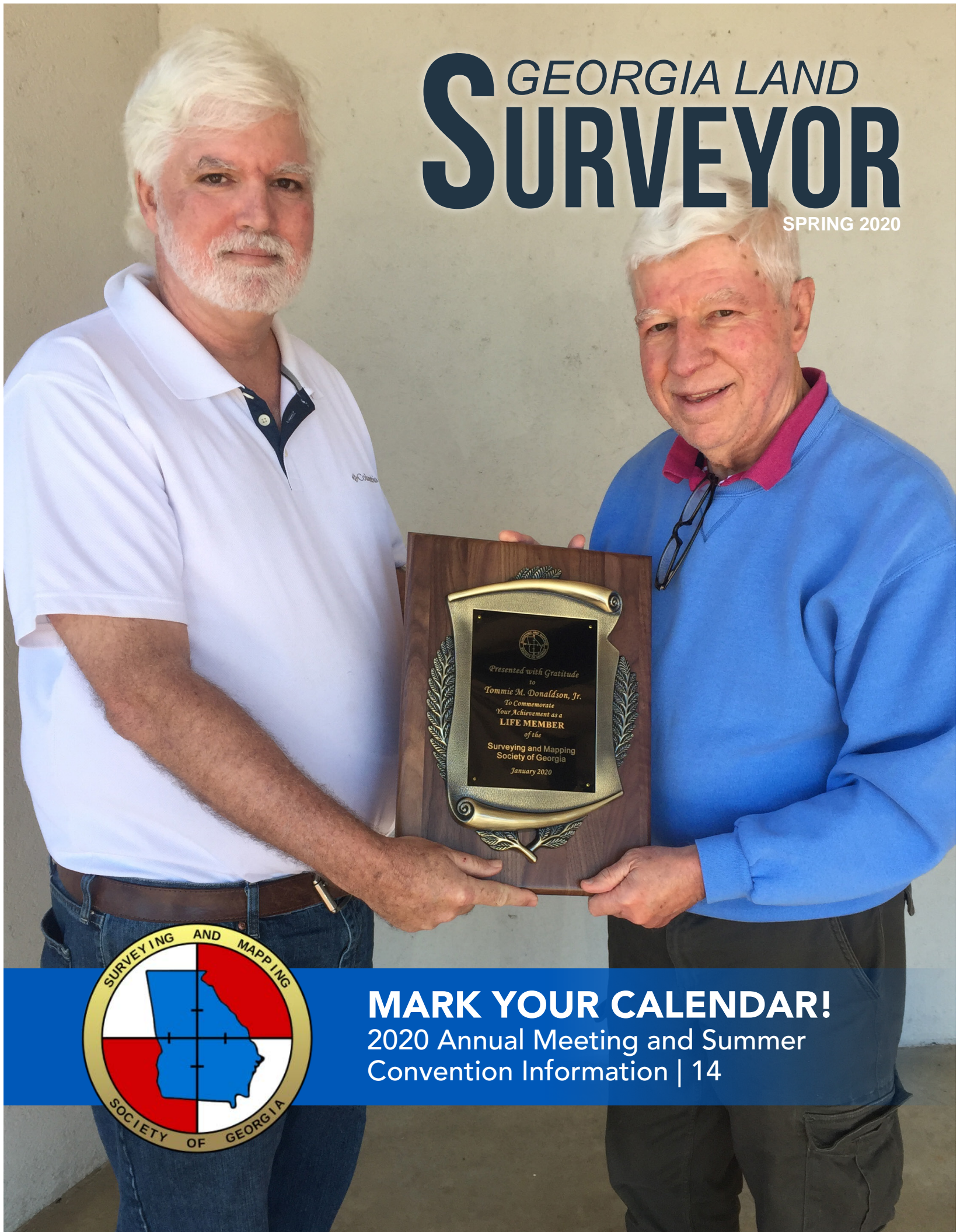


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Cover Photo: At the Board and General Membership meeting March 7th, 2020, President Phillip Brown presented Tommie Donaldson Life Membership. Phillip remarked, "In some form or fashion, Tommie shaped the professional career of every person in this room. He has served the Land Surveying profession as a member on the State Board of Registration, as President, Director, Committee Chairman and held many other positions in this society, as an owner/founder of a company, and as an employer and a friend to many of you. Tommie has helped this profession evolve and move into the future by mentoring potential in individuals, having the ability to obtain and retain clients, and by advancing and embracing technology. Without his help, the landscape of our profession in Georgia would look very different." He added "It is my honor and privilege to present this plaque as a token of appreciation for the work you have done for this society and our profession. Thank you for allowing me the ability to try new ideas and grow within our profession. You have made a difference to each of us who practice Land Surveying in the state of Georgia."

GARY KENT / PS



Reconnaissance

Liability, Battles and Wars

There is a trend that was addressed in this column about two years ago, but that deserves another look since it is a problem that will likely get worse before it gets better.

Surveyors frequently seek guidance when they are asked to sign a seemingly innocuous affidavit or certificate for a small fee. In conjunction with or sometimes completely separate from that request, the surveyor is told that the caller has a poor

copy of her ten-year old survey and can she simply provide a clean copy? Or maybe there is a request to "update" a 20-year old survey ("We only need an update; nothing has changed!").

Surveyors need to be aware that such simple requests serve a purpose that is unrelated to surveying, but that will burden surveyors with high liability if they let them.

Below is a fairly typical example of a surveyor's affidavit; there are many versions, most of which are not quite this egregious.

Without going into a long discussion on the myriad clauses that are problematic in this document, suffice it to say that surveyors should not sign something that even remotely resembles this. There are many reasons including, but not limited to, state standards, the ALTA/NSPS Standards, the normal standard of care, client and title company expectations, the possibility of persons being misled, and future misunderstandings over what the affidavit represents and what it does not.

Surveyor's Affidavit

The undersigned states that he/she:

1. is a professional surveyor licensed in the state of _____.
2. Is familiar with the real estate described in the attached Exhibit A ("Real Estate")
3. has reviewed the survey of the Real Estate previously prepared by his/her firm and certified on [date] ("Survey").
4. is generally familiar with the improvements on the Real Estate and with that Survey.
5. has inspected the Real Estate and found no material changes to the improvements on the Real Estate or to the improvements adjoining the Real Estate since the date of the Survey.
6. has found that, to the best of his/her knowledge, the improvements on the Real Estate are within the boundary lines, easements lines and setback lines, if any, of said property, and that there are no encroachments of improvements on adjoining property onto the Real Estate, and that there are no assertions being made by an adjoining property owner, nor by the owner of Real Estate against any adjoining property owners, as to the location of boundary lines or disputes as to occupancy of any portion of their respective property.

This affidavit is being made to induce [title company] to delete the standard survey exception from a title insurance policy to be issued in connection with the purchase/financing of the Real Estate.

The undersigned hereby agrees to indemnify and hold harmless [title insurance company] from any claims, demands or expenses, including attorney fees, which shall be sustained due to any misrepresentations or inaccuracies contained herein.

"How many of you have been told you were the only surveyor who would not do something?"

Let the requestor complain. Let them tell you there is no additional liability. Let them tell you that you are the *only* surveyor they ever encountered who had a problem with it. (How many of you have been told you were the only surveyor who would not do something?) All of those statements are obfuscations.

Is this a sign that title companies do not like surveyors? Nothing could be further from the truth. The affidavit above probably did not even originate with the title company. In fact, title companies generally love surveyors. Many title companies wish they had a Land Title Survey on literally every property they insure. But that is simply not

continued on page 39

Kent, continued from page 40

going to happen; that proverbial train left the station years ago.

Then why is this happening? There is tremendous pressure in the real estate transaction industry to close mortgage loans more quickly. That pressure comes from all directions—sellers, buyers, lenders and the government (all for their own reasons)—and is aimed at moving that ubiquitous closing date up in time.¹ In order to accomplish that goal, extra time, costs and problems must necessarily be weeded out of the closing process. Surveyors are far from the only businesses that are impacted; in fact, title companies may actually be the most affected. But surveyors should know what to do to avoid being simple detritus in the process.

“There are few innocent requests for a copy of an old survey.”

There are few innocent requests for a copy of an old survey, and—despite frequent assurances—the surveyor is often taking on new liability in providing that copy. The more parties that have a copy of a survey, the more potential liability the surveyor incurs. Even when a surveyor provides a free copy of an old survey, there can be associated liability—particularly if the surveyor knows it may be used as part of the documents related to a new transaction.

Seemingly simple requests to provide surveyor’s affidavits in lieu of surveys are nothing of the sort. Surveyors should read them carefully and decide if they can honestly sign them. They should also give careful consideration to providing “updates” of old surveys without a complete review of the previous survey, a site visit, review of current documents (including adjoining), checking monuments and confirming that all current ALTA/NSPS and state standards have been met.² They do not have to fold under the pressure, smokescreens and insults.

Practitioners, the profession and its licensing boards today may overcome challenges like these, and others more specifically related to technology, but

“Even if you are on the right track, you’ll get run over if you just sit there.”

—Will Rogers”

in the next few decades—probably sooner—surveying will be consigned to its roots in boundaries and the preparation of property descriptions. Societal needs, external pressures and perhaps most notably, technology, will eventually win over the rest of what is, today, the practice of surveying.

It is important to note; however, that the future of the surveying *profession* and the future of the surveying *business*—while necessarily related—are two entirely different matters. One’s future surveying business can encompass most of what it does today, and more, even though the specific areas of professional practice will likely be narrower. With some entrepreneurship, and if the profession pays attention and continues to learn and evolve, the future of both are bright. As Will Rogers said, “*Even if you are on the right track, you’ll get run over if you just sit there.*” ■

Gary Kent is Director, Integrated Services at The Schneider Corporation in Indianapolis. He is past-president of ACSM and chairs the ALTA/ACSM Committee for NSPS and the Liaison Committee for ALTA. He is on the Indiana Board of Registration and lectures both locally and nationally.

¹ According to a recent three-year study by Lending Tree, the length of time to close a mortgage has decreased from 74 days in 2017 to 40 days in 2019. <https://bit.ly/2Vxo6EK>

² Persons familiar with this column and seminars presented by the author know that he takes great exception to the term “update.” There is no such thing. Every “update” is a new survey because it purports to represent the current conditions on the property pursuant to the current ALTA/NSPS Standards. If the surveyor has performed a survey of the property previously, the client might see a related time and cost savings, but it is a still a new survey.

“Liability, Battles and Wars” by Gary Kent originally appeared in the Nov 2019 issue of *The American Surveyor*.

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REMINISCENCES OF AN OLD SURVEYOR, PART THREE

Revisiting Surveying Equipment From Over the Years



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BY KNUD E. HERMANSEN, P.L.S., P.E., PH.D., ESQ.

This is the third and last article on surveying equipment and procedures that are now relegated to history. I have been surveying for around half a century. I started before electronic distance measuring was common. Transits and steel tapes were the prevailing equipment found in a survey firm. Metal detectors were rare. As a result, I have had experience with surveying equipment that will never be used again by the modern surveyor.

My two previous articles have discussed taping, the compass, and the transit. I shall now delve into other procedures and equipment known and used in historical surveys of which I often took part.

Plane Table

In the early mapping surveys I often participated in, we used the plane table and alidade to prepare a site map and topographic map while in the field. In the days before computers, the plane table (shown above) was an excellent tool to prepare an accurate map in a hasty manner. I have been told that almost all the soil maps prepared in the 1920s and 1930s were done using the plane table and alidade. I had not made my debut on the surveying field at this time so I have no first-hand knowledge of the accuracy of this information.

The plane table was a large board, the dimensions of which I can no longer remember. It was the size of a typical drawing board that engineering and surveying students once had to purchase when studying in their major. This board was mounted on a tripod. The board came with the tripod mounting ring fastened to the underside of the board. The mounting ring was of a size that was equivalent to the transit mounting ring. The board, once mounted on the tripod, was set up at waist level. There was no attempt to plumb this over a known station though I suppose there were situations when this should be done. It was possible to do so.

A large sheet of paper was fastened to lay flat on the top of this board using tape or tacks. The alidade was then placed on the board, atop the paper. I

suppose an alidade could be described as a transit scope fastened to a flat scale – the scope being above and parallel to the long length of the scale. Somewhere on the scale was a bubble that was used to level the drafting board or plane table.

With the plane table leveled, a long shanked pin was inserted through the paper into the board. This represented the observer's position. The mapping of the area could now begin.

The rodman, armed with a stadia board, would hold the stadia board at a point to be located by the person at the plane table. Using the stadia hairs apparent when viewing through the scope in the alidade, the distance from the alidade to the stadia board would be determined. On the plane table, the scaled distance would be measured from the long-shanked pin along the edge of the alidade where a point would be marked and labeled on the paper. The orientation of the scale's edge on the alidade being the same direction as the scope is pointing. This procedure was repeated numerous times until the surveyor was satisfied the paper fastened to the plane table was complete with the information necessary for the map being produced on the plane table.

Elevations could be obtained by the simple expediency of setting the alidade level using a scope bubble for this purpose. Most alidades had a plate and Vernier to read a vertical angle that would allow the elevation to be determined by trigonometry.

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Many alidades had what is known as a Beaman scale that would allow calculations without having to look up trig values. I will omit discussing the Beaman scale and how it was used. In truth, I would be rather rusty in remembering how to use it after more than four decades without practice.

The end result is that the survey crew returned to the office with a completed map of the area often including contour lines. The only consistent fault I found with the plane table was the fact that survey work on a hot summer day using a graphite pencil often left the map sheet covered with smudges.

Stadia Board

I have mentioned the stadia board when speaking of using the plane table. The stadia board can be visualized as a level rod with much larger graduations. The stadia board was somewhat wider than a level rod in order to accommodate the larger graduations. The larger graduations allowed for seeing the rod at longer distances.

I suppose reading stadia distances is a lost art. It was a rather simple procedure unless there was trig involved. The difference in the rod readings between the upper stadia wire or hair and lower stadia hair was obtained and multiplied by 100 giving the distance in feet, assuming the stadia board was so marked in feet and decimal parts of a foot. I will confess to reading the stadia rod at ranges that I could only read half of the stadia rod – that is using only the center wire and top wire or bottom wire. In such cases the interval between the middle and upper or lower stadia hair was multiplied by two before multiplying by 100.

In theory if the stadia rod could be read to the nearest 0.01 of a foot, the horizontal distance could be calculated to the nearest foot. Conversely, if the instrument operator made an error reading of 0.01 of a foot, the horizontal distance would be in error by a foot. This precision was acceptable for most mapping projects.

I will say that I met more than one old surveyor that laid off subdivision lots using stadia to the annoyance of the modern surveyor who finds the distances between corner monuments varying by as

I was always impressed that when standing at the instrument, I could see the bright light reflected by mirror on the heliotrope for up to 30 miles away in some cases.



much as two feet with no consistency in the error that would allow a dependable deficiency or an overage to be applied when retracing the lot boundaries. Perhaps I have solved a mystery involving some old subdivisions and corners found.

Heliotrope

I will comment briefly about the heliotrope though its use in private practice was very limited. The heliotrope was an elongated target, fasted to a tripod, and plumbed over a point. The heliotrope I used was composed of two rings along the elongated board with a mirror at the end farthest from the instrument observing the heliotrope.

One heliotrope I used actually had two mirrors that allowed the sun's light to be bounced from the sun using the first mirror of the heliotrope to the mirror

in the back of the heliotrope that then reflected the sun's beam through the two rings to the observer. The double mirrors was required if the sun was behind the heliotrope as it was pointed toward the instrument. The rings in the heliotrope were aimed at an observer standing behind an instrument that was being used to measure angles. The mirror at the rear was adjusted to reflect the sunlight down through the rings toward the instrument operator producing a bright light for the observer to aim upon. Given the sun's apparent movement, the person at the heliotrope had to continuously adjust the mirror. I was always impressed that when standing at the instrument, I could see the bright light reflected by mirror on the heliotrope for up to 30 miles away in some cases.

Subtense Bar

I suppose the subtense bar I used from time to time was more common than a heliotrope in private practice, but not by much. The subtense bar appears as a much shortened level rod rotated from the vertical to be horizontal or roughly parallel to the ground. The subtense bar was mounted in its center on to the top of a tripod. The tripod was centered over a traverse station or control point. From one end of the bar to the other was a known distance. The subtense bar that I used had a sight tube in the center. The bar was rotated about



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the tripod top until the sight tube was centered on the instrument operator. This would put the length of the subtense bar perpendicular to a line between the subtense bar and instrument.

The instrument operator would measure the angle between the ends of the subtense bar. Using trigonometry, the distance between the instrument and subtense bar could be calculated. The accuracy of the distance was a direct function of the accuracy in measuring the angle. The subtense bar was a very useful tool in measuring those distances that could not be taped. I would often use the subtense bar in measuring distances across water bodies. I also used it from time to time when I did not have an extra person to help me tape the distance.

Plumb Bob

I will repeat my statement from my first article and say that I don't believe a plumb bob can be found among the equipment of the modern surveyor. The plumb bob was necessary for taping. It was necessary to hang the plumb bob under the tripod in order to place the instrument over the point, there being no optical plummets on survey equipment at the time. Finally, the plumb bob was required to give back sights and fore sights over marks and monuments in the field. I have heard of more than one employer that docked the pay of an employee that forgot to bring their plumb bob to the field.

The use of the plumb bob would seem rather easy, but it was not. Consider my previous explanation on the use of the plumb bob when taping. Hanging the plumb bob under the tripod to allow the instrument to be centered over a mark required the person to have mastered the art of a slip knot. A slip knot allowed the plumb bob to be raised or lowered depending on the adjustment of the tripod legs and how close over the mark was

I spent many hours using a Leroy set. Probably a quarter of that time was spent getting the ink to flow smoothly out of the pen. Getting ink to flow was an art that usually involved ink on the tongue and lips, not to mention scattered across the vellum or mylar.



necessary to aim the point of the plumb bob. To use other than a slip knot caused a knot to be left in the string. A knot in a plumb bob string was a crime commensurate with wanton destruction of property.

The person had to be adept at wrapping the string around the head of the plumb bob. The wrapped string was fastened in such a manner that a tug would unwind the string without leaving a knot. Many surveyors purchased gammon reels that alleviated this task.

Leroy Set

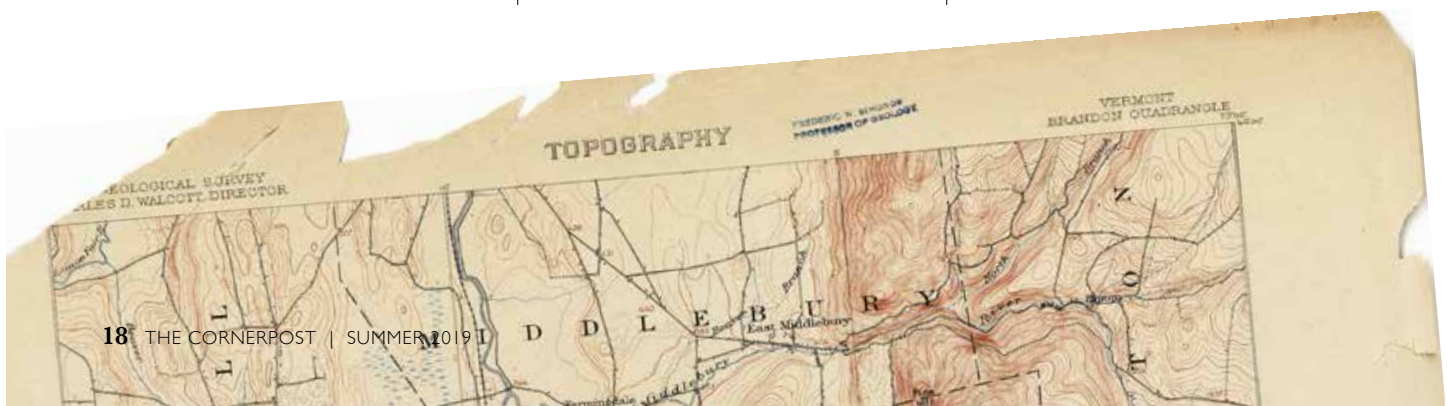
I will depart from surveying equipment in this one instance to speak of the LeRoy set. While it may not be classified as surveying equipment, almost every surveying firm had a LeRoy set unless the firm had a person gifted with beautiful handwriting.

The LeRoy set was a lettering set using lettering templates and a scribe. The scribe had three arms. One arm went into a long slot on the lettering template. A second arm went to a pin that followed the indent of the letter or number in the lettering template. The third arm held a pen that would ink the letter or number on the paper, mylar, or vellum. The letter templates came in different sizes, fonts, and styles. I spent many hours using a Leroy set. Probably a quarter of that time was spent getting the ink to flow smoothly out of the pen. I may have exaggerated this time a

little. Getting ink to flow was an art that usually involved ink on the tongue and lips not to mention scattered across the vellum or mylar. This reminds me that another quarter of the time was spent removing ink that did flow out of the pen but in the wrong location or too copiously on locations without enough pounce. Enough said on that topic as it brings back many frustrating moments.

Chain

I will admit to only using a chain one time. I would be perceived as really ancient had I admitted to frequent use of the chain – so I won't do so. For those surveyors that have never seen a surveyor's chain, the surveyor's chain does not appear like the chain an individual would find in a hardware store. The links in the surveyor's chain are approximately 7.92 inches. Each link is a length of wire with a loop at each end of the wire shank that connects to a ring loop that connects to the loop on another similar link for the chain. A four rod chain will have four brass tags with one to four fingers. One finger is found at the one rod length along the chain. Two fingers are found at the two rod length and so on. When measuring, a surveyor would count the number of rods plus the number of links to the object measured – although many a rural surveyors simply gave the number of rods and perhaps half rods without



bothering to count individual links.

While there is sag in a steel tape, it hardly compares to the large sag found when holding the chain above the ground. Furthermore, every loop in that damn chain seemed to catch and clog with sticks, grass, mud, and other debris gathered when dragging the chain along the ground. To further agitate the temperament of the user – in one case being me – the debris would somehow snag and hold two link loops together thereby doubling the chain back upon itself involving some length of the chain. If there is a log with some small appendage sticking from the log you can count on the link loop snagging that appendage. There were always some vegetation protruding from the ground that would snag the chain. Links soon stretched or even broke. Of course, these problems were all relayed to me since I can't be that old to have personally experienced the agitation caused by measuring with the chain.

Dip Needle



Metal detectors were around since World War II but their widespread use in surveying firms seemed to occur in the mid to late 1970s. Surveying without a metal detector resulted in many pin cushion corners since an existing pin or pipe that was buried to mark the corner was not always found before a new monument was set.

One trick I often employed before owning a metal detector was to hold a compass and slowly float the compass just above the ground and look for twitches in the compass needle. This technique allowed me to find many metal corners just below the ground surface. In the

1960s up to the widespread use of metal detectors, dip needles were commonly used to find the buried metal corners. Dip needles were composed of a box with a long, looped strap. The box contained a magnetized needle and had a window allowing observation of the needle.

Using the long strap to allow the surveyor to stand up, the box was hovered over the ground while the needled was observed. The sensitive, magnetized needle dipped when influenced by nearby metal. By this means, the surveyor could discover if there was a metal pin, pipe, or bar below the ground surface. The dip needle was not as sensitive to buried metal as modern metal detectors. I don't believe I ever found a pin or pipe that was buried more than half a foot below the ground surface using a dip needle.

EDME

Early electronic distance measuring equipment, known as an EDM or EDM, using shortened initials, were a separate item of equipment from the transit or theodolite. Often the operator would have to remove the angle measuring equipment and mount the EDM directly on the tripod. Later, the EDM and angle measuring equipment were configured so the EDM was mounted on the standards of the angle measuring instrument.

The first EDM I used was a tellurometer or cubic tape. A tellurometer was set up on both stations and pointed toward the other station using a null needle to find the optimum pointing. Each tellurometer would determine the distance between the opposing tellurometers. The two distances were averaged. The tellurometer used microwaves to determine a distance. You could switch between speaking to the other operator and measuring a distance. Distances were calculated using a paper form that I shall mention again with the next item of distance measuring equipment.

Later I used a Hewlett Packard laser EDM. With this instrument, you knew you were pointing at the reflector because you would see a bright red light as the laser light was reflected back to the instrument. That probably did not do my eyes any good. Not that standing in the

path of microwaves was healthy.

Both items of equipment, the tellurometer and laser EDM, required a needle be nulled, numbers read, frequencies shifted, and an entire sheet of a paper form employed where various readings were made, entered, and manipulated. I believe the form was published by an IRS agent who first invented the 1040 long form.

Temperature and atmospheric corrections had to be hand calculated. Prism corrections were applied to every measurement of the laser EDM. It was a complicated and time consuming process to determine a distance. Yet, it was far faster and more accurate than obtaining long distances by taping.

If my memory serves me, the Guppy was the first instrument I possessed that gave a distance directly without a lot of data entry on to a form and intermediate calculations. I will not further describe this popular EDM. After the Guppy, the angle measuring and distance measuring were combined into one instrument known as the total station.

These early EDMs were powered by twelve volt batteries. I often used the battery in my car or hauled around a heavy twelve volt battery to power the EDMs. To save weight I later used a motorcycle, 12 volt battery. If my memory serves me correctly, the batteries never seemed to last an entire day. They seemed to always be drained at the farthest point from the road.

I will end discussing the early EDMs with the statement that the horizontal distance always had to be calculated using the zenith or vertical angle. If the EDM was mounted on the standards of the angle measuring equipment, the offset had to be taken into account. Long distances often required numerous prisms stacked upon each other in order to get sufficient light reflected back to the EDM to effectuate a measurement.

GPS

I suppose someone seeing this heading will exclaim that the GPS is not an old piece of equipment relegated to history. If you had seen the equipment I first used,



When I first started surveying, there were no calculators. I used logarithm tables and had to look up trig functions in a book.



you would admit that it *was* historical.

The early GPS equipment was large and cumbersome. Several twelve-volt car batteries were often required to operate the equipment and obtain sufficient satellite data. The GPS receiver couldn't be used at just any time or for that matter any day. There weren't sufficient satellite constellations to allow for 24-7 operation of the GPS.

Depending on the satellite constellation configuration for that day, data could only be collected during a limited time window. I often occupied a station in the darkest hours of the night in order to comply with a predetermined window of opportunity for receiving satellite data. I met more than one police officer who was suspicious of my activities.

Spending hours on a station to obtain sufficient data was common. In fact, multiple observation windows (think days) of observation were often required. In the earliest GPS, the timing of when the GPS was to be turned on was important. When I speak of timing, I mean down to the odd minute.

Now I ask, does this GPS I have just explained remind you of what a person now uses as they run around with that lightweight GPS receiver on a prism pole, collecting numerous locations in a day?

Other Equipment

My colleague, Carlton Brown, has written several articles about slide rules and early calculation machines, so I won't mention those. I will say that when I first started surveying there were no calculators. I used logarithm tables and had to look up trig functions in a book. Unless you've tried to look up log and trig values in a book of tables, you have no idea of the errors that often resulted from trying to interpolate values using the tables in the book.

I'm sure there were other items of equipment used by past surveyors that I haven't mentioned, for the simple reason that I've never used the equipment or forgotten I used it. Forgetting is easier and more common as I get older. I am sure surveyors of my age can add their thoughts and should do so before we pass into history. 🌐



SAMSOG has joined forces with the army of Georgians providing vitally needed relief to our communities during the crisis of COVID-19 by donating \$5,000. Ten SAMSOG chapters, Central, Coastal, Etowah, Foothills, Golden Isles, Gwinnett, Muscogee, Northwest, Piedmont, and Southern Crescent requested and received \$500 to distribute to the local charity(s) of their choice. While most chapters have not reported their charity, the Central Chapter selected Loaves and Fishes, and Coastal Chapter selected America's Second Harvest and United Way of the Coastal Empire. The Gwinnett Chapter went a step further and has donated from their own resources. \$200 was given to Universal Joint, a local restaurant in Lawrenceville preparing meals for Hospital Workers at Gwinnett Medical Center and an additional \$200 to the Food Coop in Norcross.

For updated information and resources, go to www.samsog.org and select "COVID-19 Resource Page".

DO YOU JUST BELONG?

Are you an active member,
The kind who would be missed?

Or are you just contented
That your name is on the list?

Do you attend the meetings,
And mingle with the flock?

Or do you stay away
And criticize and knock?

Do you take an active part
To help the work along?

Or are you satisfied to be
The kind that just belongs?

Do you ever work on committees
To see there are no tricks?

Or leave the work to just a few
And talk about the cliques.

So come to meetings often
And help with hand and heart.

Don't be just a member
But take an active part.

Think this over, member,
You know right from wrong.

Are you active member,
Or do you just belong?

TO BE HAPPY...
Volunteer!

The upside of volunteering is well-documented and has been shown to boost mental and physical well-being. People who contribute to their community or an organization they are passionate about lead happier lives, have lower rates of depression, and may even live a little longer than those who do not volunteer, according to a 2013 research review of more than 50 studies.



JACK COFFEE HAYS AND THE TEXAS RANGERS

MICAH A. CARDIN

Recently, I was gifted a book that I started to read but quickly put down. The book was full of interesting information and was actually fascinating. But I put the book down simply because I had stumbled across a name and a side story within the book that I just needed to know more about. Before I continue, the book was, *Empire of the Summer Moon: Quanah Parker and the Rise and Fall of the Comanches, the Most Powerful Indian Tribe in American History*, by S.C. Gwynne.

The story that caught my attention in the book, belonged to a Surveyor and Texas Ranger by the name of John Coffee (Jack) Hays. And so, my research began.

Jack Hays was born in Wilson County, Tennessee, on January 28, 1817. His father was known to have fought alongside Andrew Jackson and Sam Houston in the War of 1812. From the jump, little Jack Hays was destined to lead. At a young age, Jack Hays left home for Mississippi, where he began his surveying career.

According to *The Handbook of Texas*, Hays surveyed in Mississippi until he heard of the war in Texas. Once learning of the war, Jack Hays joined the rebels in the fight for independence from Mexico.

Hays gained military experience that he paired with his surveying skills and joined a group of men tasked to protect the settlers and surveyors of the Texas frontier. This group of men would later be known as the Texas Rangers.

The settlers and surveyors were originally easy targets and no match for the ruthless Comanche tribes. When survey parties came to survey the frontiers, they were torn apart by the Comanche tribes. The Texas Government asked these “citizen soldiers” to patrol these lands and protect the survey parties and the settlers. These group of men were chosen for their military tactics, leadership quality and their ability to survey. They knew what needed to be done and how to get it done.

In battles, Hays and his men were routinely outnumbered, but their use of revolvers helped revolutionize American warfare. It wasn’t until the Mexican War, that the Texas Rangers gained national attention. During the war, promoted to Colonel, Hays turned these “citizen soldiers” into The Texas Rangers.

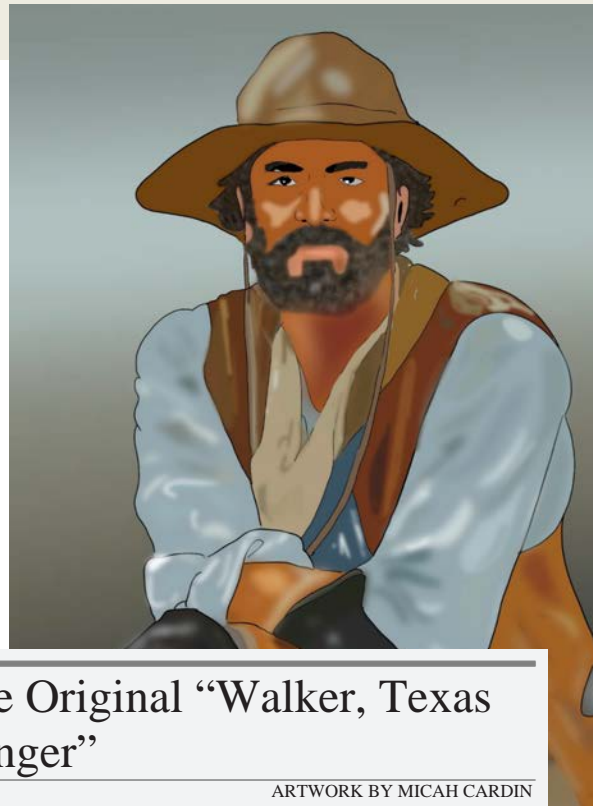
Following the Mexican war, Jack Hays pioneered trails on his way to southern California. He became an essential person to the state of California, being elected sheriff of San Francisco County in 1850 and appointed United States Surveyor General for California in 1853. After Hays passed in 1883, Hays County, Texas, was named in his honor.

Suggestions for Further Reading

S.C. Gwynne, *Empire of the Summer Moon: Quanah Parker and the Rise and Fall of the Comanches, the Most Powerful Indian Tribe in American History*, 2010

Walter Prescott Webb et al, *The Handbook of Texas*, 1996

Frederick Wilkins, *The Highly Irregular Irregulars: Texas Rangers in the Mexican War*, 1990



The Original “Walker, Texas Ranger”

ARTWORK BY MICAH CARDIN



**THURSDAY, JULY 16TH - SATURDAY, JULY 18TH
THE KIMPTON BRICE
SAVANNAH, GEORGIA**



2020 ANNUAL MEETING AND SUMMER CONVENTION

Mark your calendar for the 2020 Annual Meeting and Summer Convention in the beautiful historic district of Savannah. The Brice offers classic, warm Southern charm with a dash of wit and whimsy. From nightly wine hours in the living room to taking a spin around the city on a complimentary Kimpton bike, this hotel offers something for everyone (including your pets, this is a pet friendly hotel).

A block of Single and Double rooms have been reserved for SAMSOG meeting attendees at \$179 per night + tax and \$19 valet parking.

Reserve your room now by calling the hotel at
1-800-368-2544 or 1-800-KIMPTON and the group code is P76.

More details to follow!

10 REASONS

TO ATTEND THE 2020 ANNUAL MEETING AND SUMMER CONVENTION

10 Experience both technical and professional workshops in surveying, as well as basic business workshops all in one place.

9 Gather different perspectives and information sources on a variety of current issues.

8 Have access to solutions to technical and professional issues through peer networking.

7 Learn specialized technology from experts within the field.

6 Earn up to 15 continuing education credits.

5 Support your profession and your society.

4 Be entertained by our funny and thought-provoking keynote speaker.

3 Bid for great items at our live auction.

2 Interact with PSLS officers, state directors, other members, award winners, and conference attendees.

1 Have a good time!



2020 ANNUAL MEETING & SUMMER CONVENTION AGENDA

Thursday, July 16, 2020

7:30 am – 4:30 pm	Check-in/Registration/Continental Breakfast/Exhibits
7:45 am – 8:00 am	Welcome and Introductions
8:00 am – 10:00 am	New DATUM 2022 (4 PDH) Presented by Scott Lokken and Lonnie Sears, PLS
10:00 am – 10:30am	Break & Exhibits
10:30 am – 12:30 pm	New DATUM 2022, <i>continued</i>
12:30 pm – 1:30 pm	Lunch on your own
12:30 am – 1:30 pm	Golfer's Lunch
1:30 pm - Tee off	20th Annual Ski Bashinski Golf Outing – Bacon Park Golf Club
2:00 pm – 4:00 pm	Life Cycle of a Survey Company (2 PDH) Presented by Tate Jones, PLS
4:30 pm – 6:00 pm	Remote Workplace Management Presented by William Shepherd
7:00 pm – 10:00 pm	Low Country Boil – Knights of Columbus Building, transportation provided

Friday, July 17, 2020

7:30 am – 11:00 am	Check-in/Registration & Continental breakfast/Exhibits
7:45 am – 8:00 am	Welcome and Introductions
8:00 am – 10:00 am	Ethics for the Professional Land Surveyor (2 PDH) Presented by Tom Hurley, PLS
10:00 am – 10:30 am	Break & Exhibits
10:30 am – 12:30 pm	Auxiliary Lunch and Program
10:30 am – 12:00 pm	Georgia Minimum Technical Standards PART I (1.5 PDH) Presented by Robert Armstrong, PLS and Roger Purcell, PLS, PE
12:00 pm – 1:30 pm	Surveyor's Lunch
1:30 pm – 3:00 pm	Georgia Minimum Technical Standards PART II, continued (1.5 PDH)
3:00 pm – 3:30 pm	Break & Exhibits
3:30 pm	Exhibits Close
3:30 pm – 5:30 pm	Georgia Minimum Technical Standards PART III, continued (2 PDH) Dinner on your own

Saturday, July 18, 2020

7:30 am – 9:00 am	SAMSOG Past President's Breakfast - <i>Invitation Only</i>
9:00 am – 11:00 am	SAMSOG Board & General Membership Meeting (2 PDH)
12:00 pm – 1:00 pm	Lunch on your own
12:00 pm – 4:00 pm	Clay Sporting Event and Lunch – Forest City Gun Club, transportation on your own Sponsored by Thomas & Hutton
6:00 pm – 6:30 pm	Cocktail Social – cash bar
6:30 pm – until	SAMSOG Awards Banquet/Installation of Officers/Not-so-Silent Auction

Sunday, July 19, 2020

10:00 am	Prayer Service in the Courtyard, check out at 11 am
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SURVEYING AND MAPPING SOCIETY OF GEORGIA

2020 Annual Meeting and Summer Convention

July 16-18, 2020

The Kimpton Brice, Savannah, Georgia



MEETING REGISTRATION FORM

Name of Person Attending _____ Badge Name _____

Name(s) spouse/guest _____

Company Name _____

Address _____

City _____ State _____ Zip _____

Email _____ Phone _____

CHECK THE OPTION THAT APPLIES TO YOU BASED ON YOUR SAMSOG MEMBERSHIP

MEMBER

- | | |
|---|----------|
| <input type="checkbox"/> OPTION 1 - 3 Day Registration
(Includes admittance for one person to THURSDAY Seminars, continental breakfast, & Low Country Boil, FRIDAY Continental Breakfast, Seminars, Surveyors Lunch & SATURDAY Board & General Membership Meeting and Banquet). \$25 PER PDH | \$375.00 |
| <input type="checkbox"/> OPTION 2 - 2 Day Registration Thursday & Friday
(Includes admittance for one person to THURSDAY Seminars, continental breakfast, Low Country Boil, FRIDAY Continental Breakfast, Seminars, Surveyors Lunch and SATURDAY Board & General Membership Meeting) | \$275.00 |
| <input type="checkbox"/> OPTION 3 - 2 Day Registration Friday & Saturday
(Includes admittance for one person to THURSDAY Low Country Boil, FRIDAY Continental Breakfast, Seminars, Surveyors Lunch and SATURDAY Board & General Membership Meeting and Banquet) | \$275.00 |
| <input type="checkbox"/> OPTION 4 - Friday ONLY ETHICS & MINIMUM TECHNICAL STANDARDS Seminar
(Includes admittance to Friday Seminars and lunch) | \$200.00 |
| <input type="checkbox"/> Spouse / Companion Package + Auxiliary Program and Luncheon
(Includes admittance to Friday's Auxiliary Program and Luncheon and ALL other meals and banquet) | \$125.00 |

(Member employees can attend any function at the member rate. Spouse / Companion rates do not apply to a second employee from a company.)

NON MEMBER

- | | |
|---|----------|
| <input type="checkbox"/> OPTION 1 - 3 Day Registration
(Includes admittance for one person to THURSDAY Seminars, continental breakfast, lunch, & Low Country Boil, FRIDAY Continental Breakfast, Seminars, Surveyors Lunch & SATURDAY Board & General Membership Meeting and Banquet). | \$600.00 |
| <input type="checkbox"/> OPTION 2 - 2 Day Registration Thursday & Friday
(Includes admittance for one person to THURSDAY Seminars, continental breakfast, Low Country Boil, FRIDAY Continental Breakfast, Seminars, Surveyors Lunch and SATURDAY Board & General Membership Meeting) | \$500.00 |
| <input type="checkbox"/> OPTION 3 - 2 Day Registration Friday & Saturday
(Includes admittance for one person to THURSDAY Low Country Boil, FRIDAY Continental Breakfast, Seminars, Surveyors Lunch and SATURDAY Board & General Membership Meeting and Banquet) | \$500.00 |
| <input type="checkbox"/> OPTION 4 - Friday ONLY ETHICS & MINIMUM TECHNICAL STANDARDS Seminar
(Includes admittance to Friday Seminars and lunch) | \$300.00 |
| <input type="checkbox"/> Spouse / Companion Package + Auxiliary Program and Luncheon
(Includes admittance to Friday's Ladies Program and Luncheon and ALL other meals and banquet) | \$175.00 |

It SAVES to be a SAMSOG Member! Call Ginger at 770-947-1767 to join TODAY.

ADDITIONAL TICKETS

Tickets for the functions below are included in the full registration fee and/or the spouse registration fee Seminar Package. Additional tickets for those wishing to attend these functions but not holding one of the above registrations should be purchased separately:

<input type="checkbox"/> Low Country Boil Thursday, 7/16/2020	_____ tickets at \$30.00 each	\$ _____
<input type="checkbox"/> Surveyors Lunch Friday, 7/17/2020	_____ tickets at \$30.00 each	\$ _____
<input type="checkbox"/> Auxiliary Lunch & Program Friday, 7/17/2020	_____ tickets at \$25.00 each	\$ _____
<input type="checkbox"/> Sporting Clays & BBQ Lunch Saturday, 7/18/2020	_____ tickets at \$55.00 each	\$ _____
<input type="checkbox"/> Banquet Saturday, 7/18/2020	_____ tickets at \$60.00 each	\$ _____
<input type="checkbox"/> Children 12 & under Saturday banquet, 7/18/2020	_____ tickets at \$25.00 each	\$ _____
See separate form for Golf Outing	_____ players at \$70.00 each	\$ _____

TOTAL FROM ABOVE:

☐ Payment by check

Check number: _____

Please forward check and completed form for total amount to:

SAMSOG
P.O. Box 778
Douglasville, GA 30133-0778

☐ Payment by

VISA / MASTERCARD / AMX / DISCOVER
*Please call Ginger Jones at
770-947-1767*

For your protection, credit payments are no longer accepted by mail, fax, or email.

NOTICE

We are working with The Kimpton Brice and the other venue we have contracted for events to make this meeting safe and enjoyable for you and your family. If you have any questions or concerns, please contact Ginger Jones at ginger_samsog@att.net

DEADLINE

Registrations must be received by Tuesday, July 7, 2020. *Late and/or on-site registrations will be accepted after this date as space allows and will be charged a \$50 administrative fee.* All attendees must check in upon arrival and are required to wear nametags at all times during the meeting. SAMSOG makes every effort to have adequate program material available at the meeting; however, late registrants and/or on-site registrants may not have materials available at the meetings, in which case such materials can be shipped following the meeting, upon request.

CANCELLATION / REFUND POLICY

Cancellations received by SAMSOG by 5:00 pm on Tuesday, July 7, 2020 will receive a registration fee refund, less a \$50 administrative fee. Cancellations received after 5:00 pm on July 7, 2020 will be considered "no shows" and will not receive a registration fee refund. Program materials will be shipped after the meeting to every paid "no show" upon request. Designated substitutes may replace registrants unable to attend.

FOR ADDITIONAL FORMS OR TO REGISTER ON-LINE, VISIT WWW.SAMSOG.org

Surveying and Mapping Society of Georgia

P.O. Box 778
Douglasville, GA 30133-0778

Office Phone: 770.947.1767 ~ Email: ginger_samsog@att.net

MAKE PLANS NOW!

The SAMSOG Annual Meeting and Summer Convention will be held Thursday through Saturday, July 16th –18th, 2020, at The Kimpton Brice Hotel, 601 East Bay Street, Savannah. The program features Minimum Technical Standards as well informative seminars and plenty of sun and fun for everyone! On behalf of the entire Society, Phillip Brown, SAMSOG President and Wright Powers & Teeple Hill, Annual Meeting Committee Co-Chairs; Welcome to the 2020 Surveying Convention of Georgia!

HOTEL ACCOMMODATIONS

The Kimpton Brice Hotel will host the Surveying Convention of Georgia. A limited block of rooms have been reserved for our convention at a special rate of \$179 + tax + \$19 valet parking thru **JUNE 24TH, 2020**. Visit their web site at www.bricehotel.com for a preview of the property and accommodation details. You may reserve your choice of rooms by calling the hotel at 800-368-2544 or 1-800-KIMPTON. Use code **Kimpton Brice Savannah P76** to obtain our group rate. Check in time is 4:00 PM and check out time is 11:00 AM. **These special rates are available thru June 24th only. Make your reservations NOW to insure availability!**



REGISTRATION

Registration is required to attend the events planned and seminars. Please complete the Meeting Registration Form and mail if paying by check or register on-line at www.samsog.org if using a VISA, MasterCard, Discover or American Express. **Registrations must be received by Tuesday, July 7, 2020** to receive the \$50 EARLY BIRD discount. Late and/or on-site registrations will be accepted after this date as space allows. All attendees must check in upon arrival and are requested to wear nametags at all times during the meeting. SAMSOG makes every effort to have adequate program material available at the meeting; however, late registrants and/or on-site registrants may not have materials available at the meetings, in which case such materials can be shipped following the meeting, upon request. **Payments may be made by check or on-line with an AMX, Visa, Discover or MasterCard.** Registration packets will be available for pickup at the registration desk in the Lobby Hall from 7:30 AM – 4:30 PM on Thursday, July 16th and 7:00 AM – 11:00 AM Friday, July 19th. Admission to events is by ticket only. To attend these ticketed events and be eligible for prize drawings, you must be registered for the convention. Member employees can register at the member rate. **Members please complete the registration form or register on-line by July 7th.**

MORE HELPFUL INFORMATION

20th Annual Ski Bashinski GOLF Outing Bacon Park Golf Club – Thursday, July 16th



The Golf outing will tee off Thursday, July 16th at 1:300 PM at the Bacon Park Golf Club. Bacon Park Golf Course has been the epicenter of Savannah golf for as long as most people can remember. The course is owned by the City of Savannah and was designed by renowned golf architect Donald Ross in 1926. The cost of this event will be \$70.00 which includes golf cart, green fees, and a box lunch.

All those participating must fill out the enclosed golf registration form and return no later than **July 7th** as tee times are limited. If you have a foursome you would like to play with, please list the four names on the enclosed golf registration form. Mulligans (2 per player) and Tee Blaster (1 per player) are available; proceeds benefiting SAMPAC. For more information on Bacon Park, go to www.baconparkgolf.com.

SATURDAY, JULY 18th - OPTIONAL SPORTING CLAYS EVENT Sponsored by THOMAS & HUTTON



Join your fellow surveyors and friends at the oldest continuously operated gun club in America. Formed in 1883 and chartered in 1901 as a private club, Forest City Gun Club has a proud and rich tradition in shooting sports. The Club's shooting facilities include 32 skeet fields, 28 trap fields, 2 lighted five stands, dove tower and 2 championship sporting clays courses. The sporting clays courses are not only golf cart accessible, but also have adequate parking for both shooters and spectators alike. Your ticket to this event will include 50 targets, ammunition to shoot a sporting clays course, and a BBQ lunch catered by Sandfly BBQ. Additional services are available for purchase (see list below). For more information on Forest City Gun Club, visit www.forestcitygunclub.com.

COST: \$55 for 50 targets, ammunition to shoot the course, and BBQ lunch catered by Sandfly BBQ.

TRANSPORTATION: Transportation is on your own, however, participants will meet in the Kimpton Brice Hotel lobby at **11:00 AM** or IMMEDIATELY FOLLOWING THE BOARD AND GENERAL MEMBERSHIP MEETING and carpool or leave together at **11:30 AM** lunch will be served at club and at 12:30 pm club will review safety procedures, divide teams, etc. and the shoot will begin at **1:00 PM**. The club is 20 minutes from the Kimpton Brice Hotel.

**PLEASE SELECT "SPORTING CLAYS" ON THE REGISTRATION FORM
OR ON-LINE AS AN "ADDITIONAL OPTION".**

Additional services available for purchase: Eye & Ear Protection \$5.00/ per person, Gun Rental \$40.00/ per gun, and Cart rental is \$50 for a 4-seater.

CONVENTION ATTIRE

The SAMSOG Annual Meeting and Summer Convention is designed for relaxing, socializing, shopping and education. Comfortable, casual dress is encouraged during the day.

- Dress for the Thursday night's Welcome Reception & Exhibits will be resort casual.
- Dress for the Saturday night Dinner/Awards Banquet and Program will be business casual attire (coat & tie optional). Location is Greene Room.

AUXILIARY & COMPANION PROGRAM

Auxiliary events are open to everyone — no membership or conference registration required. Thursday is an open day to take a tour of beautiful, historic downtown Savannah, take a 25 minute drive to Tybee Island, shop or just relax by the pool. Friday morning the 15th Annual Women's Auxiliary Luncheon and Program will begin at 10:30 AM. This special event will begin with a delicious sit-down luncheon at the hotel. Program and details as have not been finalized in time for this publication. Look for emailed information or contact Ginger Jones at 770-947-1767 for details. Spouses, Guests, Companions and children are encouraged to join us again for a fun artistic learning experience. Special thanks to Lynne Shepherd and Laura Hurley for organizing this special event and for preparing a special surprise for attendees. The final event of the convention will be the Awards Banquet (business casual attire) including a wonderful meal and socializing with other surveyors and families.

*Don't forget to bring items for the
"Not-so-Silent Auction" to the Saturday
 evening Banquet. Items already
 donated include a 2 night stay at the
 Kimpton Brice Hotel!*

Registration Form

20th Annual Ski Bashinski Golf Tournament Thursday, July 16th, 2020
1:30 p.m. Tee off and Box lunch



SAMSOG 2020 Annual Meeting & Summer Conference Bacon Park Golf Club 1 Shorty Cooper Drive Savannah, Georgia baconparkgolf.com

PLEASE COMPLETE PLAYER INFORMATION AND RETURN:

Name: _____
Company: _____
Phone Number: _____ Email: _____
Approximate Handicap: _____

If you wish to play with someone else (up to 3 people) please list their name(s) below. Please be sure the other person(s) includes you on their form as well. Every attempt will be made to accommodate your requests however, if pairings necessitate, we reserve the right to make foursomes. *You do not have to have a team to participate!* Singles, Twosome, or Threesomes are welcome!

I would like to play with the following individuals if possible:

1. _____
2. _____
3. _____

Registration to play: \$70 per player
Mulligans: \$10 each - limit two per player (Proceeds to benefit SAMPAC)
Can be used anywhere on the course from tee to green
Tee Blasters: \$20 each - limit one per player (Proceeds to benefit SAMPAC)
A Tee Blaster entitles the individual to tee off on one hole from the Red tees – only the player that purchased the Tee Blaster may tee off from the Red tees (not the entire team).

TOTAL AMOUNT ENCLOSED: \$ _____

Please return Golf Registration Form with Meeting Registration Form.
Golf and Registration Fees may be paid in one payment.

MAKE CHECKS PAYABLE TO: SAMSOG and mail to: P. O. Box 778, Douglasville, GA. 30133-0778
OR pay by Credit Card and call Ginger Walker at 770-947-1767.

DEADLINE TO REGISTER IN ADVANCE TO PLAY IS: Monday, July 13, 2020, 5:00 P.M. If you have not registered by that date and still wish to play, please call Ginger Jones directly at 770-947-1767.

Cancellations accepted up to July 13, 2020, 5:00pm, otherwise no refunds. We play in all weather conditions except lightning.



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WHAT IS AN MTS CREDIT?

Chapter 180-11 CONTINUING PROFESSIONAL COMPETENCY

Rule 180-11-.01 Introduction

Beginning January 1, 1997, as stated in O.C.G.A. 43-15-6(b),” . . . which begins after the 1996 renewal cycle,” every registrant shall meet the continuing professional competency requirements of these rules for professional development as a condition for licensure renewal.

Rule 180-11-.02 Definitions

Terms used in this section are defined as follows:

- (a) Professional Development Hour. A contact hour (nominal) of instruction or presentation. The common denominator for other units of credit. The numerical unit of measure used in calculating compliance with this Chapter is a Professional Development Hour or PDH. All units and hours attributed to the courses and activities acceptable in satisfying this Chapter’s requirement are translated into PDH’s by operation of Rule 180-11-.04 of this Chapter.
- (b) Course/Activity. Any qualifying course or activity with a clear purpose and objective which will maintain, improve, or expand the skills and knowledge relevant to the land surveyor’s or professional engineer’s practice.
- (c) Continuing Education Course/Unit.
 - 1. Continuing Education Course. A course, seminar, workshop or other professional or technical presentation or activity taken or attended for the purpose of maintaining, improving, or expanding the skills and knowledge relevant to the registrant’s practice.
 - 2. Continuing Education Unit. The unit of measure attributed to Continuing Education Courses is a Continuing Education Unit or CEU. Ten (10) hours of class in a Continuing Education Course equals one (1) Continuing Education Unit.
- (d) College Courses/Unit Measure.
 - 1. College Course. When used in this Chapter, a College course is a technical course in a curriculum which has been accredited by the Accreditation Board for Engineering and Technology, or a technical course that is specifically relevant to engineering or surveying, which is offered by a college, university, or other institution.
- (e) College/Unit Semester/Quarter Hour. A College/Unit Semester/ Quarter Hour is a unit of measure attributed by the offering college, university, or institution, to a particular course, which is translated into PDH’s by operation of Rule 180-11-.04 of this Chapter.
- (f) Registrant. When used in this Chapter, a person who is licensed as either a professional engineer or a land surveyor is deemed to be a registrant.
- (g) Dual Registrant. When used in this Chapter, a person who is licensed as both a professional engineer and a land surveyor is deemed to be a dual registrant.
- (h) Board. The State Board of Registration for Professional Engineers and Land Surveyors.

- (i) Sponsor. A sponsor is an organization, college, university, institution, or individual which provides a course/activity for which the professional engineer or land surveyor seeks to obtain Professional Development Hour credit.
- (j) Successful Completion of a Course/Activity. Satisfactory completion of a course/activity taken for the purpose of obtaining PDH's means fulfilling the course or activity's requirements and obtaining a certificate of completion or its equivalent.

Rule 180-11-.03 Requirements

- (1) Professional Engineers. Every professional engineer is required to obtain thirty (30) PDH's each twenty-four (24) month (Biennial) renewal period. If a professional engineer exceeds the requirements in any biennial renewal period, a maximum of fifteen (15) PDH's may be carried forward into the subsequent renewal period.
- (2) Land Surveyors. Every land surveyor is required to obtain fifteen (15) PDH's each twenty-four (24) month biennial renewal period. In addition, every land surveyor must ensure that, once every five (5) years, at least six (6) PDH's in "Minimum Technical Standards" be included in their PDH's acquired. If a land surveyor exceeds the requirements in any biennial period, a maximum of seven and one-half (7.5) PDH's may be carried forward into the subsequent renewal period.
- (3) Dual Registrants. The person with a dual license is required to obtain thirty (30) PDH units for a twenty-four (24) month (Biennial) renewal period. If a dual registrant exceeds the requirement in any Biennial renewal period, a maximum of fifteen (15) PDH's may be carried forward into the subsequent renewal period. At least one-third (1/3) of the PDH's in a renewal period must be obtained in engineering, and one-third (1/3) in surveying. The remaining units may be in either field, at the discretion of the registrant.
- (4) PDH's may be earned as follows:
 - (a) Successful completion of college courses.
 - (b) Successful completion of continuing education courses.
 - (c) Successful completion of correspondence, televised, videotaped, audiotaped, and other short courses/tutorials taken for the purpose of maintaining, improving, or expanding the skills and knowledge relevant to the land surveyor's or professional engineer's practice.
 - (d) Presenting or attending seminars, in-house courses, workshops, or professional or technical presentations made at meetings, conventions or conferences which are relevant to the land surveyor's or professional engineer's practice.
 - (e) Teaching or instructing in any area relevant to the land surveyor's or professional engineer's practice.
 - (f) Authoring published papers, articles, or books in any area relevant to the land surveyor's or professional engineer's practice.
 - (g) Active participation in professional or technical societies. (For professional engineers only).
 - (h) Receiving patents in any area relevant to the land surveyor's or professional engineer's practice.



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Rule 180-11-.04 Units

The conversion of other units of credit to Professional Development Hours is as follows:

- (1) One (1) college or unit semester hour: 45 PDH
- (2) One (1) college or unit quarter hour: 30 PDH
- (3) One (1) Continuing Education Unit: 10 PDH
- (4) One (1) Hour of professional development in coursework, seminars, or professional or technical presentations made at meetings, conventions, conferences, or examination preparation.
- (5) For teaching of professional development coursework as in 180-11-.04, apply a multiple of two (2). Teaching credit valid for teaching a course or seminar for the first time only. Teaching does not apply to full-time faculty.
- (6) Authorizing published papers, articles, or books in any area relevant to the land surveyor's or professional engineer's practice: 10 PDH
- (7) Active participation in professional and technical society (for professional engineers only): 2 PDH
- (8) Each patent in any area relevant to the land surveyor's or professional engineer's practice: 10 PDH

Rule 180-11-.05 Determination of Credits

The Board has the final authority regarding:

- (a) Approval of courses, classes, seminars, meetings, and all other methods of satisfying the requirements of this Chapter; and
- (b) The number of PDH's allocated to each course, class, seminar, meeting, and any other method of satisfying the requirements of this Chapter.

Rule 180-11-.06 Recordkeeping

To ensure compliance of continuing education, the Board shall randomly audit a number of registrants. Registrants licensed by way of examination or comity, shall be exempt from continuing education requirements for their first renewal period. Maintaining records to be used to support PDH's Claimed, is the responsibility of the registrant. Records required include:

- (a) A log showing the type of activity, sponsoring organization, location, duration, instructor's or speaker's name, and PDH's earned.
- (b) Attendance verification records in the form of completion certificates, or other documents supporting evidence of attendance; or records as maintained by professional organizations, or other similar repositories designated by the Board.
- (c) The log and records described in Rule 180-11-.06(a) and (b) must be maintained for a period of four years and copies may be requested by the Board for audit verification purposes.

Rule 180-11-.07 Exemptions

A registrant is exempt from the professional development education requirements under any of the following circumstances:

- (1) Registrants licensed by way of examination or comity, shall be exempt for their first renewal period.
- (2) A professional engineer serving on temporary duty in the armed forces of the United States for a period of time exceeding one hundred twenty (120) consecutive days shall be exempt from obtaining 15 of the professional development hours required during that biennial period in which the majority of the days of duty fall. Likewise, a land surveyor shall be exempt from obtaining 7.5 professional development hours during that biennial period.
- (3) Registrants experiencing physical disability, illness, or other extenuating circumstances as approved by the Board may be exempt. Supporting documentation must be furnished to the Board.
- (4) Registrants over the age of 65 who have applied for an inactive license, who list their occupation as “Retired” or “Inactive” on the Board-approved renewal form, and who further certify that they are no longer receiving any remuneration from providing professional engineering or land surveying services shall be exempt from professional development hours. In the event such a person elects to return to active practice of professional engineering or land surveying, professional development hours must be earned as described in “180-11-.08 Reinstatement” before returning to active practice.
- (5) Individuals who qualify for exemption by way of paragraph (4) above may continue to use the words Professional Engineer (or P.E.), or Land Surveyor (or L.S.) as appropriate, after their names as long as they continue to fall under the restrictions specified and are not actively practicing engineering or land surveying.

Rule 180-11-.08 Reinstatement

A registrant may bring an inactive or suspended (provided all other conditions of the suspension are filled) license to active status by obtaining all delinquent PDH's. A MINIMUM OF 15 PDH's are required for each year in an inactive or suspended status for professional engineers and 7.5 PDH's for land surveyors, up to a maximum of 30 PDH's for professional engineers and 15 PDH's for land surveyors.

Rule 180-11-.09 Comity/Out-of-Georgia Resident

The Board shall recognize the continuing education requirements imposed by other states to the extent that such continuing education courses meet the requirements imposed by the Board. Comity/Out-of-Georgia residents will be required to keep recordkeeping as listed under Rule 180-11-.06.

Rule 180-11-.10 Forms

Included with all license renewal applications will be a continuing education summary log form that the registrant must use to summarize the professional development hours for which he/she has requested credit during the current biennial period. In order to ensure compliance with O.C.G.A. 43-15-6(b), the Board shall audit some registrants at a later date and will instruct them to submit this form to the Board office, signed and certified. The form must supply sufficient detail relevant to continuing education hours claimed in order to permit the Board to complete its audit.

In Memoriam...

ALVIN EUGENE “GENE” VAUGHN, GA RLS #1629

Alvin Eugene “Gene” Vaughn went to be with the Lord on April 8, 2020. He passed away at his home in Stockbridge, GA, following a nine-month illness.

Gene was born February 15, 1941, in Atlanta, Georgia. He graduated from O’Keef High School, attended Georgia Tech, and earned a Bachelor of Business Administration from Georgia State College in 1967. After graduating from college, Gene founded A. E. Vaughn & Associates, a surveying company, which he owned and operated until he retired.



Gene’s talents and hobbies included golf, photography, painting, wood working, building, and repairing most anything that stopped working. However, he believed his most important accomplishments were anything that he did to further the work of the Lord. As a 1977 founding member of Liberty Baptist Church in Stockbridge, GA, Gene used his talents to help procure land and facilities, establish the governing body for the church, and lay the foundation for the church’s mission program, which continues today.

JEFFERY HARRIS GRIFFIN, PLS (LS2503)



Mr. Jeffery Harris Griffin age 58 of Blairsville passed away at his home on Sunday April 12, 2020. Mr. Griffin was born on Jan. 19, 1962 in Suches, GA., the son of Barbara Jean Tison Griffin and the late Edwin Harris Griffin. He was a native resident of Union County and founded Griffin Land Surveying in 1993 and worked there for many years. He was a member of the Lawrenceville Masonic Lodge and of the First Baptist Church in Blairsville. He was a 1980 Graduate of Union County High School where he played many sports. His love for sports carried over into one of his favorite roles: coach to his son and daughter in all of their sports endeavors. Jeff was a loving father, son, brother and was a friend to many.

JACK HILL

On Monday April 6, 2020, SAMSOG lost a great ally. Senator Jack Hill, age 75, passed away unexpectedly at his district office in his hometown of Reidsville, GA. He was a graduate of Reidsville High School and Georgia Southern University. In 1990, Senator Hill won his first term as Georgia State Senator of the 4th District, and served 15 consecutive terms. He was also the Chairman of the Senate Appropriations Committee.

IRIS SESKO

The “First Lady” of Tennessee Land Surveyors has passed. She was the first woman to be registered as a land surveyor in Tennessee and was very active in TAPS until her retirement.

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