goal as president of SAMSOG this year will be to represent SAMSOG as a professional surveyor and promote land surveying education throughout the state. I plan on doing this by “following in the footsteps” of our past presidents.

As this generation has discovered, “following in the footsteps” may not be easy since the path is not always straight. Our previous leadership has done a good job. We have recently been able to continue with our education for land surveyors with two conferences during a pandemic and this one where we had hoped to be coming out of the pandemic. We began a video committee to help provide education through other avenues as well.

As you all know, surveyors locate the line, not only the corners, and it is sometimes difficult to explain that to the next generation of surveyors and others; we cannot only locate the corners with GPS. We also cannot prepare topographic surveys without sufficient checks and control. Topographic and utility information is useless if not located on the map properly.

Again, I will follow in the footsteps of some very good surveyors. They have marked the path well. They have noted and documented their findings, but as with all new projects, there are and will be equipment malfunctions, someone will forget a machete, property owners will not understand the flagging on the tree, and the property owner will not understand why his property area is less than his deed. That is where the well-educated surveyor is vital.

Phillip Brown never expected a pandemic, but our society carried on and our “loop has been closed.” Thank you, Phillip, for your time and leadership these past two years.

Grant Shepherd, PLS
SAMSOG President 2021-2023

This is why you should buy Carlson Software from That CAD Girl!

Carlson Software

- Offers PERPETUAL licenses with the option for NETWORK deployment
- MIX & MATCH modules to buy only what you need
- Runs on top of FREE IntelliCAD or your separately purchased license of AutoCAD
- Offers FREE technical support
- Allows dynamic design with BASIC CAD entities that can be shared with any other CAD program
- Remains INDEPENDENT and answers only to their customer base

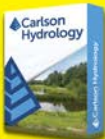
That CAD Girl

- Discounted pricing on Carlson Software
- FREE SUPPORT with purchase of software
- FREE ONLINE WEBINAR TRAINING with purchase of software
- PRIORITY SCHEDULING for one-on-one and custom training
- 30 years of experience with CAD & land development design and construction software
- Remains INDEPENDENT and answers only to her customer base



CERTIFIED TRAINING CENTER
CARLSON COLLEGE
That CAD Girl is a charter member of Carlson College










That CAD Girl
www.ThatCADGirl.com
919-417-8351

Saving surveying: What does it take to get people involved?

Prepared by Trent J. Keenan, PLS & Kristina Poulter

An abstract of a Mentoring Monday's presentation from March 1, 2021



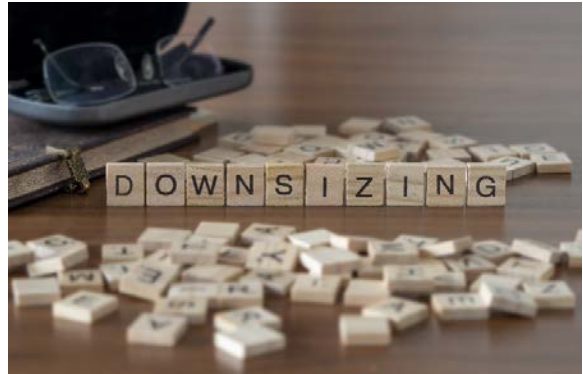
Reprinted with permission of the Nevada Land Surveyors Association, Nevada Traverse, Issue 48.2.

www.NvLandSurveyors.org/nevada_traverse.html

In almost every state, the number of licensed surveyors is dwindling in comparison to the number of surveyors who are projected to retire in the coming decade.

In Alaska alone, over 12% of surveyors will disappear from the ranks in the coming years. While a short-term viewpoint might celebrate more work and higher wages for the surveyors who remain, from a long-term standpoint, the situation looks grim.

Surveyors are a passionate bunch. Many surveyors who "retire" can't seem to stay entirely out of commission for long. It's the type of passion that results in a thirst to pass down knowledge and wisdom to future generations. So how can we ensure that enough hands will be ready to take up the reins?



During a recent Mentoring Mondays, surveyors in attendance brainstormed the challenges and hurdles facing the profession.

Balancing academics and experience



Michael Schoder, PLS and retired BLM Chief Cadastral Surveyor for Alaska is concerned about filling the surveying ranks.

He thinks that the solution to the dilemma likely lies in creating a system of mentoring.

While the University of Alaska has a strong geomatics program for surveyors, including a dedicated cadastral track, Michael doesn't know if education alone can inspire and prepare the next generation of surveyors.

"The problem is that in my view is that you can't do this all with academia. And I think once we said, hey, well, it's a four-year degree. Great. We can train them. Now I can back off. I don't have to mentor them. I know when I get

somebody out of one of those programs, they're going to have some basic knowledge," Michael said.

While programs these days are sophisticated, a thorough career like surveying requires a delicate balance of hands-on experience.

"Working experience is huge. And it's really hard to get the people that want the right desire to be in the field or deal with that," said Michael.

He raised the point that many young potential surveyors are also considering careers like engineering, which can have a much faster return on investment than a surveying degree. When it comes down to weighing finances against passion, passion doesn't always win when higher education degrees clock in at up to \$40k per year.

"I really think the best surveyors are the ones that get the passion. You know here we are, some of us in retirement that we - I thought when I walked out, hey, I've done it for 45 years. I'm going to do something else," Michael said. "I don't think we can take the surveying out of a real surveyor. You can't."



770.695.3361

Your One-Stop Shop for All Things Surveying!

ORDER BY PHONE | SHOP ONLINE | WALK IN

Our Services

- ▶ RTK Network
- ▶ Equipment, Supplies, Accessories
- ▶ Tech Support
- ▶ Certified Repairs
- ▶ Rentals
- ▶ UAV, LiDAR Sales & Training
- ▶ M2M Data Plans
- ▶ Deliveries
- ▶ Supply Inventory Management



Gold Status
GeoMax-Authorized
Total Station, Robotics and GPS Service Center

Authorized Reseller of



eGPS Solutions | 4317 Park Drive Ste 104 | Norcross, GA 30093 | www.eGPS.net

A new House Bill in Florida

Other states are grappling with this same question and experimenting with ways to find the answer.

Florida just introduced House Bill 821, which will allow the education path to open back up in Florida. The concept is that surveyors will need six years of experience, but the balance between academic and work experience can vary.

If the bill passes, it means students can choose to pursue a four-year degree followed by two years of experience, or a two-year degree followed by four years of work experience, or even elect to do six years of experience only.

Mark, another surveyor in attendance, doesn't think the Florida bill will pass - and feels that it would be a disservice to the surveying profession if it did pass.

"I understand professionalism, but I also understand that this isn't a profession that most people don't even know about. And we haven't done a good job of advertising it to the masses. And all the schools are dropping their geomatics programs. So we're at a disadvantage as an industry of getting fresh talent into it. And we're not doing anything to attract that fresh talent," said Mark.

He did note that some of the best surveyors he knows were able to get their license without a four-year degree - so this is a tricky dilemma.

"We've shot ourselves in the foot, and I don't see what we're doing to help solve the situation," Mark said.

****UPDATE: the bill died in the Commerce Committee on April 30, 2021, but I am sure this is just the beginning of these types of bills that will be introduced over the next decade! We need to keep a close eye on every state's legislative sessions!***



Finding good teachers



Michael noted that regardless of when and how surveyors-in-training learn, they still need to learn the same quantity of information.

That means that if less training is done in the classroom, it falls on the shoulders of the supervising land surveyor to teach them on the job.

"You're going to have to mentor and train those people in those higher-level subjects and teach them how to learn and teach them how to research and find their answers on their own," said Michael.

"But that's a big commitment. And I don't know. You know you look at a lot of firms; you got one LS and a whole bunch of field and office staff. He doesn't have time to look over the shoulders and walk around and spend those types of hours if they're not getting that four years."

Even if many professional surveyors had lots of free time on their hands, there's also no guarantee that they would be good and effective teachers. True teaching is a skill, and requires preparing content, getting up in front of people, and doesn't always offer the ease of one-to-one mentorship when done in a group setting.

"There never is an easy answer for total learning out of the field. There's never an easy answer for learning totally out of school. So you've gotta balance. You've got to have a balance. You've gotta be able to take the time," Michael said.

Crowdsourced mentoring

Michael described a former job at the Department of Transportation where he experimented with mentoring at scale.

He decided to devote every Wednesday to preparing anyone interested in pursuing their surveying license.

"When I was at DOT, I had bad morale. When I went in there, people were in the union. They didn't know where they wanted to go. And I said, well, hey, how about we do something for you? How about let's get you all your LS license, said Michael.

So every Wednesday, everyone came in early. Those who wanted to learn land surveying did so under his instruction. It took structure and dedication, but it paid off. Today, four of those individuals now have their licenses.

In a way, Michael sees online workshops like Mentoring Mondays as the perfect mentoring program, bringing novices and professionals together every week.

"I mean, this is crowdsourced mentoring, right? So why does every LS that maybe isn't a good teacher, but gosh, you want to learn how to do elevations with GPS? Who better than retired NGS head Dave Doyle who is going to talk about it in two weeks?" said Michael.



Suppose a program like Mentoring Mondays can be formalized, recorded, and turned into lesson plans. In that case, it could serve as the perfect vehicle to take the full weight of teaching off of busy professional land surveyors' shoulders.

The value of CFedS

While how to structure surveying education is up for debate, the value of education as a whole is undeniable.

Every professional surveyors can benefit from life-long continuing education. One program heavily discussed among attendees was the [CFedS program](#), which provides the training necessary to execute boundary surveys on or near federal interest lands.

"As a professional land surveyor and also a past BLM chief, I think it's invaluable. And if you have a need for continuing education, why not? Because you'll get more in-depth sight into the federal procedures of original surveys and dependent resurveys, understand the plats, and how to do acreage from a plat without dimensions when you have government lots. A lot of little things like that," Michael said.

While the value of pursuing CFedS depends on where you live and practice, the program has both educational and social benefits.

"It's good credentials. I know this from being on the other side of the fence at an agency too. If I'm looking at a proposal from a company and they show me some of their staff have CFedS designations, I know that those people took the commitment to do all the hours of going through it. And they had to have a passing grade. That shows an interest in higher learning and a commitment to continuing education far beyond what they needed to do to keep their license," said Michael.

Steve Parrish, PLS, the current chairperson and training coordinator for CFedS, has seen 1,300 people sign up for the program since 2006, with about 550 certified CFedS currently practicing.

He is currently organizing five presenters for an upcoming conference, where participants can take a special two-credit hour CFedS course that is offered at half the price of the regular online course.



Attracting attendees

A shortage of new students in surveying programs isn't the only problem facing the surveying world.

At the state level, chapter organization meetings are not seeing participation and attendance from people from the field.

While private-sector employees tend to show up, others don't. The pandemic has only served to exacerbate this pre-existing issue.

"A lot of it has to do with the influx of probably that individual company and what they're willing to step out and do for those guys that say hey look, we want you to advance yourself and just not be a technician or a robot for us," said one attendee.

Surveyor shortages and public scrutiny

John Brady, PLS, a surveyor located in Fairbanks, Alaska, has his own concerns about surveyor shortages.

"This year, I am president of our local Fairbank's chapter of ASPLS. And I'm the youngest guy in the room by 30 years, usually sometimes even 40. And that's a huge issue to me. Because what is the society going to look like in 10 years when I'm pretty much the only one left?" he wondered.

That's one reason why John is so thrilled to have the opportunity to participate in Mentoring Monday sessions and connect with other surveyors across the United States.

"That's the beauty of the technology we have available these days to be able to network outside of our locales and be able to actually get an idea of what people are doing across the country and across the world," he said.

John is also a fan of the [Get Kids Into Survey](#) program, which inspires future geospatial experts. During the pandemic, he's been working the program into the homeschooling curriculum for his own children.

"I mean, it's great in one sense because I'll always have a job. But I also want to see the profession grow and continue on and still be around when I'm ready to pass it off to the next generation. Which hopefully will be quite a ways down the line," said John.

Trent Keenan, PLS, raised the important point that fewer surveyors does not necessarily translate into riches and smooth sailing for the surveyors that remain.

"As much as we talk about it's going to be nice because we're always going to have job security; I think the biggest problem that we're going to run into is the public can't wait around for three, four, five, six weeks when we tell them that we can't get to it for a month and a half. So we're going to have an issue on the PR side of things," he said.

In other words, efforts to grow the surveying profession aren't just to ensure there are more bodies in the office. It's to prevent the unknown of new legislation that could follow when the necessary work of surveying simply can't be done on time.

A new teaching model



It's becoming clear that what the surveying profession needs is a new teaching model, where practicing experts and retired professionals can join forces to create engaging and comprehensive educational content without burning out.

Crowdsourced mentoring like Mentoring Mondays and recorded lessons may be able to provide a digital starting point.

For physical in-person classes, Ian Wilson, PLS, is interested in exploring shared teaching opportunities.

"In Evergreen College out here, I keep getting jingles from them saying, can you come to teach a class? Can you come and teach a class? I do not have time to spend, unfortunately, to teach an entire semester of classes. And one thing that I've proposed over and over again, and it seems to get crickets or falls on deaf ears, is to get together a few surveyors," he said.

In Ian's vision, he would be able to commit to three weeks teaching about survey boundaries, after which another surveyor would pick up where he left off with another topic, and so on until the 16-week semester was over.

Why has his idea fallen on deaf ears? He imagines it must be due to the internal logistics at the college.

"Somebody is going to have to really do some work on this because then you run all the crap about, okay, now we've got ten teachers who are going to be here. Ten guys are going to teach this seminar next semester. Do they all need to be set up as employees? How do we - you know, there's a whole lot of logistics that need to be dealt with, but somebody has got to do it," Ian said.

Despite the unknowns, one thing is clear: a passion for the profession drives surveyors. And where there's passion, anything is possible.

With modern technology at our fingertips, there's hope that we can bridge the centuries-old art of surveying with the modern world, helping to educate and inspire a new generation of surveyors to follow in our footsteps.

If you are interested in learning more about [Mentoring Mondays](#) or volunteering as a featured speaker, please contact [Trent J. Keenan](#).

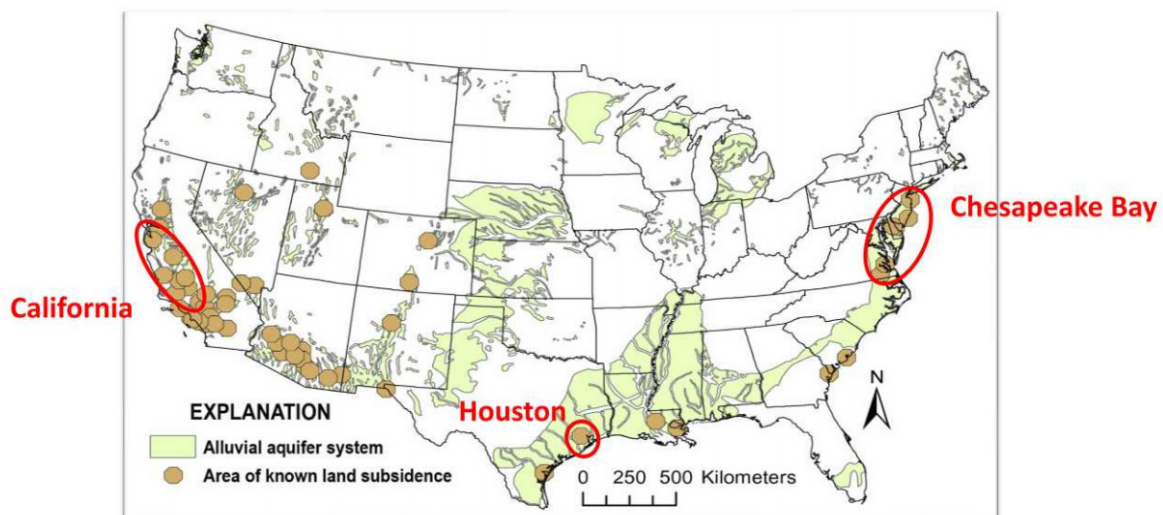


Subsidence Seen as Possible Factor in Florida Condo Collapse

NSPS has been assisting the U.S. Geological Survey (USGS), in conjunction with the National Aeronautics and Space Administration (NASA), National Geodetic Survey (NGS) of the National Oceanic and Atmospheric Administration (NOAA), U.S. Army Corps of Engineers (USACE) and others on the development of a [National Land Level Change \(NLLC\) map](#). This small scale national map would help identify areas of the U.S. that are prone to subsidence. A national subsidence program was authorized by Congress in the National Landslide Preparedness Act ([Public Law 116-323](#)), that was signed into law by President Trump on January 5, 2021, before leaving office earlier this year. NSPS was a strong advocate for the legislation. News reports on the tragic high rise condominium collapse in Surfside, Florida has led scientists and engineers to identify subsidence as a contributing factor to the structural failure. NSPS lobbyist John "JB" Byrd is discussing with members of Congress funds for USGS to begin a NLLC map to track areas of subsidence, which will stimulate more precise and accurate large scale surveying and mapping on a site specific basis in subsidence-prone locales.

What we know about Subsidence in the United States

Subsidence outside the brown dots is unknown



<https://www.multibriefs.com/briefs/nsps/nllcoverview.pdf>

SPRING INTO SAVINGS WITH

Geo-Tronics



SALES. SERVICE. SUPPORT



3 EASY WAYS TO CONTACT US:

CALL | WEBSITE | WALK-IN

TN OFFICE: (931) 614-0784 | **KY OFFICE:** (270) 970- 9261

TN OFFICE: 723 AEDC Access Rd, Hillsboro, TN 37342
KY OFFICE: 1011 Paris Road Suite 333 Mayfield KY 42066

WWW.GEO-TRONICS.COM

MENTION THIS AD FOR 10% OFF



UNIVERSITY of NORTH GEORGIA™

SURVEYING PROGRAM

By Mark Chastain, PLS

The surveying program at UNG is located at the Gainesville campus on I-985. Officially, it is the Institute for Environmental & Spatial Analysis, or IESA for short, established in 2001. The Dean of IESA is Dr. Jeff Turk, who began his tenure at the Gainesville campus in 1994 and has been the Director or Dean of IESA since 2010. The program got a huge boost in 2018 with the award of a \$600k grant by the National Science Foundation to implement a new associate degree and certificate program for surveying and geospatial science. A study had demonstrated the need for such a program to be offered in North Georgia. Dr. Turk and faculty assembled an Industry Advisory Board to help guide the program to insure its applicability to workforce needs. This advisory board is comprised of individuals from government, academia, and several practicing land surveyors. The grant provided funding for equipment, software, and faculty for a 3 year period. The grant expired in 2020 but served the purpose of establishing the program as viable.

Prior to the grant, IESA already housed a successful Geographic Information Systems (GIS) program that included exposure to surveying and mapping. The bachelor degree of the program is in Environmental Spatial Analysis and includes minors in Earth Science, Environmental Studies, Geography, Geospatial Science, and



Pictured in photo (left to right): Mark E. Chastain, PLS Georgia Board of Registration Member (at time of photograph) and member of the IESA Industry Advisory Board; Jesse Gunnin, PLS and Foothills Chapter President; Dr. Jeff Turk, Director IESA (Lewis F. Rogers Institute for Environmental & Spatial Analysis – University of North Georgia); Ron Wickle, PLS and Foothills Chapter Representative. \$3,000 check presented on behalf of Foothills Chapter on July 14, 2021.

Space Studies. The program also offers an associate degree in Geospatial Engineering Technology, a Geomatics Graduate Certificate, and an undergraduate Land Surveying Certificate which fulfills the 18 semester hour requirement for licensure as a Land Surveyor in Georgia. Besides a full time staff in the affiliated sciences, IESA has two part time professors who are PLSs and is currently advertising for a full time PLS professor as the program has outgrown the initial staffing bandwidth. The title of the new position will be Senior Lecturer of Surveying Practice. Equipment used in the program includes modern total stations, robotic instruments, laser scanners, GPS receivers, and drones.

The undergraduate Land Surveying Certificate program is very popular. Many students are working professionals who are seeking licensure as a Land Surveyor. Approximately half of the students pursuing the certificate already hold bachelor degrees in other fields. The core of the certificate program (and associate degree program) are four land surveying courses: Surveying I (ENVE 2221K); Surveying II (ENVE 2222K); Legal Aspects of Surveying (ENVE 3465), and Professional Practice of Surveying (ENVE 3475K). These four courses are modeled after the Georgia Board of Registration's requirements for applicable Land Surveying course following the change in the law of 2018 and subsequent Board Policy. They are offered as evening classes. The remaining credit hours can be chosen from the following offered courses: Fundamentals of Unmanned Aerial Systems (ENVE 1105K and GISC 1105K), Terrestrial LIDAR Methods (ENVE 4401); Aerial Geomatics Methods (ENVE 4402K), Geographic Information Science (GISC 2011), Geospatial Science and Technology (GISC3021K), Geospatial Science and Technology II (GISC 2022K), or Global Navigation Satellite Systems (GISC 3012K). Besides adding another professor, there is discussion of adding two other courses in the near future: Field Procedures and Evidence Evaluation, and Advanced Legal Aspects.

Since the implementation of the NSF grant in 2017, the program has risen quickly and consistently. Surveying I, which replaced an earlier Plane Surveying course in 2017, has had 99 students since then. Surveying I is a requirement for the bachelor degree regardless of concentration or minor. Surveying II was first offered in 2019 and has had 37 students. Legal Aspects was first offered in 2018 and has had 63 students. A second offering was added in 2021, it is now available in both Fall and Spring semesters. Professional Practice of Land Surveying has been offered since 2019. It is offered summer semester, and has had 27 students in the two summer semesters that it has been offered. As of spring semester 2021, the program currently has 70 students pursuing the BS in Environmental Spatial Analysis (all concentrations and minors included), 10 majoring in the AS Geospatial Engineering Technology track, and 11 declared for the Land Surveying Certificate. IESA has already conferred 8 AS degrees in Geospatial Engineering Technology and 8 Land Surveying Certificates. These combined with other students who only needed one or two courses account for approximately 15 new Georgia PLSs in just the last 2 years.

Being a part of IESA has many advantages for the surveying program. Whether concentrating in Geology, GIS, Geospatial Science, or Environmental Science, all BS students must take Surveying I. This adds a level of appreciation and understanding of surveying that is not found in other programs. It also provides exposure to land surveying as a possible career to the other students. Several students have already taken surveying courses beyond Surveying I to fulfill in-major elective requirements. As land surveying has grown away from the civil engineering field over the last few decades, the IESA program offers a learning environment where many future professions in the various related fields are able to network together and better understand the other fields. As word of the program spreads, it continues to grow. IESA has a growing contingent of supporters in the land surveying field in north Georgia. The program also has a growing number of students who are recipients of SAMSOG/SAMSEF scholarships. The future is bright for this young program that's working hard to fill a growing need in the surveying profession in Georgia.



August 6, 2021

Mr. Dean Olson
Treasurer
Surveying & Mapping Society of GA
PO Box 778
Douglasville, GA 30133-0778

Dear Mr. Olson,

I was delighted to learn of your donation in support of the IESA - Gainesville at the University of North Georgia for the 2021-2022 academic year.

Your generosity will truly make a difference in the lives of our talented and deserving Nighthawk students, cadets, and student-athletes. Your gift will provide important momentum to the students who need it most as they learn and grow into the future leaders of the North Georgia community and beyond.

Thanks to you, UNG remains one of only six Senior Military Colleges in the nation and a State Leadership Institution in Georgia. You play an important role in encouraging growth, increasing knowledge, and empowering our students and cadets to reach their full potential.

Gifts like yours allow the university to bring in more distinguished faculty to each of our campuses, create environments where learning can flourish, and help students achieve their academic and professional goals that they otherwise might not achieve.

Thank you again for making a difference at UNG and enhancing the educational experience for our next generation of leaders.

Sincerely,

Jeff Tarnowski
Vice President
University Advancement

Blue Ridge Cumming Dahlonega Gainesville Oconee

P.O. Box 1599 | Dahlonega, Georgia 30533 | 706.867.2873 | Fax 706.864.1649 | ung.edu

The University of North Georgia is designated as The Military College of Georgia and as a State Leadership Institute.



National Trig-Star Committee Selects Winners of the National Trig-Star and Teaching Excellence Awards

The National Contest participants completed a questionnaire which was submitted along with their completed test. The questions relate to the participants high school achievements and interests, college aspirations, and career goals. The following responses were received to two of the questions posed:

What have you learned from this experience with Trig-Star? Would you recommend this for other students to experience?

- I've learned that surveying is an interesting & sometimes engaging task: I would recommend it to other students certainly.
- I experienced the practical math. Since it will help students understand better what the purpose of learning math is. Of course, I will recommend.
- I learned a lot with Trig-Star. Before doing it, I did not know much about Trigonometry, just the basic right triangle stuff. Trig-Star allowed me to learn more about Trigonometry and to think more outside the box. I would definitely recommend this for other students to experience.
- Trig is very useful and appears in our daily life. Need to think outside the box and I had a lot of fun solving these trig problems. I highly recommend this to other students; it is fun to solve these problems.

Have you ever thought about a career in surveying and engineering?

- I have thought about a career in surveying as one of my options. I am looking into architecture or an engineering degree.
- Yes, it has crossed my mind and is now a backup plan.
- Prior to the test I had only ever considered engineering, however surveying does sound interesting.

For more information about the NSPS awards and scholarship programs, please contact James M. Anderson, RLS, P.O. Box 894, Statesboro, GA 30459, phone: 912-764-2002, fax: 912-489-6635, email: jima@andersonlandsurveyors.com



Remote Mapping Group provides remote sensing mapping services using LiDAR and imagery sensors on various platforms including:

- UAVs/drones
- Vehicles
- Boats
- ATVs
- Golf carts
- Backpacks



Aerial Photogrammetry



Aerial LiDAR



Mobile LiDAR Mapping

Providing remote mapping services to include large and small tracts and corridors.

We can deliver various final data formats that include AutoCAD, MicroStation, LAS, LAZ, ASCII or custom.

Contour maps, point cloud feature extraction, ortho-mosaic, 2D or 3D data formats.

FAA licensed pilots. AUVSI-TOP & ASPRS certified.

Licensed in:

- Georgia
- Florida
- Alabama
- Tennessee
- North Carolina

Call us for a quote!

t: 770.604.1796

e: info@remotemappinggroup.com

w: www.remotemappinggroup.com

When location is everything...

- Reduce Utility Conflicts and Change Orders
- Avoid Construction Delays
- Improve Bid & Construction Documents
- Increase Safety
- Lower Jobsite Injuries



Providing accurate underground utility locating since 1990



RHD
Services

404-874-8585

rhdservices.com

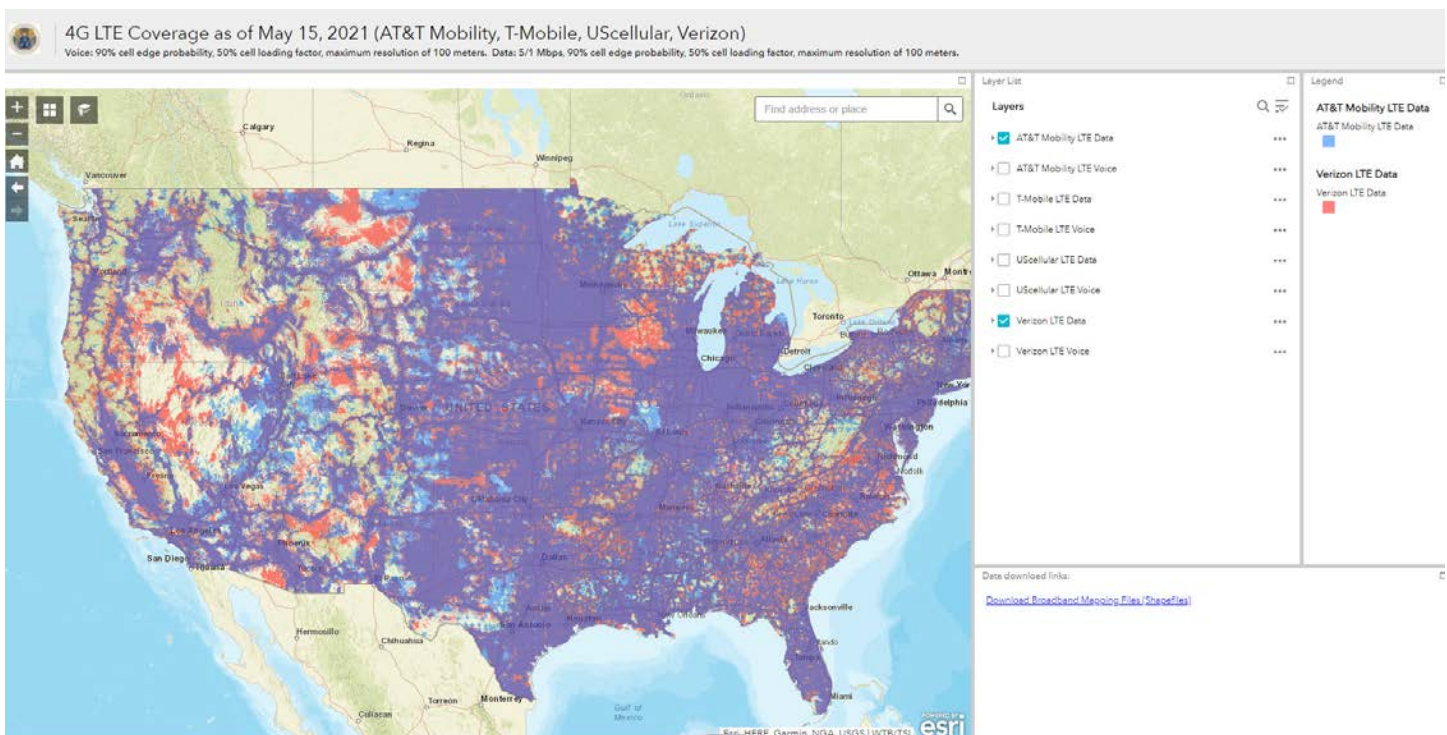


NSPS Fall meeting at the Hyatt Lodge in Oak Brook, IL - September 23-25.
The PAC Golf Outing will be Wednesday, Sept 22nd.
Workshops will be held Friday afternoon from 1:00 to 5:00.



FCC Releases First-of-its-Kind Mobile Broadband Map

The Federal Communications Commission (FCC) last week published a new map showing mobile coverage and availability data in the United States. This information was voluntarily submitted by the country's largest wireless providers prior to the FCC's Broadband DATA Act requirements going into effect. This is the first public map showing updated mobile coverage released by the FCC and represents a significant improvement over other data previously published by the agency. It also serves as a public test of the standardized criteria developed to facilitate improved mapping under the Broadband DATA Act. This map provides a preview of how the mobile data the FCC will collect under the Act's standards will look when mapped. The FCC claims that never before have maps been created using these new, standardized mobile data specifications, which will improve the uniformity and consistency of broadband availability data collected by the FCC. This map will allow consumers to search by specific address to better understand whether they should be able to make and receive voice calls or use wireless data. The map separately shows 4G LTE broadband data and voice mobile coverage as of May 15, 2021, for each of the nation's four largest mobile carriers.



Stolen Equipment

It seems as though reports of stolen equipment continue to be commonplace. If you would like your equipment added to our registry, email the following information to info@nsps.us.com

1. Description of Instruments including Serial Number
2. Location where equipment was stolen, include nearest Town and State
3. Date stolen
4. Contact person to provide information, include Phone and/or Email

The registry site is <https://www.nsp.us.com/page/StolenEquipment>

Request your U.S. Sentors Co-sponsor the S.2166 the RETAIN Act

NSPS has endorsed the RETAIN Act (S. 2166) introduced last month by Sen. Jim Inhofe (R-OK), pictured here with NSPS Executive Director Curtis Sumner. Current cosponsors include Tammy Duckworth (D-IL), Mike Rounds (R-SD), and Jack Reed (D-RI). Please contact both of your U.S. Senators to request co-sponsorship of this legislation which tackles the issue of GPS interference by Ligado (formerly Lightsquared).

Individual members, as well as state society staff and leadership are encouraged to support this important legislation. Bullet points and a template letter are available for use when contacting your U.S. Senators or when sending letters or emails to their offices. Remember to ask for action by your U.S. Senators! "Will you cosponsor S. 2166?" If needed, you may contact John "JB" Byrd with any questions as you prepare and conduct outreach to U.S. Senators via his email: jbyrd@mwcapitol.com. For more information, bullet points, and template letter, contact Ginger Jones.

Executive Order Targets Occupational Licensing

President Joe Biden recently issued a new executive order aimed at cracking down on anti-competitive practices in technology, labor, and numerous other sectors. The sweeping order, which includes 72 actions and recommendations that involve more than a dozen federal agencies, is intended to reshape the thinking around corporate consolidation and antitrust laws, according to a White House fact sheet. Among the activities the White House claims to be anti-competitive is occupational licensing. Overly burdensome occupational licensing requirements that impede worker mobility and suppress wages also restrict competition. Today, almost 30% of jobs in the United States require a license, up from less than 5% in the 1950s. Fewer than 5% of occupations that require licensing in at least one state are treated consistently across all 50 states. That locks some people out of jobs, and it makes it harder for people to move between states—particularly burdening military spouses, 34% of whom work in a field requiring a license and are subject to military-directed moves every few years. The President's rationale, "And, while many occupational licenses are critical to increasing wages for workers and especially workers of color, some overly restrictive occupational licensing requirements can impede workers' ability to find jobs and to move between States." In the Order, the President "Encourages the FTC to ban unnecessary occupational licensing restrictions that impede economic mobility."

New NTIA Broadband Map Criticized in the Senate

Sen. Roger Wicker (R-MS) has asked the National Telecommunications & Information Administration (NTIA) to review its broadband data collection, suggesting it is using "woefully inaccurate" data that threatens the effectiveness of billions of dollars in broadband subsidies. Accurate data collection has been a big issue, particularly at the FCC, as the need for universal broadband grew during the COVID-19 pandemic and the spotlight on the digital divide, both rural and urban, grew stronger. Last month, NTIA released what it was billing as the first interactive map showing "key indicators of broadband needs across the country." The Administration said the "Indicators of Broadband Need" interactive mapping tool illustrated the digital divide to the public. President Biden has proposed more than \$100 million in broadband subsidies to try and close that divide.



Trail Restoration at Fort Pulaski

Frank Gaddy, PLS of Gaddy Surveying & Design and Robert Armstrong, PLS of the National Park Service worked together to obtain survey data necessary for the future restoration of the McQueens Island Trail at Fort Pulaski near Savannah, Georgia. The historic trail built on the former Savannah & Atlantic Railroad line was damaged by recent hurricanes. GPS simplified data collection along the tidal marsh where elevations varied from 3 to 5 feet, NAVD' 88.



Technical Searches offers courthouse title research, utility data and relevant information from governing entities for land surveyors. Clients are given the completed research in a digital folder or file, sent via a cloud based service.

Extensive knowledge and proficiency utilizing many websites in the county tax offices, G.I.S. departments, and deed rooms. Exceptional attention to detail, organization, and critical analysis with cross referencing of all documents.

JANE G. KENNA

404.312.6734 c.
janekenna@technicalsearches.com
www.technicalsearches.com



DID YOU KNOW...

James Camak, the surveyor that set the "Camak Stone" at the Georgia, Tennessee, and Alabama corner was also President of the Georgia Railroad?



FROM EXECUTIVE DIRECTOR

Ginger Jones

THANK YOU ATTENDEES, GUESTS, SPONSORS, AND SPEAKERS FOR A GREAT MEETING IN JEKYLL ISLAND, GEORGIA. More than 140 participated in some part of the weekend. Thank you SPONSORS [Allen Precision Equipment](#), [eGPS Solutions](#), [Leica Geosystems Solutions Center](#), and [Lengemann Corporation](#). On behalf of all the attendees, my sincere appreciation goes to Grant Shepherd for planning an interesting and interactive program, Teeple Hill for booking the band and assisting with the Golf Outing, Dean Olson for assisting with registration, transportation and photographs, and Lynne Shepherd for leading the Auxiliary program.

The 21st Annual Ski Bashinski Golf Outing was held at the Jekyll Island Golf Club where 32 players enjoyed a beautiful day of golf, lunch, and beverage cart sponsored by Allen Precision Equipment and Leica Geosystems. For the first time in my tenure, Teeple Hill, golf outing coordinator was on the winning team including Bryan Hunnicutt, Tom Peay, and Mike Woodley; team score 66. They edged out one of 2 mixed teams, by 1 stroke. Congratulations to our second-place team Ron & Debra Smith and William & Mandy Shepherd. \$280 was raised for SAMPAC at the tournament by selling tee blasters and mulligans.

Thank you exhibitors: [Carlson Equipment & Software](#), [Duncan-Parnell](#), [eGPS Solutions](#), [Geo Slam](#), [Kucera International Inc.](#), [Leica Geosystems](#), [Lengemann Corporation](#), [Remote Mapping](#), [RHD Services](#), and [Topo DOT](#). Local band "The Wharfratz" were back again at the Welcome to the Island Low Country Boil buffet! This year they were assisted by 3 SAMSOG members Sean Byers, Buck Coulter, and Jesse Gunnin who closed out the evening with a lively rendition of David Allan Coe's "You Never Even Call Me By My Name." The band was so impressed, they sent me a "WOW! What a great time" the next day. In addition to the golf outing funds, the annual "Not so Silent Auction" raised a record \$6,255 for the Surveying and Mapping Political Action Committee. Special thanks to Trent Turk and Mitch Paulk for a great effort.

Please note the 2022 Technical Seminar and 2022 Annual Meeting and Summer Convention information below:

THURSDAY, 1/13/2022 AND FRIDAY, 1/14/2022 (A HALF DAY MIGHT BE ADDED SATURDAY, 1/15/2022)

Sonesta Gwinnett Place Atlanta
1775 Pleasant Hill Road, Duluth

Standard rooms have been blocked for meeting attendees at \$114++ per night. Make your reservations TODAY by calling 1-800-766-3782 and use Group Code SAMSOG1122022, or use the link at samsog.org
DETAILS COMING SOON!

THURSDAY, 7/21/2022 THRU SATURDAY, 7/23/2022

Hyatt Regency Savannah (located on River Street)
Two Bay Street, Savannah

Golf Tournament – Spouse/Guest/Companion Program – Silent Auction – Installation of Officers & Directors
Standard King or Double/Double = \$215++. Reservations and more details will be posted at samsog.org as they become available.

If you have any questions, please do not hesitate to ask.

Ginger Jones



Summer Meeting HIGHLIGHTS





The 21st Annual Ski Bashinski Golf Outing Winning Team received matching Jekyll Island Club logo shirts.

Left to right: Roger Wheeler accepting on behalf of player Tom Woodley with Lengemann Corporation, Tom Peay, Jr. longtime Survey member and owner/operator of Frontline Surveying and Mapping, Inc. and Teeple Hill, incoming SAMSOG Vice President and Annual Meeting Committee Chair and Partner at Shupe Surveying Company. Not pictured: Bryan Hunnicutt, Leica Geosystems.





SURVEYING AND MAPPING SOCIETY EDUCATION FOUNDATION (SAMSEF)

The 2021 Equipment Raffle was postponed from January 15th, 2021 (Technical Seminar) and held at the Annual Meeting & Summer Convention Surveyor's Lunch. Duncan-Parnell donated a Spectra Geospatial SP 85 GNSS Single Receiver Kit including a Ranger 7 Data Collector, QWERTY Survey Pro Standard, TSC7 Pole Mount, Rover Rod, BiPod, Pole Bag, and a 12-month subscription of VRSNOW Georgia real-time correction service: total value = \$22,000.



Left to Right: Byron Freeman, Winner of the SAMSEF Equipment Raffle and Chuck Drouillard, Duncan-Parnell.



Left to Right: Chuck Drouillard, Duncan-Parnell and Equipment Auction Winner Angel Marrero.

Chuck Drouillard, Duncan-Parnell, assisted in drawing 10 tickets. The 10 tickets were then put back in the bowl and tickets were "drawn down" until only 1 person remained: the WINNER.

Byron Freeman, SAMSEF Trustee Board Chairman was the last one standing however, he donated the equipment package back to SAMSEF to be auctioned at the lunch. After intense bidding, Angel Marreo, Southside Surveying & Planning, won the equipment. This raffle resulted in the most money raised for SAMSEF, total of \$16,720! Thank you Duncan-Parnell, Byron Freeman, and everyone who purchased a ticket for your generosity. This money will flow through directly into scholarships for Land Surveying students.

CONFIDENCE

Certified.

NSPS
CST
CERTIFIED SURVEY TECHNICIAN

**No matter what the future holds,
prepare to meet challenges head-on.**

Future-proof your resume by becoming
a Certified Survey Technician (CST).

This unique four-level program
indicates official recognition by
NSPS that a person can perform
tasks at a specific technical level.
Show what you can do! Decide
between the office or field track.

cstnsps.com

+1 (240) 439-4615 Ext. 112



JOIN THE FAST TRACK!

All-new quarterly online classroom at learnCST.com

SAMSOG's Past Presidents' Breakfast was held Saturday, July 17th, 2021. A total of 12 Past Presidents attended.

Front row left to right: Lonnie Sears, Phillip Roberts, Dan Collins, Phillip O. Brown, and Jesse Collins. Back row left to right: Trent Turk, Jim Anderson, Frank Gaddy, Roger Purcell, Dean Olson, Robert Armstrong, and Tom Hurley. SAMSOG is very fortunate to have so many active Past Presidents.





eGPS Solutions held a drawing at their booth for a Plan B Subscription to benefit SAMSEF.

The annual Plan B Subscription is a \$1,650 value and allows the user to connect to our statewide GNSS base network. Tickets were sold for \$5 each.

eGPS supports Land Surveying education in Georgia and nationwide and believes it is imperative to get students interested in land surveying and other geospatial career paths. The contribution furthers outreach and education efforts by SAMSOG.

Pictured left to right: Ron Godwin, Four Corners Surveying and winner of the eGPS Plan B Subscription drawing and Lonnie Sears, eGPS President.







NEW

Zoom95 robotic
total station
+
X-PAD software

One Solution is All You Need

Get a Demo

Contact eGPS Solutions, Inc.
(Authorized GeoMax Dealer)
info@egps.net 770-695-3361

GEOMAX



Trent Turk

Surveyor Says! The NSPS Podcast – Episode 90

Host Curt Sumner talks with Trent Turk about the [SAMSOG Education Foundation, Inc. \(SAMSEF\)](#) which was established by the Surveying and Mapping Society of Georgia. The 501c3 foundation was created to provide a tax deductible mechanism for donations of money and other gifts which can go directly to students to assist in their education related to a career in land surveying in Georgia.

Listeners can learn more about how the Foundation operates at: https://www.samsog.org/mpage/microsite2_subpage2_YMBLD

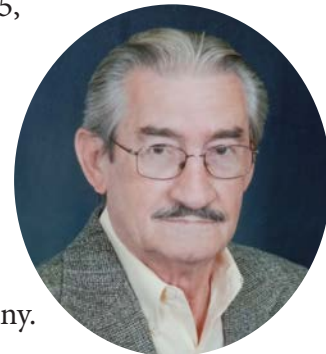


In Memoriam...

Charles Benton (Ben) DeVane, Georgia PLS 1504, GA PE

Charles Benton (Ben) DeVane, GA PLS 1504, GA PE born on October 11, 1935, in Rome, GA, died July 3, 2021, at his home in Quitman, Georgia.

Ben was a civil engineer and surveyor. He served as President of Surveying and Mapping Society of Georgia (SAMSOG) for many years and in the Surveying and Mapping Society of Georgia, he held the office of Quitman County Surveyor. Mr. DeVane was a member of Society of Civil Technicians, Tau Alph Pi National Honor Society, served in the Army and was one of two selected to train with First Battalion, Royal Scots, British Forces Berlin, Germany. Ben was also a member of the American Congress of Surveying and Mapping, Surveyor of the Year for the state of Georgia, past Governor of the National Society of Professional Surveyors, and engineer for the City of Quitman.



Byron L. Farmer, PLS 1679



Byron L. Farmer, age 80, passed away on April 7, 2021. Byron resided in Milledgeville, Georgia.

Graduating from Southern Technical Institute in June 1961 with a degree in Civil Technology equipped him for a 34-year career with the State Highway Department (DOT) combined with 50+ years as a Professional Land Surveyor. Byron was a longtime member of the Surveying and Mapping Society of Georgia and attended many meetings where he made many friends. Always smiling, people were drawn to him, and he always had a joke or humorous story to tell. He will be missed in the Land Surveying community.

Daniel (Dan) Trenholm Baker, PLS 2327

Daniel (Dan) Trenholm Baker, PLS 2327, son of the late Trenholm G. Baker, PLS and brother of Joseph Baker, PLS, passed away suddenly and unexpectedly on Sunday, June 27, 2021. Dan was a widely respected land surveyor in the NW GA area and operated Dan T. Baker, LC, PC, in Cartersville, GA.

SAMSOG SUSTAINING MEMBERS

AIRWORKS

Nadine Natividad
226 Causeway Street #102
Boston, MA 02114
Phone: 209-803-8274
Email: nadine@airworks.io
www.airworks.io

Allen Precision Equipment, Inc.

Leslie Taylor
1550 Boggs Road
Duluth, GA 30096
Phone: 770-279-7171
Email: ltaylor@allenprecision.com
www.allenprecision.com

Carlson Equipment & Software

Michael Gassman
1022 Autumn Breeze Drive Street
Augustine, Florida 32092
Email: michael.gassman@carlsones.com
www.carlsones.com

Construction Laser, Inc.

Stephen Bridges
1025 Henry Parkway Connector
McDonough, GA 30253
Phone: 770-898-6505
constructionlaser@gmail.com
www.constructionlaser.net

Duncan-Parnell

Mark Russell
4405 International Blvd, Ste B115
Norcross, GA 30093
Phone: 770-931-0844
Email: mark.russell@duncan-parnell.com
www.duncan-parnell.com

eGPS Solutions, Inc.

Lonnie Sears
4317 Park Drive, Suite 104
Norcross, GA 30093
Phone: 770-695-3361
Email: lsears@egps.net
www.egps.net

FLT Geosystems

Scott Forrest
9639 Bent Oak Court
Jacksonville, FL 32257
Phone: 904-616-4749
Email: sforrest@fltgeosystems.com
www.fltgeosystems.com

GeoMax Positioning

Mandy Clayton
Baton Rouge, LA 70806
Phone: 225-335-7058
Email: mandy.clayton@geomax-positioning.com
www.geomax-positioning.com

Geo-Tronics

Troy Deaton
723 AEDC Access Road
Hillsboro, TN 37342
Phone: 931-614-0784
Email: troy@geo-tronics.com
www.geo-tronics.com

Georgia Surveyors Exchange

Randall Brown
101 N. Gamble Road, Suite A
Savannah, GA 31405
Phone: 912-238-1688
Email: rbrown@georgiasurveyors.com
www.georgiasurveyors.com

GPI Geospatial

Allen Brock
508 West 5th Street, Suite 150
Charlotte, NC 28202
Phone: 704-540-0087
Email: abrock@imcmapping.com
www.imcmapping.com

Hayes Instrument Company

Julie Tucker
502 S. Cannon Blvd.
Shelbyville, TN 37160
Phone: 931-684-0555
Fax: 931-685-9505
Email: julie@hayesinstrument.com
www.hayesinstrument.com

Henssler Financial

Ken Harmon
3735 Cherokee Street
Kennesaw, GA 30144
Phone: 770-429-9166
Email: KHarmon@HENSSLER.com
www.henssler.com

Leica Geosystems Solution Center

Bryan Hunnicutt
1550 Boggs Road, Suite 100
Duluth, GA 30096
Phone: 678-708-6546
Email: bryan.hunnicutt@leica-geosystems.com
www.leica-geosystems.com

Navigation Electronics, Inc.

Jeannine Hightower
4275 Shackleford Road, Suite 175
Norcross, GA 30093
Phone: 770-729-8005
Email: jeannine@neigps.com
www.neigps.com

RHD Services, Inc.

Joel Davis
630 10th St., NW
Atlanta, GA 30318
Phone: 404-874-8585
Email: joel@rhdlocating.com
www.rhdservices.com

Technical Searches, Inc.

Jane G. Kenna
2052 Dover Hill Place
Atlanta, GA 30345
Phone: 404-312-6734
Email: janekenna@technicalsearches.com
www.technicalsearches.com

UtiliSurvey, LLC

Hans J. Wonneberger
154 Grant Road
Fayetteville, GA 30215
Phone: 404-312-6912
Email: hans@utlisurvey.com
www.utlisurvey.com

FLOOD SPECIALIST

ELEVATION CERTIFICATES

FLOOD INSURANCE WAIVER CONSULTATION

FLOOD MAP REVISIONS – LOMA's, LOMR's

LAND SURVEYOR-TENNESSEE AND GEORGIA

CERTIFIED FLOODPLAIN MANAGER-ASFP

CERTIFIED FLOODPLAIN SURVEYOR – TN-003

BART CRATTIE

423-888-6297

272 Valentine Drive – Lookout Mountain, Georgia 30750

bart@nilessurvey.com

Georgia Land Surveyor
Surveying and Mapping Society of Georgia
PO Box 1113
LaGrange, GA 30241

PRST STD
US POSTAGE
PAID
HUNTSVILLE, AL
PERMIT 93

DOES YOUR GNSS RECEIVER LIKE THE PINES? **OURS DOES. THE BRx7**



**THE HIGHEST PERFORMING,
MOST REASONABLY PRICED,
BEST-SUPPORTED
GNSS SOLUTION AVAILABLE TODAY**

GET A DEMO AND SEE FOR YOURSELF!

Carlson Equipment & Software

904-536-0470 | www.CarlsonES.com

michael.gassman@carlsones.com

800+ channels
11+ hours of life with dual,
hot-swappable batteries
SureFix for extreme confidence
in your RTK Solution
Exceptional performance under canopy
Long-range, spread spectrum
dual-band UHF radio
Magnetic interference-free tilt
Rugged, compact IP67-rated housing
Optimized for SurvCE|PC
Carlson Listen-Listen ready

