

The Tarheel SURVEYOR

FALL 2019 | No. 19.2



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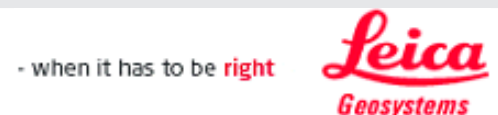
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The Tarheel SURVEYOR Fall 2019

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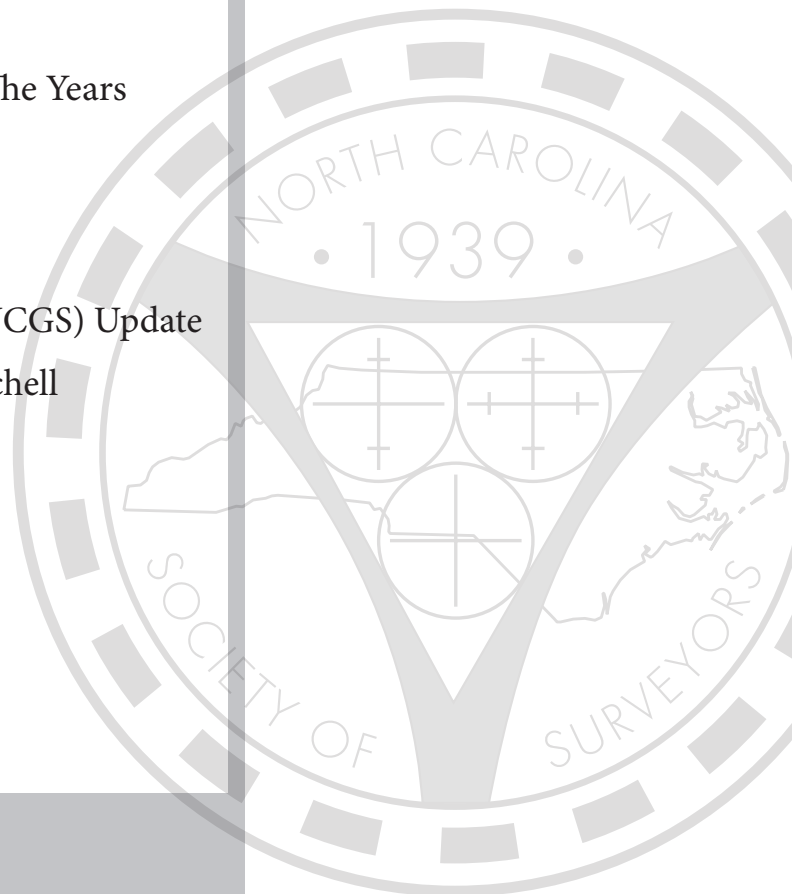
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ABOUT NCSS:

- Founded January 31, 1939
- Second oldest professional surveying organization in the United States
- Only professional surveying organization in NC
- Affiliated with the National Society of Professional Surveyors and, therefore, all Professional Members are also accounted as members of NSPS as of July 1, 2013

OUR MISSION:

"A society of professional surveyors and their associates dedicated to enhancing professionalism, improving legislative awareness and promoting the profession of surveying."



WHO WE ARE

**NCSS PRESIDENT**

Tim Bowes
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NCSS PRESIDENT-ELECT

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YADKIN VALLEY CHAPTER PRESIDENT

David L. Haywood, Jr.
davidhaywood@cesicgs.com

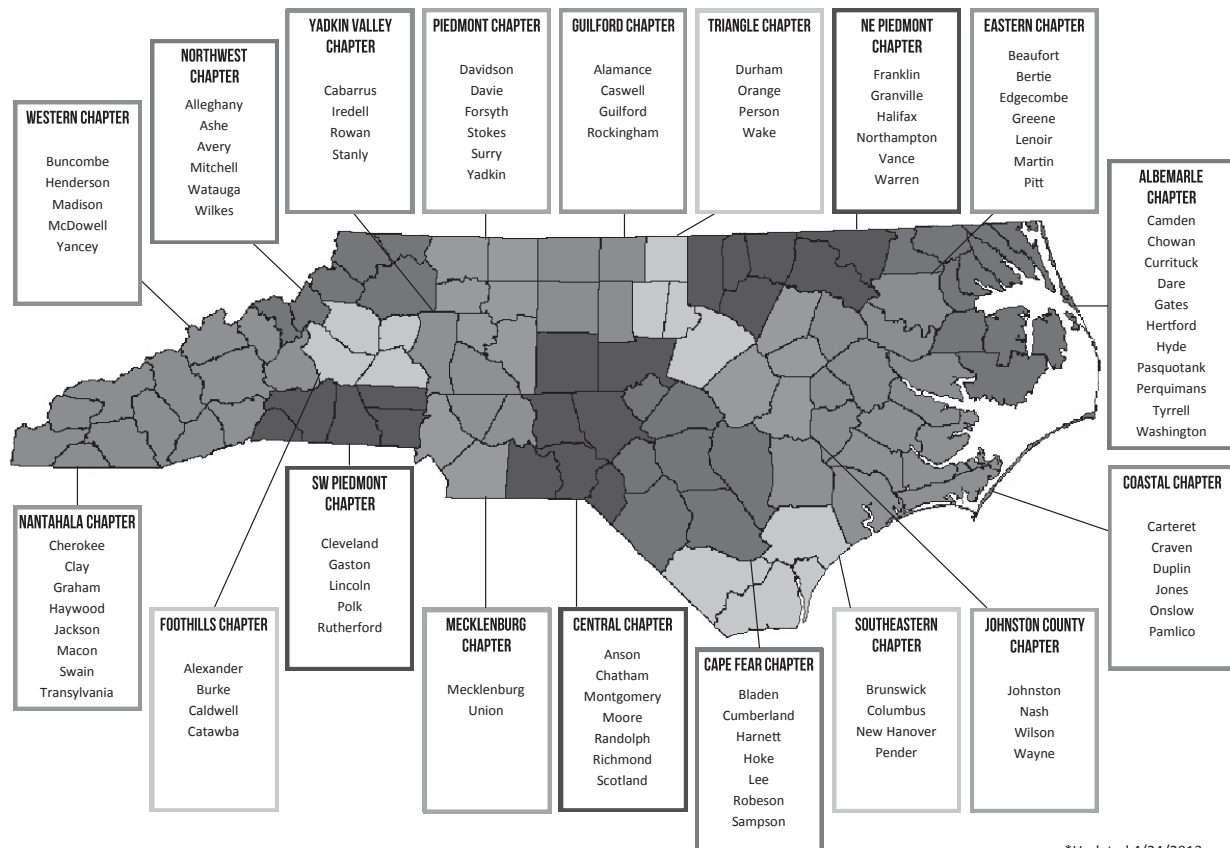
MARKETING & MEMBERSHIP DEVELOPMENT

Sherri L. Barron
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CHAPTER MEETINGS

CHAPTER	DATE & TIME	LOCATION
Albemarle	2nd Tuesday 6:30 pm	BJ's Restaurant, Jarvisburg
Cape Fear	Last Tuesday 6:30 pm	Various Locations, Fayetteville
Central	Last Tuesday 6:30 pm	Blake's B-Que, Candor
Coastal	Last Monday 6:30 pm	Sagebrush Steakhouse, Morehead City
Eastern	2nd Monday 6:30 pm	Parker's BBQ, Greenville
Foothills	2nd Tuesday, 7:00 pm	Timberwoods, Morganton
Guilford	3rd Tuesday 6:00 pm	Cooper's Ale House, Greensboro
Johnston County	2nd Tuesday 6:00 pm *no meeting Jun-Aug	Holt Lake BBQ, Smithfield
Mecklenburg	1st Tuesday 6:00 pm *no meeting Jul-Aug	Dilworth Grille, Charlotte
Nantahala	3rd Tuesday 6:30 pm *no meeting Jun-Aug	Bogart's, Sylva
NE Piedmont	Last Tuesday 7:00 pm	Various Locations, Louisburg
Northwest	3rd Tuesday 6:00 pm	Various Locations, Boone & Wilkesboro
Piedmont	4th Tuesday 6:00 pm	Hickory Tavern, Winston-Salem
Southeastern	Last Wednesday 7:00 pm	Carolina BBQ, Wilmington
SW Piedmont	2nd Thursday 6:30 pm	Dragon Palace, Spindale
Triangle	3rd Tuesday 6:30 pm	Peddler Steakhouse, Raleigh
Western	2nd Tuesday 6:30 pm	Cornerstone Restaurant, Asheville
Yadkin Valley	2nd Wednesday 6:30 pm	Pancho Villa's, Salisbury

NCSS Local Chapters



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DIRECTOR'S NOTES



On January 31st, 1939, our very first Board of Directors meeting took place with C. L. Mann as temporary Chairman of the Board. During that meeting, Mr. F. C. Morton "was duly elected" as the first President of the North Carolina Society of Surveyors. It has been intriguing to read through the minutes of the earliest meetings as we continue to archive our oldest documents for protection and easier access. Sherri, Michelle, and I enjoy discussing the processes that have changed and noting the names that are familiar to us decades later, such as C. L. Mann and Otis A. Jones.

This edition of the Tarheel Surveyor reflects upon some of our most significant accomplishments. Our mission statement evolved through the first few years challenging us to three areas of focus: promote the profession, increase professionalism, and increase legislative awareness. The Board of Directors continues to lead the activity of NCSS along those three lines.

Our membership is now larger than it has been since the 2008 recession! I am particularly excited about our Associate membership category, which is where we find those who are not necessarily licensed, but those who have careers associated with surveying. NCSS sees these members taking our education classes, attending the Annual Conference, and joining to access our MAPS Database, which currently has over 10,000 maps archived. Although I would also be extremely excited about an increase in PLS membership, the fact that our Associates have increased more than 400% indicates the value of membership for those who surround the industry. Promoting the Profession by increasing Associate members was a vision of Past President Josh White. He believed that we should reduce the price of this category to

an amount available in a technician's wallet. It took us four years to return financially to where we were before the decrease, but now the benefits are continuing in ways that we didn't foresee. For example, we are now offering a Mapping Sciences exam review section taught by Hope Morgan and Peggy Fersner for GISPs who want to become licensed as a PLS. Implementation of Josh's vision began before Hope's licensure as a PLS! Multiple technicians have taken sections of our Photogrammetry Competency Course because they work with the UAS data. UAS surveying didn't exist when Josh White was president in 2012. Josh's vision is now part of the NCSS history and legacy, fulfilling our historic mission statement!



First Photogrammetry Competency Course Graduates

Mentioning the Photogrammetry Competency Course and our Mapping Sciences section of the Exam Review leads me to the second point in our mission statement. From the earliest Board minutes, we can see the charge of increased professionalism. Our education has continued to evolve through the years, as today's technology requires specific training and applications. Having the knowledge and wisdom to deal with the evolving technology increases the reliance of others upon surveyors for their expertise. Since I have joined the Society, we have supported the appointments of three NCSS members, Mike Benton, Andrew Zoutewelle, and John Logsdon to the North Carolina Board of Examiners for Engineers and Surveyors. These gentlemen have had the challenging task of reviewing current policies and rules with the new tools of UAS,



Schedule at a GLANCE

NOVEMBER 8, 2019

Yadkin Valley Chapter

Partnership

8:00am-4:30pm

7.5 PDHs

Gold Hill Mines Historic Park
Gold Hill, NC

NOVEMBER 13-15, 2019

UAS Knowledge Exam Prep

for FAA Part 107

(Photogrammetry

Competency Course, Sect 1)

8:00am-5:00pm

24.0 PDHs

NCSS Office

Wake Forest, NC

NOVEMBER 22, 2019

Introduction to Processing

Survey Data for NCDOT

8:00am-4:30pm

7.5 PDHs

NCSS Office

Wake Forest, NC

DECEMBER 6, 2019

SW Piedmont Chapter

Partnership

8:00 am-4:30 pm

7.5 PDHs

Rankin Lake Baptist Church
Dallas, NC

DECEMBER 12, 2019

THURSDAY

Here's My Situation, Ethics &

NC Geodetic Updates

8:00am-5:00pm

8 PDHs

Dr. David M. Webb Learning
Institute

Rocky Mount, NC

BIM, and LiDAR in the surveyors' "toolbox." And in 2022, a new Datum will be introduced by the National Geodetic Survey. I'm thankful for quality professionals like Mike, Andy, and John, who will address these issues in the days ahead. The highest level of ethics and professionalism will be required from our members as avenues for surveying become easier to access without the proper training. The Education Committee, led by Chairman, John Story, actively addresses each topic suggested by surveyors as our most professional members seek the best in continuing education.

Success continues for our legislative endeavors thanks to persistence, professionalism, and great representation from McGuireWoods Consulting. My predecessor, Sara Kusan, brought unprecedented contacts to NCSS with intimate knowledge of the governing process. She had previously served as the Director of Boards and Commissions under Governor Mike Easley. Sara establishing our relationship with McGuireWoods was the beginning of a growing presence in the North Carolina General Assembly. When I began eight years ago, I made it a point to attend as many committee meetings as possible with groups surrounding our profession. These meetings make our presence known and establish lines of communication. Your current President, Tim Bowes and Past President, Leland Strother

had their own vision of establishing an Industry Roundtable. Discussions ensued between engineers, realtors, general contractors, architects, agriculture representatives, and various licensing boards. Tim and Leland saw the value of open communication before we meet on the legislative battlefields. These meetings led to surveyors being invited as a stakeholder in legislation this year limiting your duty to defend negligence of sub-contractors other than surveying.

In my final analysis, I believe the vision for NCSS has remained very much the same, but the practical application of this vision has become more vibrant and energetic. I invite everyone to play a role beginning with membership. I recently attended the NSPS Fall Meeting. I was astounded when Frank Thousand, Executive Director from Wisconsin told me that 83% of licensed surveyors in Wisconsin belong to the Society! North Carolina records about 28% of licensees as members. Why do you think that is? I invite your comments to cdavis@ncsurveyors.com. Wouldn't we be a powerful association if we could boast 83% PLS membership? Until then, we'll keep striving.

Christy C. Davis

Christy C. Davis, NCSS Executive Director



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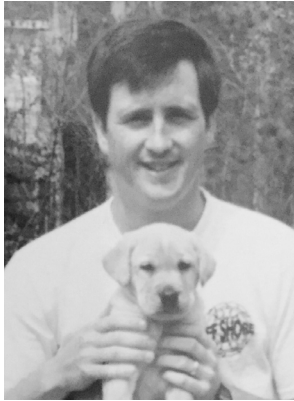
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LETTER FROM THE PRESIDENT



W elcome to our 80th Anniversary Edition of the Tarheel Surveyor. Each surveyor that has been a part of NCSS should be very proud of where we stand today. Not many professional organizations can say they have survived for 80 years. We have not only survived, but we have grown and continued to grow through the best and worst economic times in our history.

As I look back on my career now at almost 40 years, I think about how much has changed. When I started, your plumb bob had no gammon reel and the transit that I was on the grunt end of had no EDM. There were no computers. Hand-held calculators with trigonometry functions were coming out into the market. We used a 100-foot and 200-foot steel chain to measure distances. You went nowhere without a good sharp bush axe and chain splicing kit.

Traversing across creeks, swamps, and hills was always an adventure. We mostly had three-man crews, sometimes four-man in the summers. The Crew Chief directed the workflow, and everyone worked as a team. If you stayed in the job, you were given the opportunity to learn everything about your position. You would also learn the instrument (transit and or manual theodolite) and its operation. After successfully running the instrument for several years and proving you could handle a survey crew, you could move up to a Crew Chief position. Along the way, you learned to read deeds, maps, and survey signs. These took the form of tree blazes, hacks, planted stones, lighter knots, or whatever metal object that was handy at the time a corner was set. You learned to notice old fence lines, dirt paths, and sometimes just random fence posts or trees planted where they should not be. It was hard work, but truly rewarding. That part has not changed.

Today we have GPS everything. Most of our instruments have robotic capabilities and even reflectorless laser EDM's. Electronic Data Collectors have replaced field books, and computers and plotters have made map preparation a lot easier. We have UAS/UAV with LiDAR and mobile scanners that can collect over 1 million points per second. Did I forget to mention our smartphones!

Enough about technology, let me speak about our organization. From a few founding members in 1939, we have grown to over 1000 members in 2019. There is still room for 1000 more. Your association today is active in legislative matters that affect our profession. It helped obtain funding with NCEES to promote and advance workforce development with four other surrounding states. This pilot project will hopefully foster an avenue for a new generation to become interested in surveying. Our Executive Director was voted on by her peers as an Executive Director representative for the next two years with NSPS, which gives us exposure and a voice on the national level. We have 18 chapters throughout the state. We are blessed with an office that has been and is currently staffed with amazing ladies that care about our profession and the people who work in it.

I could continue with numerous examples of what NCSS has done and does for us, but I want to encourage you to take an active role and find out for yourself. Without your membership, NCSS is not possible. Encourage those that are not members and help us to continue growing this organization. We have been fortunate to have many dedicated professionals and their associates to enhance professionalism, improve legislation, and promote the profession of surveying for the last 80 years. What will you do to help lead surveyors for the next 80 years?

Tim Bowes, PLS
NCSS President 2019-2020

Education Foundation

by Gary Thompson, PLS
Education Foundation President



The Education Foundation meets quarterly before each NCSS Board of Directors meeting. Our next meeting will be October 25, 2019, in Greensboro.

We are currently reviewing scholarship applications for the second cycle of 2019. We have budgeted \$15,000 for scholarships in 2019.

NCSS Education Foundation activities in 2019:

- Develop additional sources of funding
- Update foundation web page
- Promote Trig-Star
- Attend the following conferences in 2019:
 - North Carolina Council of Teachers of Mathematics
 - North Carolina School Counselor Association

Things you can do as Professional Land Surveyor to support the NCSS Education Foundation and promote the surveying profession:

- Contribute to the NCSS Education Foundation
- Assist high schools to create a Geomatics Career and Technical Education (CTE) program
- Support NC's two- and four-year Geomatics programs
- Purchase a Department of Motor Vehicle NCSS Education Foundation specialty plate
- Increase Chapter participation in the Trig-Star program
- Take part in career day at your local high schools (National Council for Engineering and Surveying (NCEES) speakers kit link: <https://ncees.org/education/ncees-speakers-link-and-speakers-kit/>)



Wouldn't this tag look great on your vehicle?



Gary has held a professional license as a Professional Land Surveyor (PLS) in NC since 1980. He has served as president of both NCSS & NSPS. He most recently served as treasurer of NCEES, chair of the North Carolina Boundary Commission, and an emeritus member of NCBEES.

You Don't Need to be a Millionaire to Leave a Legacy

Estate Planning is not something reserved only for the rich. The word 'estate' may bring to mind an image of riches with a mansion and landscaped grounds. In legal terms, it simply means "property or possessions". I think it's safe to assume that everyone seeing these words has property or possessions and for you to depart this life without a formal declaration of what happens to your possessions creates a huge potential for your loved ones to become embroiled in a destructive conflict. Without a will, your property or possessions will be distributed according to state guidelines which may not match your final wishes. A will should be created with the proper documents, and accordingly, we strongly encourage you to engage a professional for assistance or there are several books available to guide you through the process. In short, almost everyone needs a will.

The NCSS Education Foundation, Inc. is a non-profit, all-volunteer group which raises funding for the education of future surveyors. We urge all of the NCSS members, fellow surveyors and others to create a will to represent their own personal wishes. The Foundation can offer you an opportunity to leave a legacy (a gift of property or personal possessions) to assist the future of surveying through the education of newcomers to the profession. The following sentence included in your will is one way to ensure that you can leave that legacy to reflect your passion for the surveying profession: I give (specific or identified property, possessions, percentage or residue) to the NCSS Education Foundation, Inc. (a tax-exempt organization located in Wake Forest, NC) for the purpose of supporting its education-stewardship programs.



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A Walk Back in Time

by Peggy Fersner, PE

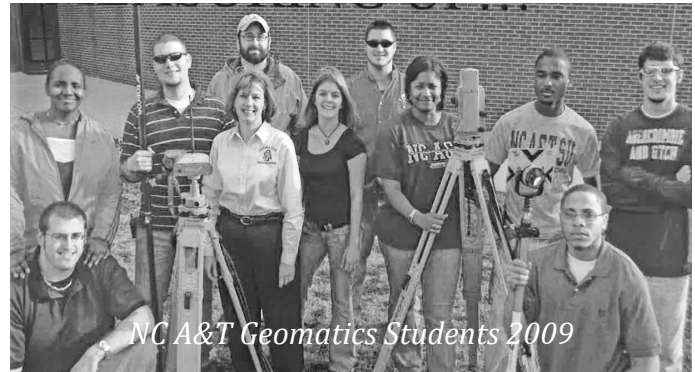


Since NCSS is celebrating its 80th anniversary, we are going to take a walk back in time and look at the Geomatics program from where we started to where we are today. Depending on who you talk to, the recollections of how this program landed at North Carolina A&T vary a little, but we can all agree that starting

in the late 1990's the North Carolina Society of Surveyors (NCSS) had the vision to create a four-year program in the state of North Carolina to benefit the surveying profession. Larry Greene and John Furmage were the faces that I came to know at the university. My involvement was a fluke as a byproduct of teaching the only surveying course at A&T. Sometimes it is genuinely just being at the right place at the right time. Meetings (of course) were held, and from the program's inception, it was designed to be offered both on campus and online. Simultaneously, NCSS was working to open up General Statute 89C to strengthen the educational requirements. In true bureaucratic fashion, the legislature was hesitant to open General Statute (GS)89C without an established four-year program. The university did not want to create a four-year program without a guarantee that the educational requirements would be strengthened. Both sides put some faith in each other and pursued their respective targets. An Advisory Group was commissioned to determine the program's curriculum. This was comprised

of professionals with expertise in the curriculum areas. This program really was developed by the industry. Within a couple of months of each other in the spring of 2006, the UNC system approved the new Geomatics program, and the modifications to (GS)89C were approved.

Our first students officially enrolled during the fall semester of 2006. We predominantly had on-campus students due to the fact I twisted the arms of quite a few Civil Engineering students to either double major or change majors. Jerry Nave joined the program in January of 2007 to provide the legal component (one of the many components he provides) of the surveying profession that was missing. I was not even going to attempt teaching those courses. The first graduating class in 2008 consisted of two students – Jason Hedley and Ken Johnson. Ken has migrated back to his original roots for financial reasons, but Jason is a proud PLS, currently with SO-DEEP | SAM NC. He also sits on our Advisory



NC A&T Geomatics Students 2009

Committee and was recently appointed to serve on the Geographic Information Coordinating Council (GICC). Between 2006 and 2011, we had some ups and downs in the College of Engineering with what seems to be a national problem of Colleges of Engineering not quite understanding or accepting the area of Geomatics. The program moved to the School of Technology in the fall of 2011. Since the move, we have been steadily growing – though at a slow pace. Jerry has been actively recruiting at the community colleges for years, and that is now paying dividends. There have been some curriculum changes, most notably introducing small unmanned aerial vehicles into the curriculum as well as advanced processing of the imagery.

The most notable milestone was the official awarding of ABET accreditation in August of 2017. Accreditation now allows our students to officially become licensed in those states requiring an ABET accredited four-year degree. Dr. Leila Hashemi-Beni joined the program in January of 2017 with her experiences in GIS, photogrammetry and remote sensing. She is focusing on growing the Ph.D. program in



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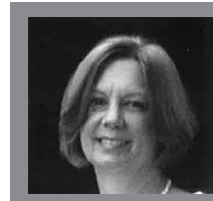
Jeff Todd
President

jeff@imcipls.com
Mobile: 704-500-6887
Direct: 704-997-2719

Geomatics, and she is currently advising our five graduate students. During this period, we have steadily increased our student enrollment. The great news is that we have 22 new students enrolled in classes for the fall semester and our official enrollment now stands at 53 students!

The program is thankful and so very appreciative for all of the support and efforts that the profession has offered as well as NCSS. A huge round of thanks goes to our Advisory

Committee that has been with us on this journey. Cheers to the future!



Peggy Fersner is the Geomatics Coordinator at NC A&T State University in Greensboro. She has been on staff since 1993, teaching surveying, GIS, and hydrology courses. She has earned both her BS and MS in Civil Engineering.

Welcome New Licensees

Brandon Arnold
Nicholas Barnes
Alexander Crowe
Cody Donnally
David Ferraro
Bryon Fredenburg
Jason Gustafson
John Hendrix

Daniel Hoying
Christopher Michaud
Cody Petit
John Petrucco
Christopher Sexton
Michael Smith
Marc Snider
Joshua Davidson

Garrett Dorsett
Cale Galloway
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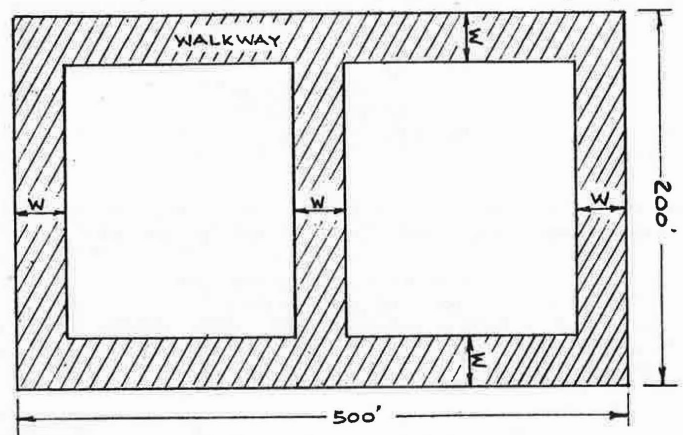
PROBLEM CORNER

Originally Published Fall 1977

PROBLEM CORNER???

A rectangular lot 200 feet by 500 feet is to be developed as a mini park. A paved walkway will be built around the outside perimeter and across the center of the lot as shown and must have a total area equal to exactly 10% of the total lot area. All walkways will be of equal width (w).

(No trial and error solutions, please! Submit your solution before December 1, 1977)



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A Look Back: NSPS/ACSM Over The Years

by Randy Rambeau, PLS, NSPS NC Director

As this is our 80th Anniversary Edition, I wanted to revisit the relationship between NCSS and NSPS/ACSM over the span of my career as a licensed surveyor. My source of information is the Tarheel Surveyor magazines I have accumulated since 1978 when I became licensed in North Carolina. The American Congress on Surveying and Mapping (ACSM) was formed in 1941, two years after the formation of our own NCSS. I do not have any documentation on the early history of ACSM. This article is by no means a complete list of activities or people that have contributed to the national organization over the past 40 years, only a portion of the activities gleaned from my personal library.



In the Winter 1979 edition of The Tarheel Surveyor (TTS), President C. H. (Pat) Blue encouraged NCSS members to “consider becoming individual members of ACSM.” In the Spring 1979 edition of TTS, it was announced that Richard Biggs had been elected as the NCSS Area 3 Director for the ACSM Land Surveys Division. Florida, Georgia, Alabama, South Carolina, Mississippi, Kentucky, Tennessee, the Virgin Islands, and North Carolina comprised Area 3. Directors from Area 3 held their first formal meeting on February 24th, 1979 in Atlanta, Georgia.

For the May 1984 TTS, Richard Biggs reported that he had attended the ACSM national convention in Washington, DC. Biggs said that “the convention was very upbeat and positive with a renewed interest in promoting the needs of the Surveyor and Society.” NCSS hosted a meeting of the NSPS Areas 3 and 4 Directors at the NCSS August 3rd, 1984 meeting. After the September 1984 ACSM Fall Technical Session in San Antonio, Texas, Mr. Biggs stated that this “was the most peaceful and positive meeting I have attended



in several years. I am sure it was this way due to the absence of the controversial question of consolidation.”

The March 1986 TTS congratulated Richard Biggs on being elected to the office of Vice President of NSPS. This

issue was also the first issue that listed the ACSM Delegate (Richard Biggs) on the cover page of TTS along with the other state officers. In the May 1986 edition, it was noted that Robert D. Inman was elected by NCSS Board of Directors to fill the unexpired term of Richard Biggs upon his election as Vice President of NSPS. Mr. Biggs had served seven years as the North Carolina delegate. The certifying of survey technicians (the CST program) through testing began this year. Mr. Inman also attended the ACSM/ASPRS Fall meeting in Anchorage, Alaska September 28th – October 3rd, 1986. Also, in 1986 a very deserving Larry Akers was selected to receive the NSPS Surveying Excellence Award. It is an understatement to say that every surveyor in North Carolina has benefitted greatly from Mr. Akers’ leadership at the North Carolina Geodetic Survey and with NCSS.



ACSM Delegate Robert Inman reported in the September 1987 edition “that the sexist language/gender specific issue and removing such language from all ACSM publications, etc. will come up at the meeting in Reno” October 4th-9th, 1987. The NCSS Board voted unanimously to support Mr. Inman’s position “that discriminatory language be removed from publications when they come up for reprinting or revision.” Mr. Inman was elected to his first full term as ACSM delegate in the fall of 1987. He continued to serve as ACSM delegate through 1991.

Mr. Inman’s November 1988 report on the ACSM Fall meeting the week of September 11th, 1988 in Virginia Beach, Virginia highlighted several items. The Survey Technician Certification Program was off to a good start with over 300 requests for information. The largest contributor to the ACSM/NSPS PAC was NCSS membership with a contribution of \$1,203. The national total was less than \$9,000.00. Our own Richard Biggs, as the 1988 NSPS President, challenged the Board of Governors to become the dominant force in NSPS.

The NSPS Area 3 and 4 Governors and Directors held their meeting during the NCSS annual convention in February 1989. Mr. Inman stated he was looking forward to the NSPS

Board of Governors meeting at the ACSM Spring meeting in Baltimore, Maryland, the week of April 2nd, 1989. In the September 1989 issue of TTS, ACSM announced it was planning “to build a customized 80-foot tall hot air balloon that will duplicate a detailed globe of the Earth and a 1,500 square-foot traveling museum exhibit about the surveying and mapping professions.” I do not know if this project was successful.

Mr. David A. Atwell, the Area 3 NSPS Director, authored an article in the May 1990 edition. The article noted that the NSPS Board of Directors was engaging an attorney to explore the possibility of incorporating NSPS within the framework of ACSM. Mr. Atwell’s report of the November 7th and 8th ACSM meeting in Anaheim, California contains issues of financial stability and the continuing desire of NSPS to form a separate corporation. ACSM was projecting a deficit of \$272,000.00 for the 1990 fiscal year, and the organization’s reserves had already been spent on previous years’ deficits.

The May 1991 edition of the TTS included an article by James H. Granger, Chairman of the NSPS Board of Governors. Mr. Granger stated that NSPS had voted to incorporate and new by-laws had been adopted. ACSM had agreed to NSPS having a separate checking and savings account. The article also noted that NSPS made up 70% of the ACSM membership. NSPS incorporated on May 2nd, 1991. NSPS called for a meeting to be held on July 19th-21st, 1991 in Denver, Colorado. ACSM Delegate Robert Inman and NCSS President Gary Thompson represented North Carolina. At that meeting, a motion passed that contained several items to further document that the National Society of Professional Surveyors, Inc. would be the member organization of ACSM.



In 1992, the new ACSM delegate was Albert D. Frieze, Jr. and William Coleman was the new NCSS President. President Coleman noted in the March 1992 edition of TTS that ACSM and the new NSPS Board of Directors seemed to be working together to bring our national organization back. In the July 1992 edition, Mr. Frieze encouraged the NCSS members to join ACSM to support our only national organization to “direct our own destiny.” Mr. Frieze continued to serve through 1993 on the NSPS Board of Governors and served on the ACSM Board of Directors from 1996 until his death in 1999. In addition, Mr. Frieze served on numerous NSPS and ACSM committees during this time.



NCSS received the ACSM Affiliate of the Year in the large membership category. NCSS President Johnie Garrason received the plaque for the award at the ACSM Spring meeting in April 1994, in Reno, Nevada. At the Fall 1994 meeting, it was announced that the organization had recorded a \$46,545.00 surplus per the 1993 audit.



NCSS President Webb A. Morgan in the March 1995 TTS commended Gary Thompson on his leadership for the ACSM/ASPRS convention held in Charlotte, NC hosting 3,312 registrants from across the Nation.



The May 1996 TTS contained an article touting the value of the NSPS Survey Technician Certification Program to both employers and employees. William R. Coleman was the NSPS Governor for 1996-1998.



An article in the Spring 1999 issue of TTS in an ACSM Government Affairs Update noted that only 9 of the 471 candidates taking the California state surveying exam had passed. The California Land Surveyors Association was “infuriated” and considering steps to alter what appeared to be a ridiculous situation. Our well-respected and former NCSS President Gary Thompson was the NSPS Area 3 Director.

In the Nov-Dec 2000 issue of TTS was an article about the report submitted by the NSPS Restructuring Committee on the restructuring of NSPS membership which will be primarily by virtue of membership in a state affiliate, but still with a non-affiliate membership. The details were to be worked out by the appropriate committees and approved by NSPS. Mr. Thompson continued his leadership example and became the NSPS President-Elect in 2000 and the NSPS President in 2001. Thomas D. Morgan became our NSPS Delegate.



In 2001, Mr. Morgan also received the NSPS Surveying Excellence Award and was presented with the award at the Spring meeting in Las Vegas, Nevada. He continued to serve as our Delegate through 2003.

Mr. Frank R. Ledford became our NSPS delegate in 2004 and served as director through 2007. An article in the December 2004 edition announced the “New” NSPS because of the changes in the ACSM structure. “Self-governance, underpinned by financial autonomy, has positioned NSPS to better represent the surveying profession at a myriad of professional and political forums and to enhance decisively the quality of the profession and its public image.”

In the final 2007 TTS issue, there was an announcement that William R. Coleman was running for NSPS Vice President. Mr. Coleman went on to serve as Vice President and NSPS President in 2011 after serving in numerous positions and capacities at both the State and National levels. He is well-known and highly respected throughout the Nation.



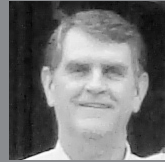
In 2008, Mike Benton was elected as North Carolina’s NSPS delegate and served until 2012 when he was appointed to the North Carolina Board of Examiners for Engineers and Surveyors (NCBEES). Mr. Benton served as our delegate at a critical time in NSPS history.

This was the beginning of the 100% affiliate membership

initiative and a time when our GPS was threatened by the broadband services provider Lightsquared that wanted to use a frequency band adjacent to the GPS signals with an extremely strong signal.

Upon Mr. Benton’s appointment to NCBEES, Mr. William Coleman was called back into service and appointed as our NSPS Delegate for 2013. In the Spring 2013 issue of TTS, Mr. Coleman noted that the transition from ACSM to the single member entity under the NSPS banner had occurred in less than eighteen months and that the 100% Membership Affiliation proposal had been met with unexpected support.

This brings up to the current time as I became your NSPS North Carolina delegate in 2014 upon Mr. Coleman not seeking a full term. It has been an honor and privilege to serve our NCSS Society for the past six years and a gratifying experience for me personally. Thank you!



Randy Rambeau has been the Geomatics Office Manager at McKim & Creed, Inc. in Raleigh since 1991. He graduated from NCSU and became a PLS in 1978, when he joined NCSS. Randy now serves as our NSPS NC Director.

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1939-2019

With a vision to see the profession of land surveying methods improved and all land surveyors registered in North Carolina, a handful of men gathered at North Carolina State College on January 31, 1939. Led by C.L. Mann, the first officers were elected. F.C. Morton was elected president, G.S. Harrell was elected vice-president, C.L. Mann was elected secretary-treasurer. W.J. Lambert and Weldon Willis were elected as additional board members.



C.L. Mann 1877 - 1961

Mr. Mann graduated from North Carolina State College in 1899 with a degree in civil engineering. Later, Mann became head of the Department of Civil Engineering at North Carolina State College for 47 years.

MINUTES OF THE ORGANIZATION
MEETING OF THE
NORTH CAROLINA SOCIETY OF SURVEYORS

JANUARY 31, 1939

The meeting was called to order by C. L. Mann, temporary chairman. Mr. Mann stated that the purpose of the meeting was the organization of a North Carolina Society of Surveyors and stated that the first business would be the election of officers so as to form a permanent organization.

He called for nominations for President. Mr. F. C. Morton was unanimously elected President.

ARTICLE I

Section 1. The name of this organization shall be the North Carolina Society of Surveyors.



Originally published in the Charlotte Observer in February 1942. Officers from left to right: F.C. Morton, Grady S. Harrell, C.L. Mann, W.J. Lambert & Weldon Willis.

NCSSS LOGO

The original logo was used in various forms through 1969 when the current logo took its place.

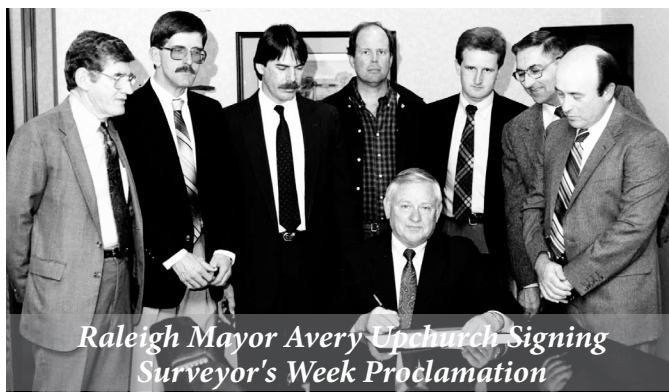


NORTH CAROLINA SOCIETY OF SURVEYORS FINANCIAL REPORT			
<u>Receipts:</u>			
Dues - 32 members - \$1.00 each		\$ 32.00	
Interest - Raleigh Industrial Bank		.36	
<u>Disbursements:</u>			
Carolina Printing Company,			
200 1939 and 1940 membership cards		\$ 4.75	
Stamps for F. C. Morton, President		1.00	
		\$ 32.36	\$ 5.75
BALANCE on Principal,			26.61
Raleigh Industrial Bank		\$ 32.36	\$ 32.36
January 1940		C. L. Mann, Secretary	

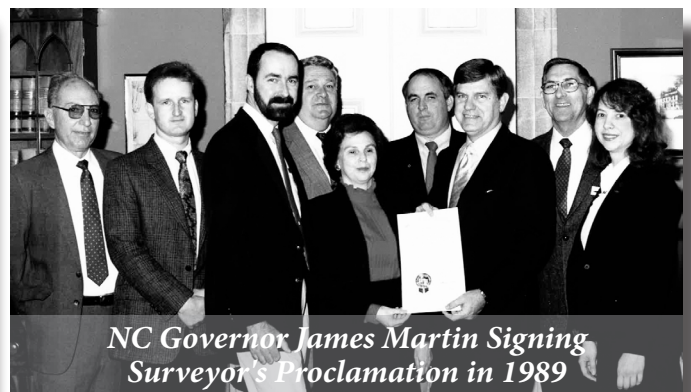
The first financial report lists 32 members with dues of \$1.

RECOGNITION

Since the beginning, members have worked diligently to see the surveying profession recognized in North Carolina as a thriving profession.



Larry Akers, Watson McNeill, Charles Piratzky, Daniel Joyner, Gary Thompson, Derward Baker, Sherrill Styers & Mayor Avery Upchurch



Robert Inman, Gary Thompson, Bryant Hardison, Al Frieze, Lucile Inman, Charles Rawls, Governor James Martin, Derward Baker & Patrician Hutchison

FIRST IN THEIR FIELD



Emily Blount (L-1825) has celebrated many firsts in her career. She is the first woman to earn a degree from N.C. State in civil engineering, the first North Carolina female registered as a professional engineer (July 8th, 1960) and the first registered female land surveyor in North Carolina (February 19, 1976).

The “lady engineer” went on to have a 40-year career at NCDOT, most of it in traffic engineering. In 2006, Emily was inducted into the N.C. Transportation Hall of Fame. She continues to maintain her license in North Carolina. You will often find her attending seminars with her son Clayton, also a licensed land surveyor.



Patricia Hutchison Roberts (L-2756) was the second female to become a licensed land surveyor in North Carolina. She was the first and only female President of NCSS in 1988, Vice-President in 1986, and chaired multiple committees. She was also President of the

Western Chapter in 1987. In addition, she was on the ACSM Finance & Budget Committee and the Survey Technician Certification Board as well as chair of the NSPS Forum for Women in Surveying.

OTIS A. JONES EDUCATIONAL INSTITUTE



From the very beginning, it was the desire of the society to ensure that land surveyors were educated professionals. Established as part of Past-President Otis Jones' presidential goals, the first Institute was held January 5-9, 1987 at the Jane S. McKimmon Center in Raleigh and had 43 surveyors in attendance. Since 1987, NCSS has continued to provide this educational program,

typically offered every two years. It is designed to provide an in-depth look at important aspects of the surveying profession while also creating a university atmosphere for networking and professional development. To date over 200 members have graduated from the program. Your next opportunity to participate will be September 30 - October 2, 2020.



LEGISLATIVE ACCOMPLISHMENTS



The General Statutes of North Carolina, with direction from the Board of Examiners for Engineering and Surveying (NCBEES), define the practice of surveyors and the bounds in which that practice takes place. Changing the existing practice of surveying must be accomplished through changes in the current general statutes. This involves clearly defining our position and goals and building relationships with those who have the power to promote or prevent new legislation.

NCSS accomplishments have taken the following form:

- NC 811 Safe Digging Act - this has provides design protection, location opportunities, and representation by surveyors within the state.
- NC GS 47-30 Re-write - allows paper plats to be used in recordings instead of

mylar, has eliminates the requirement to set control corners in subdivisions, while at the same time bringing our plats up to modern datum standards and has provides clarity to surveyors and Municipalities alike for mapping standards.

- DOT simplification of Highway Plans - requires new Right-of-Way and easements to be clearly identified and tied to either the project alignment or State Plane Coordinate System.
- Qualified Immunity for Surveyors - allows surveyors the same protection afforded to engineers while working during a state of emergency.
- Statute of Limitations and Repose - provides for 3/7-year liability vs 10 years as defined by the court.
- Fair Contracting - helps end the need for surveyors and small businesses to sign contracts indemnifying owners for negligence other than surveying.

NCSS OFFICE MOVES



The NCSS Office has been in various locations during the last 80 years. When Lucille Inman, the first Executive Director was hired in 1976, the office was located in Tabor City. In 1997, the office was moved to Oberlin Road in Raleigh. In 2009, the office was moved to Wake Forest under the leadership of Sara Kusan, Executive Director, where it is still located today.

Continued on page 30

Proud to be Your Advocate

by Kerri Burke, Senior Vice President, McGuireWoods Consulting

Happy 80th anniversary to the NC Society of Surveyors! I am proud to have represented you as your lobbyist and proudest fan for nearly eight years now! When I began at McGuireWoods, the Society was one of my first clients, and as such you all will always have a special spot in my professional life. I have to admit that eight years ago, I was not familiar with what a land surveyor was or

our professional industry!

Victory on Fixing Confusing Legal Liability Laws

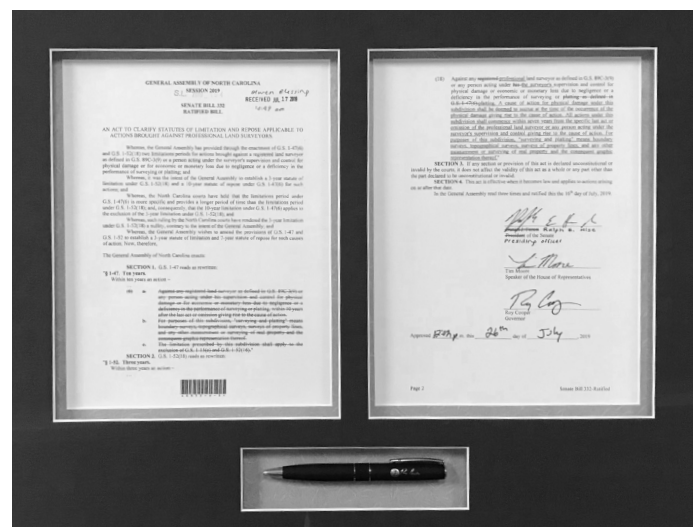
Statute of Limitations vs. Statute of Repose: How many years am I liable for my surveying work on either? When does the clock start on the reported damage? These are just some of the questions we heard from you, as the Society

"Mr. Lambert made a motion that the Board of Directors be a legislative committee whose principal duties for this year would be devoted towards securing legislation requiring registration for surveyors. The motion was passed."
Excerpt from the first board meeting minutes on January 31, 1939.

did for the community. I have thoroughly enjoyed learning the invaluable assets your industry contributes to our great state. Land surveyors are professionals and are an integral part of the broader industry group of engineers, realtors, general contractors, architects, etc. I am most proud of educating industry leaders and elected officials of our professional contributions to the industry and providing surveyors a seat at the table in a wide array of industry decisions.

"If you are not at the table, you are on the menu..." This expression reflects one of the first lessons I learned as a lobbyist. Industry leaders and politicians make wide-ranging decisions every day; how does it impact our industry? That is the importance of engagement in the political process because if we are not at the table, other industries and politicians will make those decisions without knowing the impact on the surveying community. I have been proud to represent the surveyors at the "table." Your engagement with the Society has allowed me to represent a larger community of surveyors and make the arguments to industry lobbyists and legislators on either the positive or negative implications of proposed legislation. Your voice matters, and it is making a difference in the political circles. My job is to be at the General Assembly every day. Legislators and lobbyists see Christy and I and now think surveyors. As a direct result of my and your engagement, we are proactively approached for our opinion on proposed legislation and involved in coalitions for wide-ranging legislation. We have made great strides in legislative accomplishments, staying engaged and proud of

discussed putting forward comprehensive legislation a couple of years ago. Because of confusing and conflicting laws, a court decision found that surveyors are liable for damage for whatever the longer period was in law. Several different statutes found liability at three, seven, and ten years without any distinction between the statute of repose vs. statute of limitations. This was an important issue for the Society, so we laid the groundwork last year,



soliciting input from major trade associations such as the NC Chamber, NC Manufacturers Association, various associations representing engineers, and other impacted industries. Venting our issues on a grassroots level allowed us to go to legislators this session outlining the problem, proposing a solution with a list of supporters. Involving trade associations and their lobbyists early in

the process provides cover to legislators working to move our legislation. We were diligent and purposeful in our statute of repose bill this session and we were successful with unanimous votes in the House and Senate and the Governor's signature! Our Society owes special thanks to Rep. Dean Arp (R-Union) and Senator Warren Daniel (R-Avery, Burke, Caldwell) as they were pivotal in making sure our legislation passed with strong bipartisan support preventing outside parties amending our bill.

Senate Bill 332, Civil Procedure/Limitations/Land Surveyors clarifies the statute of limitations and statute of repose for negligence claims brought against professional land surveyors. The new law:

- Provides that a claim against professional land surveyors for physical damage due to negligence or a deficiency in surveying or platting is deemed to accrue at the time of the occurrence of the physical damage giving rise to the cause of action
- Provides that any action for physical damage or economic or monetary loss due to negligence in

surveying and platting must be brought within seven years from the specific last act or omission of the professional land surveyor or person acting under their supervision and control giving rise to the cause of action.

I am looking forward to working on new issues for the Society and as always being your face and representation at the General Assembly every day! Please stay engaged with the Society, as we need active representation to become a stronger advocacy association every year as we become a more organized and professional industry. Thank you for allowing me to work with you, happy anniversary and hope to see everyone soon!

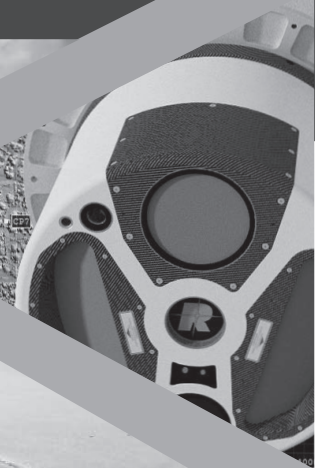


Kerri Burke is Senior Vice President in the State Government Relations group for McGuireWoods Consulting in Raleigh, NC. She received a BS in Political Science from Old Dominion University, and attended the Indiana University School of Law. She has served as communications director for the NC Chamber, and has worked as a registered lobbyist and legislative intern.

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North Carolina Geodetic Survey (NCGS) Update

by Gary Thompson, Chief of the North Carolina Geodetic Survey and Deputy Risk Management Chief

Replacing the North American Datum of 1983 and North American Vertical Datum of 1988 in 2022

The replacement of the North American Datum of 1983 (NAD83) and the North American Vertical Datum of 1988 (NAVD88) will dramatically impact everyone in the North Carolina (NC), from professional applications and services to recreational users who use maps, charts and satellite positioning systems such as GPS (Global Positioning System).

NAD83 will be replaced with:

North American Terrestrial Reference Frame (NATR2022)

NAVD88 will be replaced with:

North American-Pacific Geopotential Datum of 2022 (NAPGD2022)

Another change that will occur in 2022 is the current North Carolina (NC) State Plane Coordinate System will be replaced with the NC State Plane Coordinate System 2022. The National Geodetic Survey no longer plans to support the US Survey Foot.

Watch for an email from NCGS seeking your opinion on changing from the US Survey Foot to the International Foot in NC.

For more information about the datum changes in 2022, NC State Plane Coordinate System 2002, and the International Foot go to these links:

- <https://www.ngs.noaa.gov/datums/newdatums/index.shtml>
- <https://www.ngs.noaa.gov/SPCS/index.shtml>
- <https://www.ngs.noaa.gov/web/news/measure-unit-change-coming.shtml>

North Carolina Society of Surveyors Volunteer Options for Local Chapters

[Adopt a Gage \(AaG\)](#)

The Flood Inundation Mapping Alert Network (FIMAN) provides flood warning information to local community officials and the public. The goal of FIMAN is to reduce the loss of life and flood-related property damage by providing timely, detailed, and accurate flood inundation information to government officials and the public.

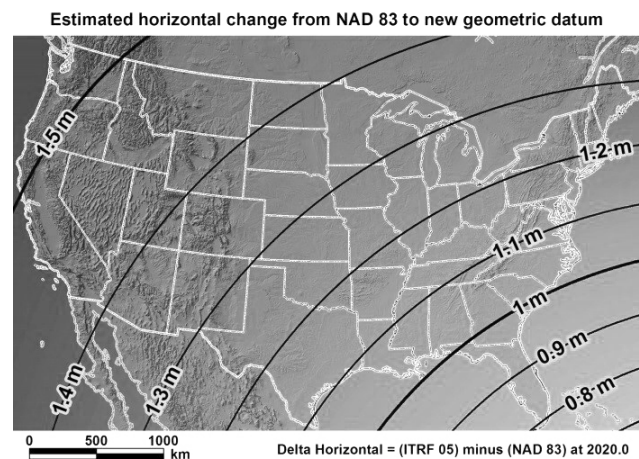


Image Source: National Geodetic Survey

FIMAN uses data from a network of more than 500 gages. In order to provide flood warning information for additional locations in North Carolina, more stream gages are being installed. For FIMAN to provide timely and accurate



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information, data from these gages must be obtained 24 hours a day, seven days a week with no interruptions.

Gage maintenance provides critical data to community officials and the public during an event. North Carolina Emergency Management has created the Adopt a Gage (AaG) program to partner with local officials to ensure that gages are operational and to notify NCEM when a gage needs repair.

The AaG program would allow a county, local government, or non-profit organization to adopt the gages in their community and serve as eyes on the ground for those gages. AaG partners would use the North Carolina Emergency Management, NCEM/AaG web page to report status information about a gage site, to report problems (debris buildup, damage, theft) or report that the gage is in good condition.

The AaG partner would also serve as a local contact that could handle a quick visit to a gage to perform simple maintenance tasks.

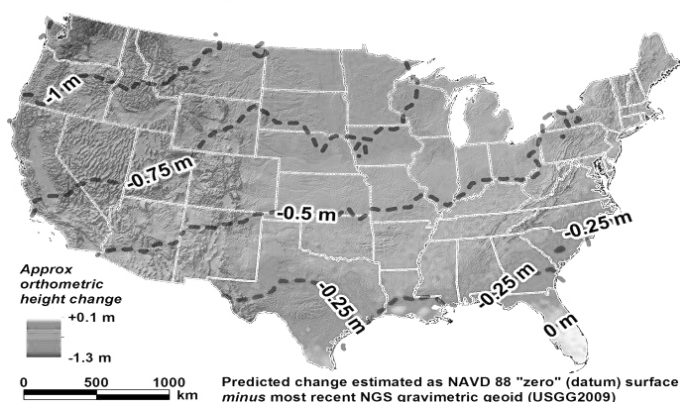
For additional information about the program submit your questions or information request to NCEM. (aag@ncem.org)

High Water Mark Training

NCEM is partnering with the North Carolina Society of Surveyors (NCSS) to provide High Water Mark (HWM) training classes to Professional Land Surveyors (PLSs). Once trained in the proper methods used to identify and mark a HWM, these PLSs can volunteer to assist their community and the NCEM/North Carolina Floodplain Mapping program (NCFMP) to mark HWMs following a flood event.

High Water Marks (HWMs) are the best resource to document a flood event. This information can be used in a variety of mitigation planning efforts. HWM data is perishable and time is of the essence in order to mark and collect positional (horizontal and vertical) information. Mud and seed lines, debris lines on the ground and debris snags in trees are types of HWMs that can be recorded so that PLSs at a later time can survey the points and obtain the horizontal and vertical positional information. HWM information will be used by the North Carolina Floodplain Mapping program to validate FIMAN flood boundaries and to calibrate and validate future flood study updates performed by the NCFMP. High water marks also can help facilitate development of detailed flood boundaries to document historical flooding extents to support disaster

Approximate predicted change from NAVD 88 to new vertical datum



The predicted change in elevation from the current NAVD 88 value to the new geopotential datum, which was estimated using the USGG2009 gravimetric geoid. Image Source: NGS

recovery, economic analyses, and future floodplain management and mitigation strategies.

The HWM training class will cover the following topics:

- Benefits of HWM
- Types of HWM
- Identifying and marking HWM
- HWM field kits
- North Carolina HWM phone application

NCFMP has developed a phone application that can be used by the PLS volunteers to photograph and submit the recorded HWM using their smart phone. The NCFMP HWM photo application will allow users to specify the location of the high water mark using the application map or with the Global Positioning System within the smart phone itself. Users can also take a photo of the location with their smartphone and upload it directly into the app.

The HWM phone application can be found at this link:

<http://ncem-gis.maps.arcgis.com/apps/GeoForm/index.html?appid=e4b0124896264c37aa7e235de3d89809>

To arrange HWM training, contact Gary Thompson at gary.thompson@ncdps.gov.



Gary has held a professional license as a Professional Land Surveyor (PLS) in NC since 1980. He has served as president of both NCSS & NSPS. He most recently served as treasurer of NCEES, chair of the North Carolina Boundary Commission, and an emeritus member of NCBEES.

1000 Acre Survey North of Mt. Mitchell

by Ken Mills, PLS

Once upon a time, the company I was working for in 1978 was asked to survey a tract of land approximately 1000 acres in size, which was to be sold to the State of North Carolina to be added to the Mt. Mitchell State Park. At the time the northeast corner of the Mt. Mitchell State Park ended at about 820 feet south of Cattail Peak on the Black Mountain Ridge.

That is a lot of land to cover if we had to walk over and along the boundary lines carrying all of our field equipment and food.

We obtained some aerial maps that showed logging roads all over the area. Using these maps we were able to drive from the valley, on the west side of the Black Mountain Ridge, up to the shelter in Deep Gap. We also found some logging roads to follow up to the Knob on Ogle Ridge, just to the west of the northwest corner of the state park at that time. At the northern end of the tract, there was a gravel road which snaked up the side of the Black Mountain Ridge to privately owned parcels. We were able to use this gravel road to locate the northern line of our tract and to reach an NCDOT Marker located on Grassy Ridge.

One of the surveyors in the company went up to the tract to do some recon. He looked for access roads and hiked up to the ridge top to get an idea of the scope of work to complete. This first step took about one week. He made sketches and traced routes on quad maps and spotted locations where we could place control points and he also looked for existing geodetic monuments to tie to during the field traversing

portion of the survey.

To get to the site, we would drive from Asheville, north to Burnsville. Then we would take Highway 197 South to Pensacola. At Pensacola, we turned left on to Cattail Creek Road which we followed to the bottom of the Black Mountain Ridge. We were using a Jeep Wagoner, and when we reached the beginning of the logging road, we would put mud and snow chains on all four wheels. On the way up to the shelter at Deep Gap, we had to repair a number of washed out sections of the logging road. Once at the top, we split into two groups of two men each. One group followed the trail along the top of the Black Mountain Ridge to the north, and I took the trail to the south. Our job was to establish traverse points, to clear brush, to look for the monuments shown on the quad map and to look for existing corner markers.

Because it took about an hour to get to the bottom of the ridge from Asheville, we decided to run the traverse from the southwest corner, along the existing park boundary, up the side ridge to the top of the main ridge, south of Cattail Peak. From there, we began running the traverse north along the top of the Black Mountain Ridge as far as we could before sunset. We then hiked down to the shelter at Deep Gap, where we spent the night. After breakfast the next morning, we headed back south to pick up where we ended the evening before and continued north. We traversed past Deep Gap, Deer Mountain and about 2,200 feet north of Winter Star Mountain to the corner marker we found while searching on the previous day.

Along the northern line of the existing Park boundary, there was a 3/8" or a 1/4" steel cable extending the entire 3,600 feet. This part of the boundary followed the top of a side ridge, which was very steep until we were within 300 feet of the top of the Black Mountain Ridge. In many places, we had to use the steel cable to pull ourselves up along the ridge. It amazed us to realize some men carried all that cable and then laid it out along that very steep boundary line.

To get to the northwest corner of the park boundary on Ogle Ridge, we drove along an old logging road, which

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followed the south branch of Cattail Creek. When we ran out of road, we stopped and loaded up with equipment, lunch and water and started up the rocky branch. We went about 4,000 feet and stopped to eat lunch.

I noticed a rhododendron on the other side of the branch in full bloom. This was in July and very hot in the valley, but in this hollow and beside the cold water of the branch, the rhododendron bushes were in full bloom. I had a thermos and went across the branch and picked one of the flowers. I put the flower in the thermos with a little of the cold water and took it home to my wife.

We finished the south boundary and the east boundary by late in the afternoon of the second day. We were able to cover approximately 15,900 feet using a 200-foot chain and a theodolite in two days.

Along the Ogle Ridge and below the southwest corner of our tract, there was a large exposed rock, about the area of a very large house. We set a control point in a crack in the rock and traversed from our traverse point at the southwest corner of the tract we were surveying, down the ridge to the control point. We wanted to tie an NCDOT Marker on

Grassy Ridge, about 3.15 miles to the north, into our control traverse. We positioned our instrument man on the rock and told him it would take another man and me about an hour to drive the Jeep from there, down to the valley to the west, then along the valley and back up the gravel roads to the beginning of the roadbed, which went north into a small valley on the east side of Grassy Ridge. We parked the Jeep at a stream and hiked out the rest of the way, about 1.3 miles, to a point where we thought we were opposite the NCDOT Marker on the ridge. Then we climbed the side of the ridge and found a path leading to the marker.

Using my binoculars, I found the exposed rock where the instrument man was located, and discovered we had to clear some small saplings out of the way, so he had a clear line of sight. We set up the bank of reflectors we carried with us, and I called over the radio to the instrument man to tell him we were ready. A couple of minutes later, he called back and said he could not see us. I always carried a hand compass with a mirror in the lid. I opened it up and flashed sunlight toward him. He was then able to complete the angle measurement, place the laser ranger on the tripod, and take the distance measurement. Later, when we picked him up, he said he was amazed at how well the mirror worked, and

The advertisement for Tuck Mapping Solutions, Inc. features a central logo with a circular graphic and the text "tuck MAPPING SOLUTIONS, INC." Below the logo is the tagline "Leading-Edge Solutions for Remote Sensing". Surrounding the logo are eight images illustrating different services: "High-Resolution LiDAR Data" (aerial view of a highway interchange), "Digital Orthophotography" (aerial view of a stadium), "Simultaneous LiDAR and Imagery Acquisition" (a helicopter), "Oblique Imagery" (aerial view of industrial smokestacks), "Digital Surface Model" (3D terrain model), "Topographic and Planimetric Mapping" (aerial view of a parking lot), "Volumetric Analysis" (3D model of a landscape), and a central image showing a grid of cars parked in a lot.

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I remember one day, two guys and I were sent to look for the location of the northwest corner of the tract we were surveying. We started from Deep Gap and walked out a logging road to where it came to Winter Star Ridge. On the quad map, the logging road is shown as a hiking trail. As we went down the ridge, I was in the lead. The ridge was covered in small trees, no more than 15 to 20 feet tall. All at once, because of our hiking speed going down the ridge and through the trees with very little underbrush, I charged out into an open area covered with scrub pines about 6' tall. These densely packed trees slowed me down. Just a short way into the scrub pines, maybe 20 feet, I came to the edge of a vertical mine shaft. It wasn't deep, but the walls were almost vertical. Falling in would have resulted in an injury, and getting back out would have required some ropes, which we didn't have. We spent some time walking around the edge, which was at least 20 feet across, speculating about what the miners were looking for. I made a note about the approximate location of the mine on the ridge to show on the final survey map. We then finished our hike down the side of the ridge to the area of the northwest corner and spent some time searching for any evidence of a corner marker or marked witness trees. We could not find any evidence of the corner, so we set a new corner marker at

a later date. We could see the main gravel road from there and then made our way to the road and then headed down to meet the Jeep at a lower point on the road.

The survey was very hard, and I was pleased to have had the opportunity to be in charge of the fieldwork and the calculations. The views were spectacular whenever we were able to get out of the trees. Sitting on the exposed rock on Ogle Ridge, we could see north, west and south to the horizon. Then spending the night at the shelter in Deep Gap was really great. The shelter faced east, and the sunrise was really wonderful! I've never been back there since, but about a month ago I received an email from a hiker who found one of the markers we set. The monument was destroyed and he found the survey cap we set in concrete. He sent a picture of the cap. I emailed back and asked about the shelter. He replied the shelter no longer existed. Nevertheless, it was a great experience.



Ken Mills became a PLS in 1975. He has been an active member of NCSS, serving three terms as the Western Chapter President. He served as the NCSS President in 1998. Mills co-authored *Following in their Footsteps* with Otis A. Jones. He has written for *American Surveyor Magazine* and is a columnist for *Madison County's News-Record & Sentinel* newspaper.

George T. Paris

MEMBER PROFILE



As part of our 80th Anniversary Edition, our Member Profile celebrates the contributions of Past President, George Thomas Paris. He is well-respected, exemplifying all that professionalism means. George responded to a few questions I had for him via email. I was immediately struck with the wisdom found in his life lessons. I believe George's words will speak for themselves. Christy Davis

Tell me about your family:

I married my childhood friend Euolene Sizemore Paris. We were together for 45 years from until December 18, 2007. She was a patient woman because she married the military and surveying professions. I never remarried because it wouldn't be fair. No one could ever measure up to her worth and I still miss her every day. I have 3 children, two sons and a daughter and nine grandchildren. I was fortunate that although I traveled for work and served in the reserves, I was able to be at home during the birth of all my children.

What was your childhood ambition?

World War II had a very profound impact on my childhood, instilling in me the desire to serve my country as a soldier. I remember watching the Newsreels when I went to see a movie. It seemed so far away, but I knew I had three uncles serving overseas. I was able to fulfill my ambition by serving as a member of the National Guard, Army and Army Reserve, finally retiring in May 1993.

What lessons did you learn working your first surveying job?

At the end of my sophomore year in college, I was able to secure summer employment with the North Carolina State Highway Commission, now known as NC Department of Transportation, as an engineering aid on a survey party located in Davis, NC. My first challenge was actually arriving to work in Davis, which is east of Morehead City. The bus (my only means of transportation) traveled as far as Morehead City leaving me an additional distance of 18 miles before I could report for work. Luckily, I was able to hitch rides and didn't have to walk very far. On June 5, 1960, with my suitcase and a great deal of apprehension about what to expect, I reported to John C. Sherbert at a boarding house in Davis.

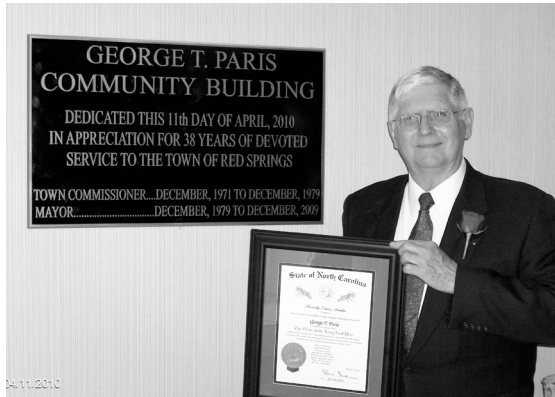


Our project was to establish horizontal and vertical survey points that were identifiable on both the ground and aerial photography available at that time. These paneled vertical and horizontal points were used to study beach erosion along the Outer Banks from Ocracoke Inlet to Cape Lookout. I distinctly remember Mr. Sherbert stating that he knew I had, or would have, a lot of questions as I began working. He asked that I withhold my questions, listen, pay attention and learn the job tasks given me, always observing what my fellow workers were doing. After two (2) weeks, if I still had questions, he would answer them. Paying attention, listening to my peers and performing the assigned tasks were my greatest early lessons in surveying. Working in the area of photogrammetry and surveying with the first and second order instruments developed a desire to generate a quality product. Later, as our field party established statewide control for the interstate highway system, the passion for accuracy grew and my desire to continue in the surveying field developed.

What was your first and favorite surveying equipment?

My first surveying purchase was a Gurley 130 Transit. Through the years, I've purchased many surveying instruments to assist in gathering accurate positions on property corners, physical evidence of horizontal and vertical improvements and other applications related to our surveying profession. My passion has always been to embrace the available technology and produce the best survey possible. As I think of my favorite surveying equipment, taking advantage of the improvements in gathering data, understanding and utilizing new software to provide timely and accurate final reports

and/or plats has always driven my purchasing decisions. While many instruments have created a degree of excitement, my favorite equipment has been the instruments and technology developed to obtain survey grade positions through GPS such as locators, distance meters, theodolites, and levels.



Have you previously served your profession or the public through NCSS, NCBEES or other volunteer organizations? Why do you think that is important?

Upon obtaining my license in January 1966, I attended the 1966 Annual Meeting of NCSS seeking to become a member. During the meeting, I asked the question of how to join. President Joseph Hardee tasked Past-president Paul Ward and Secretary/Treasurer Moses Farmer with assisting me. I became a member of NCSS soon after. In 1979, I was elected Vice President, and in 1980 I was elected as President. The interaction, fellowship and education opportunities enjoyed through membership have been outstanding.

In 1981, I was appointed by Governor James B. Hunt to the "North Carolina Board of Registration for Professional Engineers and Land Surveyors" now known as "The North Carolina Board of Examiners for Engineers and Surveyors." I was honored to serve as Chairman of that Board in 1985.

I also served as Mayor of Red Springs for thirty years. It was fun and hard and tiring, but some of the best years of my life.

Active participation is extremely important to the vitality of any organization. NCSS represents land surveyors and speaks with a voice of understanding and knowledge on issues confronting the profession. Past positive results on legislation in North Carolina attest to the importance of a dedicated Society overseeing the interest of the surveying community.



What project are you most proud of?

A unique opportunity surfaced at the end of the twentieth century. Funding was available to retrace and establish selected county boundaries. I was able to be a part of the process and enjoyed the challenges presented by "following in their footsteps."

For example, when I took the land surveying examination in December 1965, one of the requirements was a personal interview with a current board member during the testing period. My interviewer was Meriweather Lewis. While surveying one of the county boundaries, I had the privilege of surveying a line previously established by Mr. Lewis. When I positioned my surveying assistants at the computed location of a monument in a pastured area, the point of the prism rod struck the top of a buried triangle concrete monument previously placed by Mr. Lewis. I was amazed at the degree of precision the original survey party was able to obtain with the older transit

and steel tape. While the complexity and accuracy of surveying instruments may change over the years, it is paramount for the surveyor to utilize his knowledge and procedural applications to ensure a lasting product.

What one piece of wisdom would you share with a young surveyor just starting his/her career?

Approach every project with the expectation that you will revisit that project in the future. Never compromise your principles and accuracy in gathering data. When all is said and done, your reputation as a surveyor is the legacy you will leave for future generations.

Share a memory about surveying that captures your love of the profession:

Every time another surveyor requests information from one of my previous surveys, it gives me great gratification to know he/she values my survey. Sharing information is important and in most cases eliminates misunderstandings among peers.

ANNUAL CONFERENCE



NCSS members have been gathering every year since 1963 to celebrate the accomplishment of its members during the annual conference. It is always a great time for networking with friends.

Join us for our next conference February 6-8, 2020 at the Hilton Charlotte Univeristy Place.



GOLF TOURNAMENTS



Golf has always held a special place with NCSS, whether it be a PAC Tournament, a MAPS Tournament, an NCSS Tournament, we have some of the most faithful players and sponsors year after year.

Long time member and avid golfer, Jerry Callicutt recently shared this memory.

When I first became involved with the NCSS in the mid-60s, the Secretary/Treasurer was the one who looked after the day to day operations under the guidance of the President of the Society. This role included looking after both the annual convention and the summer meetings near the coast. I had the privilege of serving as Secretary/Treasurer from 1972 through 1976.

The function of this position continued into the mid-70s when NCSS hired Lucille Inman as the 1st Executive Director. Hiring an Executive Director enables NCSS to become a much stronger organization having a much larger influence over the issues affecting Surveyors. With the Leadership we now have at the top of the Society, we are recognized for our initiatives both in our State and also on the National Level.

Keep up the good work.
Jerry Callicutt

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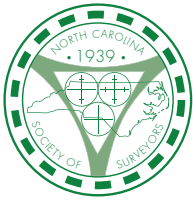
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