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# Land Design Insurance Group

Timonium, MD www.landdesigninsurance.com



#### Leica Geosystems, Inc.

Peachtree, GA www.leica-geosystems.us



#### Meridian 3D, Inc.

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#### **NC Railroad**

Raleigh, NC www.ncrr.com

#### Rentavault, Inc.

Marion, NC www.rentavault.net

#### **Ron Kirkland Land Surveyors**

Franklin, NC www.ronkirklandlandsurveying.com



#### **The Schneider Corporation**

Indianapolis, IN www.schneidercorp.com

# The Tarheel SURVEYOR

# **fall 2015**

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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."

On the Cover: Truck generously provided by Linwood Powell of Louisburg, NC. Dog, Murphy, belongs to Christy Davis. Photo by NCSS.



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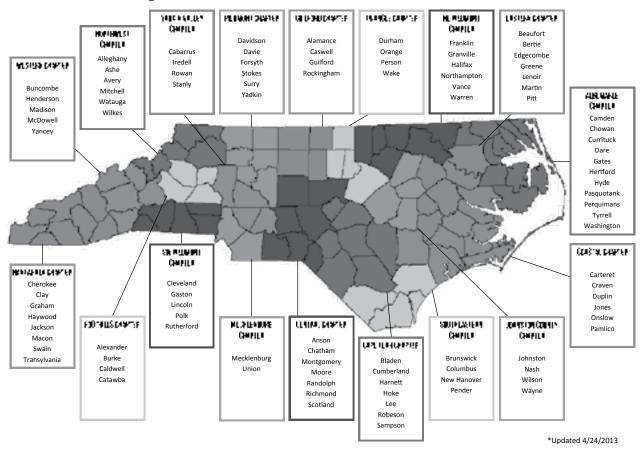
# CHAPTER MEETINGS

#### **CHAPTER** Albemarle Cape Fear Central Coastal Eastern Foothills Guilford Johnston County Mecklenburg Nantahala **NE Piedmont** Northwest Piedmont Southeastern SW Piedmont Triangle Western Yadkin Valley

#### **DATE & TIME** 3rd Tuesday | 6:30 pm Last Thursday | 6:30 pm Last Tuesday | 7:00 pm Last Monday | 6:30 pm 2nd Monday | 6:30 pm 2nd Tuesday, 7:00 pm 3rd Wednesday | 6:00 pm 2nd Tuesday | 6:00 pm 1st Monday | 6:00 pm \*no meeting Jul-Aug 3rd Tuesday | 6:30 pm \*no meeting Jun-Aug Last Tuesday | 7:00 pm 3rd Tuesday | 6:00 pm 4th Tuesday | 6:00 pm Last Wednesday | 7:00 pm 2nd Thursday | 6:30 pm 3rd Tuesday | 6:30 pm 2nd Tuesday | 6:30 pm 2nd Wednesday | 6:30 pm

#### **LOCATION** Cypress Creek Grill, Elizabeth City Various Locations, Fayetteville Westmore Family Restaurant, Westmore Texas Steakhouse, Morehead City Parker's BBQ, Greenville Timberwoods, Morganton The Porterhouse Grill, Greensboro Holt Lake BBQ, Smithfield Dilworth Grille, Charlotte Bogarts, Sylva Various Locations, Louisburg Daniel Boone Inn Restaurant, Boone Oscar's Grill & Tavern, Winston-Salem Carolina BBQ, Wilmington Ryan's Steakhosue, Forest City Casa Carbone, Raleigh Cornerstone Restaurant, Asheville Ryan's Steakhouse, Salisbury

#### **NCSS Local Chapter Areas**





# Director's Notes



y daughter and I love jigsaw puzzles. She puts them together considering only the shape of each piece, while I put puzzles together by looking at the color variations and minute detail.

She is the type of person that can put together a puzzle of a polar bear in a blizzard, at the North Pole, just as quickly as I can put one together of various hot air balloons on a summer day. Both of us are successful, but in the end, her method inspires awe!

I am reminded that my work at NCSS resembles Erin's method of puzzle solving. Each piece of the puzzle comes together slowly to form a picture that perhaps I couldn't see initially. Since the last edition of the Tarheel Surveyor, the new website was unveiled, making everything much more user friendly for our members. I have carefully monitored our budget numbers as one fiscal year ended and another began. Our goals for the 2015 membership drive are well within reach for the first time in a few years. The Fall Education Calendar was planned and implemented with the help of the Education Committee and the support of local chapters. We are planning the 2016 Conference while shopping sites for 2017. I have lobbied for NC Geodetic, license plates and shellfish boundaries through the second longest legislative session on record. The office went through a personnel change with Morgan Creager leaving and Sherri Barron taking her place as the Director of Marketing and Membership Development. The Standards of Practice Committee has made significant progress on the Control Corner rewrite that we hope to present to the legislature in 2017.

Finally, your generosity enabled me to hire a summer intern to upload plats into the MAPS database, now triple the size it was at my last Tarheel Surveyor letter. I am looking for financial partners in this endeavor to continue building a database that is both historical and helpful. A very small tax deductible contribution goes a long way towards paying an intern to scan maps for us. If every member simply donated \$10.00, we would have enough to hire an intern full-time for 6 months! Please give me a call if you would like to become a partner in this effort or send your check to PO Box 2101, Wake Forest, NC 27588. Make your tax free donation to NCSS MAPS, INC. One hundred percent of your contribution will go towards improving the MAPS Database.

Each action had its time and place over the last 6 months,

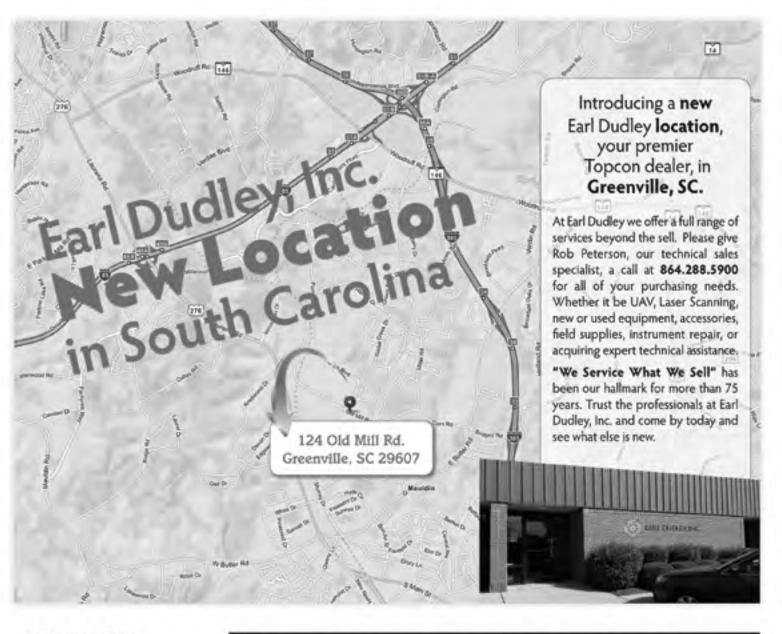
and while some days felt plodding, I am excited about the developing picture of a thriving Society moving forward in both service to our members and as examples to the rest of the nation. Thank you for a great spring and summer. May the fall and winter inspire the awe one feels when the last piece of a puzzle finds its place.

Christy C. Davis, Executive Director



Joel Johnson and Christy Davis compete in the annual "White Legs Contest" at the May Golf Tournament. Who do you think won?







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# LETTER FROM THE PRESIDENT



reetings from the beautiful mountains of western North Carolina.

I hope everyone has had an enjoyable spring and summer. In February, as my year of service to the North Carolina Society of Surveyors began, it seemed as though the changing leaves of fall were in the distant future, yet time finds us already watching the autumn harvest and anxiously awaiting the cool and crisp winter weather. Fall is a time of reflection. In May, the Spring Board of Directors meeting and golf tournament held in Wake Forest was well attended with a productive agenda

that continued to move our Society in a positive direction. In August, the Summer Board of Directors meeting was held in the western region. Golf enthusiasts were welcomed by the challenging fairways and greens of the Waynesville Country Club with spirited competition and good-hearted fellowship. The full agenda included presentations from nominees for the January, 2016 opening upon the North Carolina Board of Examiners for Engineers and Surveyors. I would like to express my gratitude to all nominees who travelled to the NCSS board meeting. I offer sincere thanks to each nominee for their participation and dedication to the Society.

As time passed, continuing education seminars were offered and attended by surveyors representing all regions of the state. The Society's continuing education partnership with local chapters to maximize benefits for all entities is evolving into a successful venture providing the best educational opportunities for members, while sharing the economic burdens and proceeds. One of my goals is to see full participation with every chapter in the Society partnering with the state to offer at least one seminar annually.

I am excited about increased activity in the various committees that had struggled in the past, but are now being revitalized by the wealth of knowledge shared by increasingly active participants whose interest and commitment evidences excellence among our membership. The Standards of Practice Committee has worked diligently to rewrite G.S. 47-30. Among the contributors to this effort were members of the North Carolina Geodetic Survey and Secretary of State's office.

As we approach the holiday season, I can say with certainty that our Society is meeting the goal of "growing at a measured pace." Our membership will be in good hands with the incoming 2016-2017 officers who have agreed to serve and represent our interests as we continue leading the way as professional land surveyors.

Sincerely,

POAB-

Bobby H. Burns, PLS NCSS President 2015-2016



Certified Floodplain Surveyor Certification

8:00am-5:00pm Nov. 4-6 Final Exam 8:30-12:30pm Nov. 7 20-24 PDHs NCSS Office Wake Forest, NC

#### **NOVEMBER 13, 2015**

### **State Line Boundary** & History of Chains

Instructor:
James E. Davis &
Timothy S. Guisewhite
8:00am-5:00pm, 8 PDHs
Miner's Hall at Gold Hill
Mines Historic Park
Gold Hill, NC

#### **DECEMBER 4, 2015**

#### The Surveyor in Court & Recent Developments in the Law Instructor: John Logsdon Gateway Convention

8:00am-5:00pm, 8 PDHs Rocky Mount, NC

#### **DECEMBER 4, 2015**

#### Whatever Floats Your Boat & Adverse Possession Like You've Never Seen It

Instructor: Kristopher M. Kline George W. Clay, Jr. Utility Operations Center 8:00am-5:00pm, 8 PDHs Shelby, NC

#### **DECEMBER 11, 2015**

Surveyor's Workshop 8:00am-5:00pm, 8 PDHs McKimmon Center Raleigh, NC



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# NSPS Update

by Randy S. Rambeau, Sr., PLS

I have just returned from the NSPS Fall Meeting held at the Kalahari Resort in Sandusky, OH in conjunction with the Fall Seminar Event of the Professional Land Surveyors of Ohio. The PLSO provided the NSPS delegates the opportunity to share meals and a hospitality function on each of the four days we were there. Meeting and talking with numerous Ohio surveyors and other NSPS Directors was very interesting and informative.

I attended the NSPS Education Committee, chaired by Andrew Sturgeon of Maine. Items of discussion by the committee were the 2016 Student Competition, the Body of Knowledge Requirement, and the future initiatives of the Education Committee. The 2016 Student Competition will be held in conjunction with the NSPS Spring Meeting in Arlington, VA on March 14, 2016. The topic for the competition is the boundary and topographic survey of a several acre tract to be used as the basis for an engineering design.

NSPS President, Jon Warren, charged the committee with several initiatives including: promoting the concept of regional education centers and on-line programs to provide four-year degree programs, working with Geomatics Advisory Boards to develop a model surveying curriculum for two- and four-year programs, creating a continuing education program list by state. It was mentioned that the beasurveyor.com site sponsored by the NCSS Education Foundation is an excellent source of information and readily available to everyone.

I wrapped up the morning by attending the NSPS Membership Committee. At the meeting, subcommittees were formed for NSPS Awards, Membership Development, Member Benefits, and Member Retention. There was considerable discussion on allowing current Certified Survey Technician (CST) certificate holders to become associate members of NSPS. There are currently approximately 1500 active CST certificate holders and these younger surveyors would be a wonderful addition to our organization. Also, for our members that are taking advantage of the CST program for their staff, there is on-line training available at www.learncst.com for those technicians wishing to pursue the CST certifications.

The NSPS Board of Directors held an all-day meeting on Friday attended by the NSPS officers and directors from forty-five states. Executive Director, Curt Sumner, reported on numerous items including the following: The new NSPS website is undergoing final testing and will be on-line soon. The NSPS Radio Hour hosted by Curt and airing Mondays at 11:00 am is doing well. We are encouraged to listen weekly and volunteer to be a guest. NSPS has been asked to take over the entire CFedS program from the Bureau of Land Management and is considering that possibility. Curt confirmed that the 2016 Spring Meeting will once again be held at the Crystal City Hilton on March 14th-18th including a visit to Capitol Hill on Wednesday, March 16th. It would be awesome to have a large number of North Carolina members attending the meeting and going to the Hill that day.

Mr. Pat Smith, the Joint Government Affairs Committee Chair from Texas, reported on the continuing efforts of his committee working in conjunction with Mr. J. B. Barnes of John M. Palatiello & Associates, our Governmental Affairs consultant. Issues that continue to be at the forefront are: 1) The U.S. Labor Department's inclusion last year of survey technicians under the Davis-Bacon Act, which is contrary to the past fifty years of federal policy; 2) Promoting and protecting QBS (Qualification Based Selection) on federally-funded projects; 3) Involvement in the upcoming reform of the National Flood Mapping Program; 4) Advocating federal funding for the 3DEP program; 5) Preparing a position statement on U.A.S. regulations and operation; and 6) Opposing the award of work by federal agencies using the "reverse auction" process.

Mr. Gary Kent of the NSPS/ALTA Committee reported that updated ALTA/NSPS standards will be available soon and will become effective February 23, 2016. There will be several major revisions to the standards, including Table A items 6(a),(b), 11(a),(b), and 19.

The NSPS Young Surveyors group continues to grow and gain momentum holding their first meeting during the Fall Meeting. Thirty-three states now have a designated representative to the group, including North Carolina.

I would like to remind our NCSS members to visit the NSPS website to learn how to take advantage of the numerous benefits provided by our NSPS membership, Also, there are numerous opportunities for NCSS members to participate in NSPS by volunteering to serve on one of the NSPS committees.



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 Governor.

# Milestones in Education

by Peggy Fersner, PE

nother year - yes, August begins our year - another semester started. student population is on the rise and that is great news. We officially had ten (10) new degree seeking students enrolled this fall and three (3) non-degree seeking students. A nondegree seeking student is one who may have started the application process too late. Two of the three students fit this criteria and the third is looking at obtaining course work to satisfy other states' educational and surveying course requirements. If you look at the students that started in the program last spring, we have over 15 new students enrolled in the program. We owe a lot of that to the \$500.00 incentive offered by the NCSS Educational Foundation. The students really appreciated that boost for their first semester. These students are all distance learners and most are working in the profession. I like to think that the profession will be in good hands in years to come!

The creation of a joint Bachelor of Science in Applied Geospatial Science and Technology Program with UNCG that I mentioned back in the fall of 2013 is moving along. This project has been an ongoing saga since the fall of 2011 so we are thrilled at the progress. This program would make it one of three in the nation that combines fields of study in Geographic Information Systems (GIS) and Geomatics. The Provosts and the Chancellors at both institutions have given it the thumbs up and we met in October, 2015 with both universities' Offices of Assessment and Accreditation to finalize our submittal to the UNC General Administration. Having all of the key players in one room at the same time is a tremendous step for this venture.

Another milestone this year is the partnership with the North Carolina Geodetic Society (NCGS) and the Geomatics Program at NC A&T to develop the necessary skills related to the use of Unmanned Aerial Systems (UAS) technology. This partnership will perform test flights, and analyze data collected via unmanned aerial systems. Obviously we are thrilled to be working on this with NCGS, as it is vital to keeping the program out in front with new technologies. As part of this, the Geomatics Program faculty – that's

Jerry Nave and me - will be getting the required training on ground and flight operations in order to obtain our own Certificate of Waiver or Authorization (COA) for the program. Our goal is to provide the surveying professionals a training facility for the legal operation of UASs. Last but not least, we are in the process of writing our ABET (Accreditation Board for Engineering and Technology) Self-Study for Readiness Review. This is our national review for program assessment that validates the worthiness of the program. This is essentially an abbreviated self-study report, though we are submitting all sections. ABET will then read this and make sure that we are ready to submit our final self-study report for a full-blown accreditation review. That review will take place during the fall of 2016. Needless to say, we are thrilled about this process finally coming to fruition and are excited about the accreditation visit in the fall. (Yes, we are optimistic!)



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.



#### NSPS Memorandum of Understanding

In 2012, NCSS agreed to partner with the National Society of Professional Surveyors (NSPS) to foster membership on both the state and national levels. As a result, your membership with NCSS now includes dual membership with NSPS. Read the MOU on our website at:

www.ncsurveyors.com/about\_ncss/governing\_documents/nsps



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# NCSS Education Foundation

by James E. Davis, PLS Education Foundation President



our NCSS
Education
Foundation
continues to
support and
carry out the purposes of
the North Carolina Society
of Surveyors. As your
Education Foundation,

we are focusing on the areas where we believe we can have the most impact which are: 1) Growing the endowment, 2) Providing a funding mechanism to support a 4 year program, and 3) Providing a funding mechanism for scholarships. Hopefully, by now, everyone has heard about the surveyor specialty license plate. This is a great opportunity to show your support for NCSS and express your pride as a surveyor. Additionally, this will provide a steady funding source to support the objectives described above. If you haven't done so, go ahead and fill out the application located on the NCSS homepage. You don't want to be the only one who shows up at an NCSS meeting or seminar without the specialty license plate.

If getting a personalized license plate is not your thing and you still want to support the NCSS Education Foundation, I have good news. It's raffle season. The "CASH" raffle will consist of 100 tickets sold for \$100 each. There will be a reverse drawing held at the NCSS Conference in February to determine the winners. The first ticket drawn will win \$500, the next to last ticket drawn will win \$500. The last ticket drawn will be the grand prize winner and will win \$2,000. This year, we will be awarding the person that sells the last ticket drawn with \$100. Another opportunity comes through Don Clements, who has once again offered us a week at his beach condo which we will be raffling off as well. Tickets for the condo will be \$20 each or you can get 6 tickets for \$100. Please help us make this year as successful as last year and thanks in advance for your support. All of the raffle money raised goes

directly towards scholarships and the endowment. Speaking of scholarships, the NCSS Education Foundation has awarded two scholarships totaling \$2,250. The scholarships were awarded to both a 4-year degree applicant and a 2-year degree applicant. If you know of someone who is pursuing a degree in surveying, please encourage them to apply for a scholarship. We're happy to support as many applicants as our budget will allow, but first, the students will need to send in an application www. ncsseducationfoundation.com/scholarships. deadline for scholarship applications is March 15, 2016. Additionally, the Foundation continues to support the Geomatics Program at NC A&T with a \$500 incentive grant for students newly enrolled in the program. The Foundation has contributed an additional \$5,000 for the program this year.

Finally, the Foundation has reactivated our Vendor Contact Committee in an effort to reconnect with our supporting professional merchants and suppliers. Much of the original NCSS Education Foundation endowment was built with the generous support of vendors through donations of money and/or equipment. We will be contacting vendors with opportunities to share in the growth and success of the NCSS Education Foundation. As always, if you have any ideas for the Foundation to consider or would like to attend a meeting, please let me know or contact one of the other board members found at http://www.ncsseducationfoundation.com/.



# Life After the Fire

Leland & Judy Strother







Almost one year ago Leland & Judy lost their home to a fire. Last May they were able to move into their lovely new home. They feel very blessed by the outpouring of support from NCSS members across the state of North Carolina.



# 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.



# Surveying Merit Badge A Recruitment Tool

by Frank Lenik, PLS

here are few challenges facing the profession of land surveying today which are as great as the need to revitalize our ranks with young and technologically savvy individuals. We all recognize the aging of our colleagues but cannot seem to identify the reasons for the lack of new blood coming into the field. New tools and technologies have been introduced, but the application of these tools to our methodologies has been slow.

One of the storied tools for education and outreach has been the Boy Scout Surveying Merit Badge. As a former scout and scout leader, I recognize the value of the merit badge system as a way to introduce young people to various fields to encourage them to grow and learn about the world around them. I typically attend a troop meeting or camporee to teach the scouts about the highlights of surveying and guide them through the requirements for the badge.

Recently however, I was introduced to a new and exciting way to work with scouts to earn this merit badge which I believe is a game changer. This idea was shared with me by the students at the Pennsylvania State University in Wilkes Barre, Pennsylvania. If you are unfamiliar with the school I will just say that it is one of the premier Surveying Engineering institutions in the United States. PSU offers three options to its students, a two year associate degree in Surveying Technology, a four year bachelor's degree in Surveying Engineering and a five year concurrent program which results in both a bachelor's degree in Surveying Engineering and a bachelor's degree in Civil Engineering.

The Penn State model is really quite ingenious. Rather than teaching the scouts at some remote location where their attention is easily diverted, the students and faculty invite local scout troops to visit their campus for a Surveying Merit Badge day. The program run by the surveying students themselves and includes a field component, a computer lab component and a barbecue prepared by the students.

The main strengths of the program are the peer to peer sharing of the knowledge of our profession and the introduction of the Penn State Surveying Engineering program to middle and high school age youth who will soon be looking to enter into the higher education system. What better emissaries of our field than those who are young and excited about it and how better to attract new students to our college programs than to invite them in for hands on experience.

As your liaison to the NSPS Young Surveyors Network and Chairman of the Youth Outreach subcommittee, I challenge you to share this idea with every educational institution in your region. I further ask that you share with NSPS any ideas which you have on how we can grow and sustain our profession. I welcome your comments and can be reached via email at frank.lenik@me.com, via twitter @ franklenik, or on facebook at National Surveyors Week.



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# Another First for North Carolina

by Chris Witherspoon, PLS



everal years ago, the idea was launched to create a specialty license plate for the surveyors of North Carolina. I am not sure who originally had this great idea but their creative thinking is going to pay off in a big way for the NCSS Education Foundation. The original plate idea actually made it through the legislative process but unfortunately, there

were not enough applications and with some changes in the law the plate was taken off the table.

In early 2014, while going through some old stuff from NCSS, I ran across the original license plate application. I thought that it may be time to give it another try. After a meeting with Gary Thompson, we both felt that the time was right and this "little" project began again.

I contacted Allen VanNoppen of VanNoppen Marketing here in Morganton in late March of 2014. I wanted to get an idea of the cost for getting a fresh design and some marketing materials in place for an endeavor like this. . He researched the idea and in April of 2014 gave me some numbers needed to fund the project. I eventually pitched this project to the Foothills Chapter of NCSS after seeking ideas from several different groups of folks. The Foothills Chapter voted to fund what was needed in order to make this happen.

The first tag concepts were given to us at the end of November, 2014. Jamie Griffin of VanNoppen Marketing, a friend of mine from high school, designed two options for the tag. A small target group was given the options, and with few revisions, we had the final design by the end of January 2015. With the NCSS Annual Conference just a few days away, we had the perfect opportunity to get the word out. Postcards were actually mailed directly to the Great Wolf Lodge, the conference location, in order for us to have them there to hand out. Everyone seemed excited about the tag at the conference, but we had a lot of work

ahead of us to get 500 paid applications to meet the April 1st 2015 deadline.

With the help of Doug Suttles, Foothills Chapter President, we started our email campaign the week following the conference. I hope that we did not bug you too much, but it worked. Just an email or two a week with little challenges and updates, and the applications began rolling in. NCSS staff did a great job playing mailroom and keeping me updated on the progress of the applications. Emails were coming to me by the dozens during the early stages of the process. We were looking good for the April 1, deadline. Speaking of deadlines, the DMV had given me the impression that the deadline for the initial application, artwork and check for \$12,500 was due April 15, 2015 when the process began. However, we found out on March 31, at approximately 4 pm, that the deadline was



Representative Hugh Blackwell takes a moment with Christy Davis after Senate Bill 313 passed through the Transportation Committee.

actually April 1, 2015. It would have been a great April Fool's joke if only it had been a joke. The next 24 hours would turn out to be something I will not soon forget!

March 31, 2015 – 4 pm. Received call from Doug Suttles: "Spoon, I think we have a problem with the tag. Deadline for submittal is tomorrow at 5 pm." (I will be kind and not give you my reaction.)

March 31, 2015 – 6pm. I made a call to Representative Hugh Blackwell. We still needed a Representative on the application to help us with the tag. Mr. Blackwell was in Raleigh in session so I had to leave a message in the hope that he would call me back. I had coached his grandson in Little League and was praying he would remember me. At this point, he was my only hope.

March 31, 2015 – 11pm. Representative Blackwell retuned my call after the legislative session adjourned to offer his help to push this through.

**April 1, 2015 – 9am.** Made phone call to NCDMV in Raleigh, Specialty License Plate Division, to see what needed to happen in the next 8 hours. Basically, all that had to happen was:

- Initial application filled out and emailed to Raleigh (completed).
- Final artwork emailed to Raleigh, this was not done yet, but VanNoppen Marketing answered the challenge.
- A check for \$12,500 to cover the 500 applications needed by the NCDMV Specialty License Plate Division in Raleigh (this is where the fun began).

Would you believe the NCDMV Specialty License Plate Division cannot accept credit cards, debit cards, electronic checks or direct deposits? Well, they can't. So guess what? The check had to be hand-delivered, to Raleigh, by 5 pm. With John Furmage in my Morganton office, we began calling representatives from every major bank in the great state of North Carolina trying to figure out an alternative to driving to Raleigh. We believed that we could transfer funds or send a money order and have someone pick it up in Raleigh and deliver to NCDMV for us. With McKim and Creed, Stewart Engineering, and others ready to act, we were time and time again told "no, we can't do that." With time dwindling down and our options running out, Randy Rambeau volunteered to take a personal check to the NCDMV to cover the fees so that we could meet our deadline. Without his offer, we were not going to meet the

deadline. Sometime around 4 pm the check was delivered and all was good. Crisis adverted. Hey, by the way, we did pay Randy back, right?!?!!?

After the smoke settled on the happiest April Fool's Day of my life, it was time to kick back and wait for the legislature to do its thing. Prior to the April 1st deadline, we had set a submission deadline of March 31st for the applications to make sure we had enough interest in the tag to reach the goal of 500. When we submitted all the paperwork on the April 1st deadline, we had about 400 applications in hand or promised by surveyors across the great state of North Carolina.

So I sat quietly from April to the end of September. With the passing of the state budget and in it the license plate provision originally found in Senate Bill 313, the clock to secure the final applications started again. I am writing this prior to the final deadline and prior to obtaining all 500 applications. But I know by publication time the tag will be reality and I personally cannot wait to see a parking lot full of surveyor tags at the 2016 NCSS Annual Conference in Wilmington.

Every surveyor in North Carolina should be proud of what we have accomplished. This specialty plate will raise a lot of money for YOUR Education Foundation and will affect the future of our great profession. For every tag purchased, \$15 goes directly to the Education Foundation and \$15 for every renewal in the years ahead. I am proud to be a Surveyor and a member of NCSS. And I am especially proud of the membership of NCSS for pulling this off. Thanks to all those that helped in this endeavor. I will not try to name you all for fear of leaving someone out, but this was an effort that took many visionaries and the benefits will be reaped for years to come.



Jonathan "Chris" Witherspoon, PLS has been a Professional Land Surveyor since 1997. He holds an Associate Degree in Surveying Technology from Coastal Carolina Community College from which he graduated in 1993 and a Associate in Arts Degree from Western Piedmont Community College. Upon graduation he began a career in Land Surveying which has led him to his

own private company which has been in business since 1999, Witherspoon Surveying, PLLC in Morganton, NC. He & his wife Tanya have two children Carson (14) and Allie (10).

# Once Upon A Time by Ken Mills, PLS

anuary 2, 1969 was my first day on a survey crew. I showed up at the office about 15 minutes until eight andwas assigned to a crew. The crew consisted of four people: the party chief, the instrument man, the head chainman and me as the tail chainman.

When we left the office, heading out to a job site, the party chief asked me if I knew anything about land surveying.

"No, not a thing." I answered.

When we arrived at the job site everyone jumped out of the truck, a Chevy van, and began doing stuff. That is when my education began.

The instrument man was getting the tripod legs out, which were the old-fashioned kind with straight legs (non-adjustable). The party chief gave me a plumb bob and pouch and told me to put it on my belt. He told me it was a loaner and I would need to get one of my own. Let me jump ahead in time two weeks, after I got my first paycheck. I went to the survey supply store in town and purchased an eighteen ounce plumb bob and a leather pouch to carry it in. The pouch had a place for the plumb bob, a place for a 6" wooden ruler scale and a mechanical pencil. I still have the plumb bob and the leather pouch. The other items disappeared long ago.

Now back to work, the plumb bob had a string wrapped around the shaft. I was told to carry it that way until we needed to measure something. Once we began measuring, I could un-wrap the string and drape it around my shoulders. When the job was finished, I would then wrap the string back around the shaft.

To wrap the string, you would hold the bob in one hand. With the other hand, take the string near the top of the bob, pull it snug and place a loop under the first hand's thumb. Then begin wrapping the string around the shaft. This creates a loop under the thumb. When the end of the string is reached, a loop is made and passed through the first loop. This is held in place while the string from the top of the bob is pulled under the wrap. This causes the first loop to close around the second loop. You stop pulling when the first loop is snug and holding the second loop. To un-wrap the

string, you pull the end of the string, this pulls the second loop out from the first loop and the whole thing unwinds.

My next lesson was with the chain. The chain was not a link chain, but rather a steel tape 100 or 200 feet long. The chain had lead Babbits or labels every foot along the entire length. Each one was stamped with the foot number as measured from one end. The neat thing about the chain was that it was in a small circle. The head chainman twisted the chain in such a fashion as to open it up into a twisted figure 8. From there, he carefully laid the chain out so that the chain was completely flat the entire length. There were no twists anywhere. It was magic!

I couldn't wait to learn how to work the chain like that.

To coil the chain up, you stand at the 0 mark with the chain straight out behind you. You pick up the end of the chain in your left hand, then grasping the chain in your right hand, extend the left hand in front and reach back with your right to grasp the five foot mark. Without twisting the chain, place the five foot mark over top of the 0 mark. Continue placing the five and ten foot marks on top of the zero mark until you reach the end of the chain.

The front of the chain had a long leather thong attached through a loop on the end of the chain. Once the chain was gathered up, the leather thong was wrapped around the chain to keep it from unraveling. The same was true for the end of the chain. Then placing both hands at about the 10 and 2 o'clock positions on the chain you would say the magic words like, "I sure hope this works," and twist your hands in opposite directions. If done correctly with the right amount of magic, the twisted figure 8 turns into a very neat, untwisted circle. Nothing to it! I also had to learn how to hold the chain steady and to keep it from slipping through my hand when the head chainman pulled the chain tight. You couldn't hold the chain like you would a rope by wrapping the chain around your hand and squeezing tightly. Being a flat, smooth ribbon of steel, it would just slip through your hands. Instead, you would hold the chain in your hand with the part toward the head chainman under your little finger. You would curl your hand into a fist with the chain inside your curled fingers and coming out over the top of your fist. Then you would place your thumb under the chain and push forward lightly. This would not kink the chain but would provide very tight control of the chain when the head chainman pulled.

Later, I learned to never let go of the uphill end of the chain. If you did, it would race downhill like a scalded snake stopping somewhere downhill in a tangled mess. If you were very lucky, it wouldn't break while piling up on itself. The

other danger came when you began to untangle the chain from the pile. If you weren't careful, the chain would break, which would require you bringing out the chain repair kit.

The next lesson for me as the tail chainman took place when I got out of the truck at a job site. I would always have my plumb bob and grab the chain ready to measure. If the party chief had other plans, he would then tell us what was needed from the truck. Sometimes it would be the range pole or the stadia rod.

The range pole was a tapered wooden pole, eight feet long with a steel point attached to the large end. It was used in place of a plumb bob string to give line to the instrument man. The pole was painted red and white alternating every foot beginning from the steel point. We were told not to use them as a spear. I don't think anyone could resist.

The stadia rod was the instrument we used to do most of the location work. This rod was the level rod or if we were taking direct elevations, we used a linker rod. The level rod was graduated from the bottom up with marks every one hundredth of a foot. All of the surveying instruments had stadia hairs along the vertical and horizontal cross hairs in the scope. With the stadia hairs, the instrument man could read the distance from the instrument to the rod. If something needing to be located was behind a tree, holding

the rod sideways and holding the plumb bob string over a foot mark enabled the instrument man to easily locate the object.

The linker rod had a continuous loop tape mounted on the rod. The tape was like the face of the level rod except the numbers read from top to bottom. You would hold the linker rod on a benchmark and with the instrument scope level, the instrument man would call out for you to move the tape up or down. When he called out "good," you would lock the tape in place. Then when you placed the rod on something, the instrument man would be reading the elevation of that point.

There were many other things to learn such as measuring distances, staking out distances, setting up the straight leg tripod, setting up the engineer's transit, reading the vernier and learning the hand signals for sending numbers to the instrument man. Life was good!!!!



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.



# A View From the Capital

#### General Assembly Adjourns 2015 Session, Victories for Surveyors

by Kerri Burke, McGuireWoods Consulting

he General Assembly adjourned the 2015 session around 4:00 a.m. on September 30th. The legislative session was one of the longest sessions in over a decade, beginning their work on January 28th. This year's session ran 13 weeks past the end of the fiscal year June 30th, making it the longest legislative session since 2002.

The House and Senate began their session focused on top priorities such as regulatory reform, Medicaid reform, job creation policies, and the state spending plan. The session ends with nearly three hundred bills passed into law. The General Assembly will return to Raleigh for its 2016 'short" session on April 25, 2016.

# The outcomes of the legislative session resulted in several victories for the NC Society of Surveyors.

**Budget & License Plate:** Within the final budget that passed, a provision was included to permit for a new license plate for the industry: NC Surveyors – Full-color plate, bearing the phrase "Following In Their Footsteps" with a picture representing a surveyor on the plate. Plate fee would be \$25, with \$15 to be used to grant assistance to persons genuinely interested in formal education in the field of surveying.

Regulatory Reform & Flood Study: Within the omnibus regulatory reform bill (House Bill 765), an amendment was passed to ensure the surveying industry is represented on a new flood study.

### STUDY FLOOD ELEVATIONS AND BUILDING HEIGHT REQUIREMENTS SECTION 4.38. The

Department of Insurance, the Department of Public Safety, and the Building Code Council shall jointly study how flood elevations and building heights for structures are established and measured in the coastal region of the State. The Departments and the Council shall specifically consider how flood elevations and coastal building height requirements affect flood insurance rates and how height calculation methods might be made more consistent and uniform in order to provide flood insurance rate relief. In conducting this study, the Departments and the Council shall engage a broad group of stakeholders, including property owners, local governments, representatives of the surveying industry, and representatives of the development industry. No later

than March 1, 2016, the Departments and the Council shall jointly submit the results of their study, including any legislative recommendations, to the 2015 General Assembly.

Property Protection Act & Clarification for Surveyors: Within the legal reform bill, House Bill 405-Property Protection Act, clarification was achieved so that the industry practice of surveying was not "taking of property". The bill is aimed at protecting property owners (employers) by enacting civil penalties for people who take or record information that "substantially interferes" with the rights of the property owner. The new law prevents anyone from placing an unattended camera or other surveillance device in a business.

#### Regulatory Reform & Cuts to Business Costs

An ominous package of regulatory reform provisions passed a compromise of the House and Senate.

- Shifts the burden of proof in certain contested cases.
- Prohibits licensees from serving as investigators and inspectors on occupational licensing boards.
- Exempts small business entities buying or selling entityowned property.
- Amends the definition of "employee" under the Workers' Compensation Act to exclude volunteers and officers of certain nonprofits.
- Expands the Good Samaritan law to breaking into or out of railroad cars, motor vehicles, trailers, aircraft, boats or other watercrafts.
- Directs the Environmental Review Commission to study open and fair competition with respect to materials used in wastewater, storm water and other water projects.
- Creates two studies on: 1) electronic recycling programs, and 2) permitting and recycling programs for utility-scale solar projects.
- Amends the risk-based remediation statutes.
- Amends the definition for "prospective developer" under brownfields redevelopment.

- Makes amendments to isolated wetlands laws.
- Studies and amends storm water laws.
- Creates a study of flood elevations and building height requirements.

### N.C. House and Senate Approve Conference Report on Environmental Regulatory Reform

The North Carolina House and Senate approved a compromised version of House Bill 795 –State Environmental Policy Act (SEPA) Reform. The bill reforms SEPA by making key changes to both when and under what circumstances environmental impact studies would be performed.

The Senate had previously approved the measure in a 33-14 vote, including language that would have triggered environmental impact studies for projects exceeding \$20 million or which disturbed more than 20 acres of land. The House bill set that cap at \$10 million and 5 acres. After failing to concur with the changes that the Senate made to the bill, a conference committee was appointed to iron out the differences between the two chambers. The conference committee's only change to the bill was deleting a definition of the phrase "direct environmental impact," which was added by the Senate.

### House and Senate Reach Compromise on Gas Tax Proposal

- Fuel Tax Rate: The current 37.5 cents per gallon will fall to 36 cents on March 31, 35 cents in January 2016 and 34 cents in July 2016.
  - o The Senate originally proposed to cut the fuel tax rate to 35 cents on March 1 and retain the rate for the future year. The House originally proposed for a minimum rate of 36 cents beginning April 1 through 2015, and letting the rate fall below 30 cents in January 2016.
- Gas Tax Formula: Repeals the current rate formula that moves the fuel tax rate up or down every six months depending on wholesale fuel prices. Effective in January 2017, a new formula will adjust the tax rate based on changes in the state population and the national Consumer Price Index for energy costs.
  - o The Senate originally proposed to recalibrate the current fuel-price formula, which would enable the rate to rise in future years.
- DOT Staff: Does not include general DOT layoffs, but

eliminates 40 unfilled positions.

o The Senate originally proposed to lay off 500 DOT workers, with the House not including any layoff provisions.

#### State Budget & Long-Term Infrastructure Funding

- Highway Trust Fund: Repeals the transfer of \$216 million from the Highway Trust Fund to the General Fund.
- DMV Fees: Increases all DMV fees with revenues to be used toward funding additional Strategic Transportation Investment projects and DMV modernization.
- Road Funding: Additional \$440 million
- Light Rail Projects: Caps the state funding for light rail projects at \$500,000 per project.
- Turnpike Authority Projects: Increases the statewide cap for turnpike projects from nine to 11.
- Port Modernization Additional: \$70 million
- Infrastructure Bond: Lays out the blueprint for the \$2 billion infrastructure bond for capital projects.

### Compromise Reached on Economic Development Package

The final compromise to House Bill 117, NC Competes Act passed. The final legislation contains changes to the Job Development and Investment Grant (JDIG) and OneNC programs, as well as several changes to the tax code, and a section dealing with tax compliance and fraud prevention.



Kerri Burke is 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.



# Defining TRID's Impact on Surveyors

by Jeffrey T. O'Briant, Esq, PE, PLS

n October 1, 2015, the process and documentation for residential real estate closings changed due to a new lending rule called TRID. Because it is likely you will be impacted either as a professional land surveyor or as a consumer buying or selling a home, it makes sense to share a little about this change and its potential impact upon North Carolina surveyors.

What is TRID and how did it originate? As you might guess, TRID is a new acronym and it stands for: TILA RESPA Integrated Disclosures. This new process for residential real estate transactions is the latest in changes designed to protect the consumer that flows from the Great Recession in the United States and the associated mortgage failures. Specifically, this new set of rules comes from the Consumer Financial Protection Bureau (CFPB). The CFPB originated out of the Dodd-Frank Wall Street Reform and Consumer Protection Act, which is a new piece of legislation enacted in 2010 in response to the recent financial woes of the United States. The intent of Dodd-Frank was to protect the United States against a reoccurrence of such a devastating financial event. Like most new laws, a variety of critics have attacked Dodd-Frank. Some argue it was not enough to prevent another financial crisis or more bailouts, and others argue it went too far and unduly restricted financial institutions. Regardless of your view, it has caused many changes in financial regulations since its enactment and more are likely. Today, let us consider TRID changes.

In closings before TRID, homeowners could generally expect a 30-45 day closing window when they were buying and selling homes. At the closing table, they signed a lot of documents - most from the lender to protect itself in the event of non-payment. However, among these documents, there were three key items that encompassed 4 or 5 pages (Good Faith Estimate, HUD Settlement Statement and Truth in Lending). The HUD Settlement Statement summarized all the seller and buyer fees in the transaction, including the loan fees. The Truth in Lending and Good Faith Estimate essentially set out the terms of the loan for the buyer to review to ensure he or she was getting the deal promised by the lender. If errors

were found, changes were made and closing immediately continued. Going forward, TRID changes this process.

In a post-TRID world, things will be somewhat different. There are two primary changes TRID brings starting October 1 to all new loan applications. First, there is a requirement that all fees and closing costs be disclosed to the new buyer 3 days before the closing. This requires the lenders, real estate brokers and other parties (including surveyors) in a real estate transaction to get data to the closing attorney sooner than before. Although you should start to see requests for work coming a little earlier than before, the pressure to meet the 3-day restriction will be very stressful for many and could cause closing delays. Furthermore, if certain key elements change, a NEW 3-day waiting period begins and the closing must be delayed. Therefore, closing schedules are expected to be between 45-60 days for the next few months. The second change that TRID brings is new closing documents: Loan Estimate and Closing Disclosure. These new forms are 8 pages of disclosures and encompass the data previously found on the HUD Settlement Statement, Truth in Lending and Good Faith Estimate. You can see the new disclosure forms at: http://www.obriantlaw.com/projectupdates.html and link to the CFPB website for more detailed data and information on other minor changes.

So, for the next few months, we can expect residential closings to take a little longer and be confusing for everyone involved. However, after brokers, attorneys, mortgage lenders and the rest of us have time to learn the "new normal," I expect that we will see closing times come back closer to 45 days and the buyers and sellers across the US will come to understand all the new disclosures that are designed to protect us. For me, I am going to take a deep breath and try my best to remain patient.



Jeffrey T. O'Briant, ESQ, PE, PLS received a degree in Civil Engineering from UNC Charlotte. He attended Camptbell University and moved into a private legal practice. This legal knowledge led him to Progress/ Duke Energy for 10 years. He is now in private practice with years of diverse experience.

#### CONGRATULATIONS TO THE NEWEST LICENSEES

Brian Bingham **Brock Bowman** Beth Braun James Briscoe Donald Chandler Roderick Frandino Steven Jones Matthew Grant

William Gray **Brandon Hicks** John Hurdle David Ivey Cody Jones

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# Recording of Deceased Surveyor Maps

by Thomas W. Morgan, PLS

irst, just because a surveyor is deceased does not mean that his survey can only be recorded as a deceased surveyor map under the North Carolina General Statute (NC GS) § 47-30(h). NC GS § 47-30(d) states ... "[N]othing in this requirement shall prevent the recording of a map that was prepared in accordance with a previous version of G.S. 47-30 as amended, properly signed, and notarized under the statutes applicable at the time of the signing of the map. However, it shall be the responsibility of the person presenting the map to prove that the map was so prepared." In accordance with this section of the statute, a map that complies with a previous version of 47-30 may be recorded as any other map even if the signing surveyor is now deceased.

NC GS § 47-30(h) allows for the preservation of surveyor plats that do not meet the requirements of 47-30 as amended if the preparing surveyor is now deceased. This is not to say that anything prepared by a now deceased surveyor may be recorded. The document offered for recording must be the unaltered original plat (Note: a copy was not prepared by the surveyor). While a map filed under this paragraph is not required to be signed or notarized, if that plat contains the clear statement of intent that the surveyor did not intend for the plat to be filed in the register of deeds, i.e. a note "Preliminary Plat - Not for recordation, conveyances, or sales," it should not be recorded in the office of the Register of Deeds. The preliminary note is to be considered evidence that the surveyor did not intend for the plat to be recorded.

A plat presented for recordation under this paragraph must be presented to the County Review Officer along with proof that the surveyor in responsible charge for preparing said plat is deceased. Once the Review Officer is satisfied that 47-30(h) is applicable, the plat should be certified by the Review Officer in accordance with NC GS 47-30.2. Said certification should include a notation that the plat is approved under the provisions found in 47-30(h) – Deceased Surveyor Plat.

The plat is now ready to be presented to the Register of Deeds. NC GS 47-30(h) states that "Nothing in this section shall be deemed to prevent the filing of any plat prepared by a registered land surveyor but not recorded prior to the death of the registered land surveyor." NC GS 47-30(a) and 47-30(b) address the size of the plat and its reproducibility respectively, each being a requirement for recording in the office of the Register of Deeds. It appears that these plats are exempted from these recorded requirements under paragraph 47-30(h). In closely reading 47-30(h), only those deceased surveyor plats that do not have the surveyor's signature, notary acknowledgment or probate are required to be filed in a special plat file. Many County Register of Deeds do not have a physical special plat file. In order to compensate for this, the Register should consider using a designation of "Special Plat File" or "Deceased Surveyor Plat" in the designated status field and/or include a notation in the comment field of "DECEASED SURVEYOR PLAT" when indexing a plat under the authorization of NC GS 47-30(h) in the Real Property Consolidated Index.

Recently, I have been questioned about the reprinting of an AutoCAD® file of a deceased surveyor and filing that unsigned Mylar in the Register of Deeds as a deceased surveyor plat. It is my opinion that an AutoCAD® file is too editable to be considered a final representation of the surveyor's final work product in its electronic form and a print that was not made under the supervision of the surveyor in charge is not his work product. Therefore, a reprint (tangible medium [paper or Mylar] or electronic [PDF or Tiff]) of an AutoCAD® file not made under the supervision of the now deceased surveyor is not an appropriate document for filing as a deceased surveyor plat.

But if the Register of Deeds accepts electronic filing of plats, a PDF or TIF made under the supervision of the surveyor in charge (now deceased) may be recorded in one of the following forms.

- 1. An original map on tangible medium with original signatures and then scanned is considered an electronic plat.
- 2. A PDF electronically produced from a computer aided drafting system (CAD) with approved electronic signatures, signed by the surveyor prior to his death (see Signing and Sealing Guidelines, http://www.ncbels.org/policies.html) is considered an electronic plat.
- 3. A PDF or TIF electronically produced from a CAD system made under the supervision of the surveyor in charge who is now deceased. The unsigned PDF may be

filed as an electronic plat but filed under the Special Plat File Designation.

Remember once a plat is signed electronically, it becomes the original. If it is then printed, the tangible image is a copy and not eligible to be recorded in the Register of Deeds. Also, the PDF or TIF is the work product of the surveyor in charge (now deceased) not the tangible medium image generated after his death.

If any plat is to be submitted electronically to the Register of Deeds, the provisions of NC GS 47-30 (o) must be observed. The addition of the review officer certification and the 47-30(o)(4) trusted submitter statement will not be considered an alteration of the plat.

<sup>1</sup>§·47-30 (h)·····Nothing in this section shall be deemed to prevent the filing of any plat prepared by a registered land surveyor but not recorded prior to the death of the registered land surveyor. However, it is the responsibility of the person presenting the map to the Review Officer pursuant to G.S. 47-30.2 to prove that the plat was so prepared. For preservation these plats may be filed without signature, notary acknowledgment or probate, in a special plat file.

- <sup>2</sup> Portable Document Format
- <sup>3</sup> Tag Image File Format
- <sup>4</sup> § 47-16.2. Definitions.

In this Article:

- (1) "Document" means information that is:
- a. Inscribed on a tangible medium or that is stored in an electronic or other medium and is retrievable in perceivable form; and
- b. Eligible to be recorded in the land records maintained by the register of deeds.
- (2) "Electronic" means relating to technology having electrical, digital, magnetic, wireless, optical, electromagnetic, or similar capabilities.
- (3) "Electronic document" means a document that is received by the register of deeds in an electronic form.
- (4) "Electronic signature" means an electronic sound, symbol, or process attached to or logically associated with a document and executed or adopted by a person with the intent to sign the document.
- (5) "Person" means an individual, corporation, business trust, estate, trust, partnership, limited liability company, association, joint venture, public corporation, government, or governmental subdivision, agency, or instrumentality, or any other legal or commercial entity.

<sup>5</sup> § 47-30 (h) ...[F] or preservation these plats may be filed without signature, notary acknowledgment or probate, in a special plat file.



Tom Morgan graduated from NC State University in 1971 with a BA in Geology, and received his PLS in 1978. He started Bruanswick Surveying in Holden Beach, NC in 1979, which he sold to Withers & Ravenel, Engineers, Surveyors & Planners in 2006. He has been the Land Records Manager for the NC Secretary of State since January 2008.



# Is Necessity the Brother of Intention?

by Kristopher M. Kline, PLS, GSI

he basis of the concept of "Easement by Necessity" developed early in the history of English common law. Numerous examples can be found as far back as the fourteenth century, including some spirited debates over whether the grant of a pond and the fish in the pond gives the grantee the right to drain the pond and take all of the fish. Things haven't changed much – owners now argue over whether the grant of a subterranean coal seam precludes another party from drilling through the seam in order to reach the oil deposits below.

At its most basic level, an easement by necessity may be created when a grantor sells a field completely surrounded by his remaining lands with no mention of any right of access. In this circumstance, the grantee will probably gain a right to access the field, since the grantee would otherwise realize no benefit from the grant.

The North Carolina courts apply a slightly expanded version of this principle: "Our Supreme Court has explained...[a] way of necessity arises when one grants a parcel of land surrounded by his other land, or when the grantee has no access to it except over grantor's other land or land of a stranger. In such cases, grantor impliedly grants a right-of-way over his land as an incident to purchaser's occupation and enjoyment of the grant." Jernigan v. McLamb: 192 N.C. App. 523; 665 S.E.2d 589 (2008). This ruling also emphasizes that easements by necessity cannot be claimed over the lands of a stranger. Since this type of easement is based on the presumption that the original grantor did not intend to make a grant of a landlocked parcel, the recognition of the easement is a mechanism to enforce the presumed intent.

An earlier ruling spells out the specific requirements justifying an award of an easement of this type: "The law of this State will imply an easement by necessity in favor of a grantor under appropriate circumstances ... Such an implied easement arises when the party seeking the easement proves the essential elements of an easement by necessity: "(i) the claimed dominant tract and the claimed subservient tract were once held in common ownership that was severed by a conveyance and (ii) the necessity for the easement arose out of the conveyance." Whitfield v. Todd: 447 S.E.2d 796 (1994). This case seems to restrict the claim of easement by

necessity to claims by the grantee. It is also generally held that the necessity need not be absolute. In this instance, the plaintiff had been granted permission to access a public way. However, the judge saw fit to grant an easement since the plaintiff's access was permissive and was not an "enforceable right."

**Peculiarities of Easement by Necessity:** Unlike prescriptive easement claims, no minimum time requirement exists for the award of an easement by necessity. The right is created immediately by operation of law upon the fulfillment of the required elements. Nor is there any requirement that a pre-existing road or other visible access exist.

Another attribute that separates easement by necessity from other hereditaments is the relative ease with which they can be extinguished. In most cases where an easement is created by express grant or reservation, the easement does not cease to exist simply because the landowner legally obtains some other legitimate access to a given tract. However, this is not the case with easements by necessity. Joines v. Herman: 89 N.C. App. 507; 366 S.E.2d 606; 1988 observes: "A way of necessity is a temporary right in the sense that it continues only so long as the necessity exists . . . and ceases to exist upon the termination of the necessity which gave rise to it." When the necessity ceases to exist, easements by necessity are extinguished immediately by operation of common law.

A Few Complications: Unfortunately, the name itself suggests to the layman that a landowner's need of access across the lands of another is by itself enough to prove the existence of the easement. However, necessity caused by any act other than the initial division which creates the necessity cannot be used to justify easement by necessity. Several years ago, I witnessed an attempt in the courtroom to misrepresent the principle in this way. The plaintiff owned a tract which had (many years previously) been part of the defendant's parent tract. However, the plaintiff's tract (as originally conveyed) included access to a public road on the side remote from the defendant. After several years had passed, the plaintiff sold that portion of his tract which included public access, thus land-locking himself; only at this point did he file suit to claim easement by necessity over lands of the defendant. The attempt failed.

Only complete research will provide the proper framework from which to consider a claim. Numerous cases confirm that the test of necessity must be made while considering the condition of the parcel and that of surrounding lands at the time of the division which created the necessity. "[T]he easement must arise, if at all, at the time of the conveyance from common ownership." ... Consequently, all elements required for the easement's

creation must exist at the time of the severance of the alleged dominant and servient estates." Woodring v. Swieter: 180 N.C. App. 362; 637 S.E.2d 269 (2006)

On the other hand, an easement by necessity will sometimes be upheld in less than obvious circumstances. It is wellestablished that the easement could be claimed by a later landowner years after the grant which created the necessity. This may occur even if no use was made of the easement at the time of its creation. The Maryland court reflects on these principles with the statement: "If the way of necessity was not implied at the time of the grant, it cannot be established by a subsequent necessity...In other words, the necessity must be determined from the conditions as they existed at the time of the conveyance. ... Hence a remote grantee of land not being used at the time of severance may nevertheless, when the use becomes necessary to the enjoyment of his property, claim the easement under his remote deed. ... This rule is consonant with the generally held view that non-use alone is not sufficient to extinguish a way by necessity." Stansbury v. MDR Development, L.L.C. 871 A.2d 612 (2005)

When Grantors are Landlocked: As is the case with adverse possession, the courts are jealous in defending against attempts to claim any implied easement. Common law generally requires a preponderance of evidence on the part of any claimant attempting to do so. There have been countless instances where the easement by necessity has been denied, particularly when the portion retained by the grantor is the landlocked portion. Because any uncertainty in a description generally is construed in favor of the grantee, courts raise the bar for a successful claim even higher when the grantor is the claimant. This is due to the presumption that grantors will reserve to themselves any rights necessary for the enjoyment of their remaining lands.

However, the possibility of easement by necessity in favor of the grantor was firmly entrenched early in English common law: "In Clark v. Cogge, decided in 1607, there was a question as to whether the grantee could have a way by necessity over other lands of the grantor, and the court held he could have such a way, "for otherwise he could not have any profit of his land." But the court also said, "If a man has four closes lying together and sells three of them, reserving the middle close, and hath not any way thereto but through one of those which he sold, although he reserved not any way, yet he shall have it, as reserved to him by law." [emphasis added] Columbia Law Review, Vol. 25, No. 5 (Nov., 1925), p. 573

The Scope of the Easement: Implied access for mineral rights is closely related to the concept of easement by necessity. This right may occur when subterranean land rights have been granted to various corporations for the

mining of coal seams, oil and gas drilling, and/or use of subterranean water supplies. (These grants may be characterized as horizontal estates in the strata of the soil.)

Where no provision is made in the deed for access to the mineral estate, rights to build necessary infrastructure reasonably required for the extraction of the mineral will be presumed. This may include the construction of railroad tracks, drilling rigs and holding reservoirs. This situation can create conflict when surface rights are held separately from the mineral rights. Individual states vary regarding the legal mechanism applied to assure reasonable access for mining and drilling operations, but these access rights are sometimes equated with easement by necessity. Only in a situation so complex can owner A hold an easement through owner B's land, while owner B in turn holds another easement over that of A!

Other differences exist between implied easements and prescriptive rights. While the original necessity justifies the existence of an easement by necessity, the scope of the easement may vary over time based on prevalent modes of transport, mining, and the changing needs of society. This flexible definition is at odds with rules defining the scope of a prescriptive easement. In the latter case, extent and scope are defined by the uses that were demonstrated to prove the prescriptive right.

The role of the surveyor in cases of this type is limited, since these easements come into being by an operation of law. The surveyor may play a supporting role by researching the sequence of conveyances which created the boundary lines associated with the area in question. Surveyors may be called on to show relationships between parcels and document evidence of possible incorporeal property rights, and may also collect evidence that might shed light on conditions current at the time of the conveyances.

Note: neither the author nor publisher of this article intend this article to be considered a source of legal advice. The law can change over time and differs in various jurisdictions. The best source of legal counsel is an attorney admitted to the Bar in your state.



Kris Kline became licensed in NC in 1991. He served for 3 years as Chariman of the NCSS Education Committee. He has spent the last several years focusing on boundary disputes. Kris lives in Alexander, NC. His books on Adverse Possession and Riparian Boundaries are now available on-lineatwww.2Point.net

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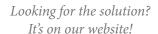
### PROBLEM CORNER

by John Furmage, PLS

In a survey map an estate of 144 acres is represented by a quadrilateral, ABCD.

The diagonal, AC, is 6 inches, and the perpendiculars from B and D on AC are 1.8 inches and 0.9 inches respectively.

On what scale was the map drawn?

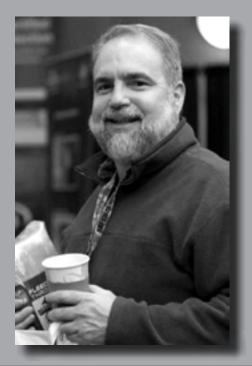




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# Philip A. Collier

Philip A. Collier, 51, of Pine Knoll Shores, passed away Tuesday, June 9, 2015 at Carolina East Medical Center, after a brief illness. A memorial service was held at 2:00 pm Friday, June 12, 2015 at Munden Funeral Home Chapel with Rev. Freddy Braswell officiating. He is survived by his mother, Jane Horton Collier of Raleigh; three brothers, Michael Collier of Denver, NC; John Collier and wife Sherry of Raleigh, and Bryan Collier and wife Ann of Smithfield; sister, Marian Collier of Cornelius; half-sister, Pam and husband Pat Hagan of Elizabeth City; also five nieces, two nephews, three great-nieces and two great-nephews. He was preceded in death by his father, John William Collier. At the time of his death, Phil was actively serving on the NCSS Board of Directors representing the Coastal Chapter. He was also Treasurer of the Political Action Committee. He was a true professional and will sorely be missed.

# MEMBER PROFILE Marshall Wight



**Current Position**WithersRavenel, Project Manager
Cary, NC

**Most Recent Purchase** Fencing material, building a fence.

#### First Job

Construction laborer for a grading contractor in Asheville

### **Favorite Movies**Too many to choose one

#### Dream Vehicle

Muscle car from the 60s - 70s or old truck from the 50s - 70s

#### **Hobbies**

Wood working, driving his dune buggy, riding on the lake in his boat & fishing but he hasn't been in a long time.

#### **Favorite Surveying Equipment**

I guess I would have to say Topcon, because that is what I have used the most in the field. I really like Carlson office software.

### **Areas of Service within NCSS** PAC Secretary /Treasurer

Marshall grew up in Asheville, North Carolina, graduating from high school in 1997. While in high school, Marshall worked every summer for the grading contractor, Perry Alexander Construction Company. His job involved checking grade and running whatever equipment they would let him. He continued his education after high school at North Carolina State University and continued working with Perry Alexander while home during the summers. During his junior year, he took an internship with the Raleigh firm, S&ME, doing soil and concrete testing. The next summer he worked for ESP as a soil and concrete technician.

Marshall graduated from NC State in 2002 with a BS in Agriculture Environmental Technology and a minor in Agricultural Business. While searching for a career, he worked a couple months at Keen Transport, loading Caterpillar backhoes and front-end loaders onto trucks. He fondly looks on that job as his heavy machinery valet job. He soon found employment at Buck Engineering, engineering environmental company, doing stream and wetland restoration. Being young, he was immediately thrust into field work that consisted of a lot of surveying. Loving the outdoors, Marshall embraced surveying and traveled all around our wonderful state surveying stream and wetland projects. Buck



Marshall with wife Jennifer and sons Mason & Liam



Engineering was bought by Michael Baker Corporation in 2006. Once he had the appropriate amount of survey experience, he was able to pursue his professional license. Marshall took advantage of all the training offered by NCSS and bought lots of books. This persistence resulted in his licensure in 2012. He became Survey Manager at Michael Baker International and



Mason & Liam are now 4 and 2

then moved to his current position at WithersRavenel as a Project Manager.

Marshall became involved with NCSS early in his career through classes and the Annual Conference and Trade Show. Recently he agreed to take a leadership role as the Political Action Committee Treasurer and Secretary. He is a great representation of a younger generation of surveyors that see the value of belonging to a professional society for the benefit of everyone.

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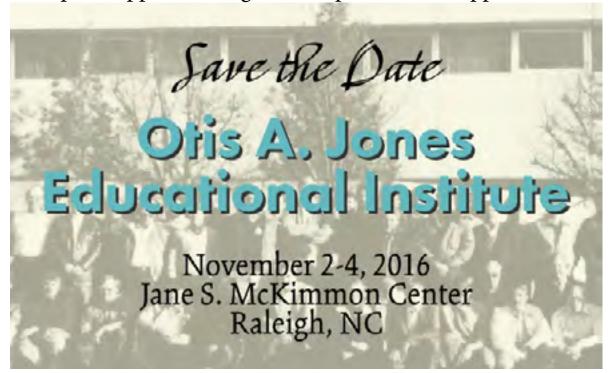
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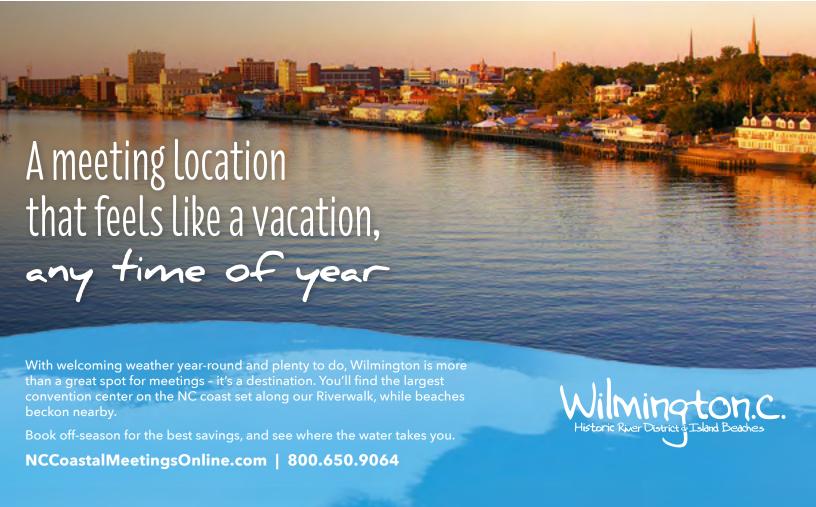


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