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#### The Cornerpost

Volume 48, No. 3 • Fall 2017

Published by the Vermont Society of Land Surveyors, a professional society dedicated to the advancement of the science of surveying and mapping. 802.229.6358 | www.vsls.org

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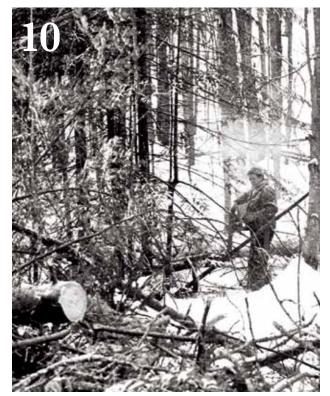
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#### Send In Your News

The success of The Cornerpost depends on all of our members. Please consider making a contribution to an upcoming issue. We would love to hear about your experiences in the field and your thoughts about historic writings or current events. Or, snap a photo while you're at work and send it to kelly@vsls.org.

#### **About the Cover**

A team from VSLS got together on September 15 to shoot a video for the society's website. Pictured in the photo are Becky Gilson, L.S., and Jacob Keasbey, an engineer and survey technician with Trudell Consulting Engineers. The scene is being taped by Matt Richardson, a videographer and friend of Brad Holden. More photos can be seen on pages 12 and 13. PHOTOS BY KELLY COLLAR

## President's Corner



Gayle Burchard at the VSLS video shoot in September. See more photos on page 12.

### Presidential **Term Comes** to a Close

After two years as VSLS President, Gayle will be passing the torch at the December meeting to Mark Day, who has served as V.P. for the last two years. Thank you, Gayle, for your responsiveness, hard work and many hours traveled on behalf of VSLS. And a hearty welcome to Mark!

Gayle gives a presidential wave from her recent flight home from Texas.



FTER A WARM START TO FALL, the temperatures are really dropping. I hope you are all still enjoying getting out in the field. I know I am; any excuse to get out of the office is always great. The Fall Conference at the Stoweflake was well attended, with about 115 people from Vermont and other New England states.

We had good speakers and good interaction with our vendors – it was fun having the vendor raffle at the end. Thank you to all the people who came over to Little River Survey to enjoy the bonfire and have a beverage after the dinner Thursday night. It was great seeing several past presidents and some potential future presidents.

In the beginning of October, I went to the NSPS Conference in Frisco, Texas, with Tricia Kules, our NSPS Director, and Brendan Golubjatnikov, from our Young Surveyor's Network. The NSPS Conference was held in conjunction with the Texas Conference. Texas had about 500 attendees, 120 vendors and two-and-a-half days of seminars. I met some really great people, and hopefully some of them will find their way to Vermont. I did have a few people ask me what state Vermont is in?!

Texas seems to have the same issues as we do here in Vermont – with finding qualified help being a big concern for many firms. The Dallas area is seeing tremendous growth, and many companies need technicians to get the jobs done. The CST program is much more active out west than it is in New England, and a lot of technicians have some level of certification. Bob Moynihan, who was with the Thompson School at UNH for years, is living out west and has become very active in the Certified Survey Technician (CST) program. Bob says "Hi" to everyone back here.

In December, we will be discussing how to complete lingering projects and how much we will have to raise the dues to accomplish these goals. The biggest ongoing project is the scanning and cataloging of old survey plans. We also need to have an upto-date list of deceased members and where their records are being stored. If you know of another project that VSLS should be involved in, please let me know.

We also need to keep track of what bills are being introduced and if any of them may have an impact on our business. If anyone knows of anything that is coming up or something that we need to amend, please let the Executive Committee know or, better yet, come to a meeting. We meet on the third Thursday of every month. Just let Kelly know if you're interested and she'll get you the information: kelly@vsls.org.

See everyone in December,



GAYLE BURCHARD, VSLS PRESIDENT







BY PATRICIA KULES, DIRECTOR

HE FALL 2017 NSPS MEETING was held in Frisco, Texas in early October. The first day was devoted to committee meetings, and the next two days were Directors' meetings, where committee chairs made presentations and motions were introduced and voted on.

#### **PR Committee Promotes Surveying Nationally**

Every director needs to be Committee. The PR committee is aggressively promoting surveying at the national level and at some state guidance counselor conferences.

A tool that is generating great interest at conferences is an "augmented sandbox." This sandbox X-Box connection, sand and a box. Contours are projected onto the sand and as the sand is moved (by hand), the contours change and if some of the projection is blocked, rain appears and the contours show how water would move. Vermont is fortunate because we have one

of these sandboxes in the Echo Museum in Burlington. You can go to YouTube and search for "augmented sandbox" for more details.

#### **Educating the Next Generation of Surveyors**

The Workforce Development committee generally meets with the PR group. Many states with surveying programs are losing their programs due to instructor attrition and few applicants. Schools are considering dropping the ABET certification since the requirements are quite rigorous and not required for licensure in many states. Good news, however, is that The University of New Mexico is now offering in-state tuition to anyone who attends their surveying program. In addition, many of their courses are offered on-line.

The CST certification program is going strong in many states including New York. In Vermont we only have a handful of CST-certified surveyors. Vermont Tech is considering gearing its program toward CST certification. This certification is worthwhile

Pictured above, the Vermont crew at the Texas conference: from left, Tricia Kules, NSPS Director; Brendan Golubjatnikov, Young Surveyors Network; and Gayle Burchard, VSLS President.

#### **Enter the Plat Contest!**

I would like to encourage Vermont surveyors to enter the plat contest. The categories are:

- **Subdivision Plats**
- Boundary/Cadastral Maps
- Topographic Maps
- **ALTA/NSPS Survey Maps**
- Miscellaneous Maps

If you're interested, go to nsps.us.com » About » Competitions/Awards Scholarships to download the application. Or, contact me at tricia@littleriversurveyvt.com and I can get you one.

## Young Surveyors Network Has Annual Gathering

Vermont representative makes new contacts and sees emerging technologies

BY BRENDAN GOLUBJATNIKOV, SURVEY TECHNICIAN AT CEA

**ONFERENCES ALWAYS** provide you with a great opportunity to step out of your regular routine by meeting new people, learning new things and receiving inspiration. That is exactly what happened to me while attending the Texas Society of Professional Surveyor's 2017 Convention that was held recently in Frisco, Texas; a northern suburb of Dallas. It was a pleasure to have enlightening conversations with Timothy Burch (NSPS Secretary), John Hohol (President of the International Federation of Surveyors), and others. I spoke to and learned a great deal from a lively, national group of land surveyors. I also attended three classes and spent countless hours in the exhibit hall investigating the newest technologies, captivated by all the fancy new toys!

As a member of the Vermont Young Surveyors group, I was inspired to hear of what the NSPS Young Surveyors are doing to grow the number of young people entering the industry. I am excited to work with the Vermont Young Surveyors to strengthen our bond and membership, and to further

"I am excited to work with the Vermont Young Surveyors to strengthen our bond and membership, and to further engage Vermont youth."

engage Vermont youth. As someone who entered the surveying field just this year, I am well aware of the challenges facing those entering the industry. I know that these challenges must be overcome in order to ensure a healthy future for land surveying.

I spent a lot of time at the convention learning about unmanned vehicles/systems (UAV/UAS). As a result, it became quite evident to me how much these technologies have advanced. Most interesting to me is the fact that some surveying work can currently be done with a UAS costing only a few thousand dollars. This goes beyond capturing high-quality aerial imagery, and these "cheap" systems can even accomplish some contouring.

I believe that we, as surveyors, should begin integrating UAS into our work regime as soon as possible. In doing so, a period of institutional change would most certainly be needed. This would involve learning about the aircraft, licensure, insurance, and any specific software that is necessary. I believe, however, that we should overcome this knowledge gap sooner rather than later. That way, we will be able to hit the ground running in a few years when the technology becomes less expensive, more precise, and even more useful.

All in all, the TSPS convention helped me grow professionally and proved to be very interesting. The keynote speaker, local Texas state legislature representative Matt Shaheen, spent most of his time underscoring the robustness of the Texas economy. It is the second largest in the United States and the tenth largest in the world if Texas were a sovereign nation. Texas is seeing the most population growth of any state.

Texas and Vermont both have an acute problem with automobile dependence. With the exception of Burlington's expanding

suburbs, overall, the arid concrete jungle of Texas is a far cry from Vermont's fertile, green landscape.

This was my first visit to Texas, with the exception of a one-night layover in Dallas a few years ago. My trip was not to be complete without a ride on a mechanical bull, thanks to the Texas Young Surveyors, and sampling some authentic Texas pit barbecue. In the 80s and a bit humid, the locals told me the weather was "amazing" compared to the triple digits common in the middle of summer.

Ultimately, it felt good, as it always does, to board my plane and head home to BTV. Thank you very much, VSLS, for providing me with the opportunity to attend this conference and experience this rewarding trip!











# **FALL CONFERENCE**

SEPTEMBER 21 & 22, 2017 STOWEFLAKE RESORT & CONFERENCE CENTER



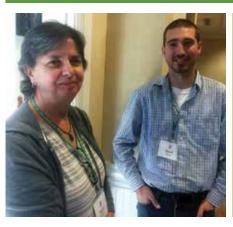
#### THANK YOU TO OUR SPEAKERS

- Jay Doody, PS, PE, Boundary Law Instructor, Charter Oak State College "Finding Case Law for Land Surveyors"
- Stephan Nix, Attorney at Law and **Licensed Land Surveyor** "The Land Surveyor's Role: Adverse Possession and Ácquiescence"
- Charlie Cogbill, Forest Ecologist "The Historical Ecology of Early Vermont Surveys"



#### **VIEW ALL THE CONFERENCE MATERIALS ONLINE**

- Go to www.vsls.org
- Look under "resources"
- Click on "conference presentations"











#### THANK YOU TO OUR **CONFERENCE EXHIBITORS**

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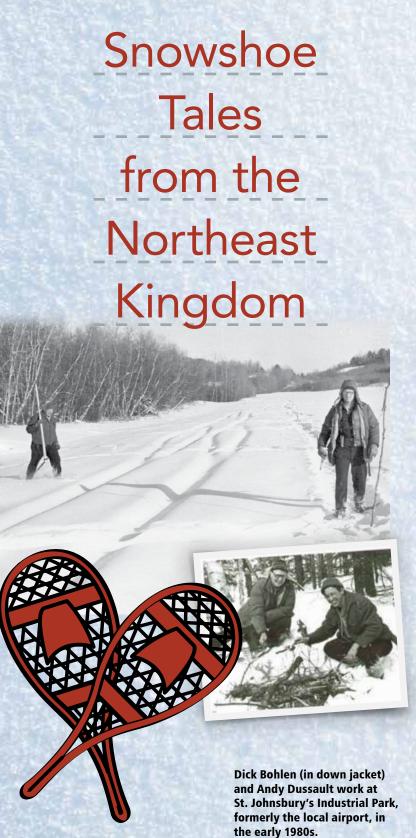






# Survey Markers

BY DICK BOHLEN, L.S. #7, retired



'm from New Jersey (but please don't hold it against me). However, the woods and the hills have always been an attraction to me. We had some woods on the hills behind my home in New Jersey, and they saw quite a lot of me on hikes and ice skating on a pond that we kept clear of snow so that we could play hockey.

Then my folks owned a cottage on Lake Champlain where Mom and I spent our summers. I was in the woods back of the cottage most every day playing cowboys and Indians. Then there was the woods and mountains across the lake in New York State. I did a lot of hiking and camping out in those hills when I was in high school.

After two years in the Navy, and four years at the University of Vermont, I opened a survey office in St. Johnsbury. Believe me, none of the above prepared me for survey work in the mountains of the Northeast Kingdom ... nothing, and I mean nothing! I had an awful lot to learn. This was "on the job training," if there ever was such a thing!

When I think of those early years, one of the things that stands out that I had to learn was, snowshoes! I had heard of them but paid no attention to them, since New Jersey did not have much winter snow. The first winter taught me differently in the Kingdom! So, I bought a pair of "cross-country" snow shoes from Vermont Tubbs, and off I went into the woods. It wasn't long before I realized that the tails on the shoes were nothing but trouble when I was clearing line for a survey. So, I bought a pair of "Bear-paws" that were shorter and wider, and a lot better. Then Tubbs came out with what they called "K" type Bear-paws, shorter and wider yet, and with "control" type harnesses, and I was in business.

When the snowshoes began to show wear, I found a guy in Barnet by the name of Moulton who repaired snowshoes. He was quite a character, a small farmer, and a real craftsman. I found out that he not only repaired snowshoes, but was in the business of making them to any design that you wanted. He told me that he made the rawhide from his beef stock, and made the frames from ash trees that he cut in his woodlot! How much more "homemade" could you get? I took the Tubbs "K" type to him for a pattern, and from then on he made the snowshoes for us as we needed them.

> Here are a few "snowshoe tales" that come to mind!

e were working on the height of land in Northern Newark, before the land tips down into the Clyde River Valley. The deed called for a blazed line, and we were searching for it. It was summer, some bug problems, but not as big a problem as finding that blazed line! Finally one of us looked up, and there above our heads were blazes on the trees! Some were above our reach! I could not believe it, but there they were. I was convinced that the surveyor used a step ladder to cut those blazes, and I believed that for a long time until I finally realized that it was not a step ladder, but that he was on snowshoes standing on three or four feet of snow when he cut them.

Ever since then, I have cut my blazes about knee high in the winter so that they would be easier to see in the summer. I told this story at a seminar of the Vermont Society of Land Surveyors, and a fellow surveyor told me of a surveyor in Southern Vermont that cut his blazes about a foot off of the ground thinking that they would still show if the lot was logged. Good idea, but not good in the winter snows of the "kingdom"!

bout a year after that experience, I found myself and my helper, Bob Hovey, on snowshoes again on that same project. We were running a compass and tape survey along lines on Hardscrabble Mountain in the town of Sheffield. I had followed and flagged the fence lines that marked these bounds the previous fall, in anticipation of a winter survey. We parked the rig, put on the snowshoes and worked on the survey. We had passed several corners, had eaten our lunches and were well up the mountain when it came time to quit and head for home. It was starting to turn colder, and the shades of night were falling fast. We did not want to follow our tracks out of the woods with their many turns; we just wanted to head straight for the car! I have always had a good sense of direction in the woods and we wanted to get to the rig as soon as possible, so I said to ol' Hovey, "follow me and I'll get us out of here!" Off we went making tracks for the car! Incidentally, I was told by a Maine Guide that had me do some work for him, that in Maine, snowshoe tracks are known as "snowshoe floats." So we made "floats," if you will, for about an hour when much to our surprise, we came onto another set of floats! Hello, somebody up here with us? Can that be? Come on! Not very likely! Finally it dawned on us that we were looking at our own floats, and that we must have made an unwanted circle! Whoa!.... Out came the hand compass, a bearing was established to the car, and out of the woods we came and gained the car well before dark.

hen there was that winter that I spent mostly in the offices of the town clerks of Sheffield and Sutton. I was researching the land records for the bounds of two, 600 plus acre tracts, close to each other, but not attached and belonging to Grinnel and Myra Martin. The properties were the former farms of many people, and it was quite a project to put them all together for a boundary survey to be done in the spring. I remember one sunny day in the dead of winter that I got itchy feet and wanted to get out of that office and onto the land. There happened to be a rail fence that the deeds called for that I was anxious to find, close to a road. So, I left the clerk's office early, put on my snowshoes, and went into the woods to look for that fence. I circled, searched, and circled some more to no avail. No rail fence! No evidence of a rail fence! What's up? It's got to be here! I had a 6-foot range pole with me, and just for the fun of it, I drove it into the snow underfoot. Lo and behold, when the range pole hit the dirt, only about a foot of it stuck up above the snow!! I guess we know why I couldn't find that rail fence!



I had another interesting experience on snowshoes that's worth sharing, involving an 85-pound Labrador Retriever, but that's a story for another day...



SURVEY CREW headed into the field on September 15 to tape footage for a short video that's being produced for the VSLS website. The video will help educate the public about the role of land surveyors and, with luck, attract some new interest in the profession.

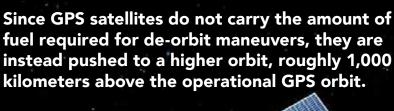
Brad Holden has taken the lead on the project, writing the script and setting up the shoot near the Essex-Westford town line. Matt Richardson, a videographer and friend of Brad, spent a few hours taping the group in the field. He'll also integrate some footage of records research in a local town clerk's office.

If all goes well, we hope to show the video at the December Seminar, so keep your fingers crossed. Either way, we'll make sure everyone sees it on the website.

Thanks to those who took time off work to help with the project!

Pictured in the photo below, from left: Jacob Keasbey, an engineer and survey technician with Trudell Consulting Engineers; Matt Richardson, owner of Bear Pond Productions; Becky Gilson, L.S., of Civil Engineering Associates; Mark Day, L.S., of TCE; Gayle Burchard, L.S., of LIttle River Survey; and Brad Holden, L.S. VSLS Administrator Kelly Collar snapped all the photos.







## U.S. Air Force Bids Farewell to 25-year-old GPS Satellite

t 25 years old, GPS Satellite Vehicle No. 27 completed its time in orbit on April 18 of this year. With the satellite's final duty completed, the 2nd Space Operations Squadron (2 SOPS) said goodbye via final command and disposal from Schriever Air Force Base in Colorado.

SVN 27 was launched in 1992, meaning it performed more than triple its design life of 7.5 years.

"The most interesting thing about this process for me was the ability to do some experimentation and advance training prior to the disposal," said 1st Lt. Cameron Smith, 2 SOPS bus subsystem analyst. "Experimentation started in mid-March, which consisted of advance training opportunities and vehicle component validation. This was very exciting and new to a lot of people in 2 SOPS."

Smith explained underperforming satellites, such as SVN 27, are removed from the GPS constellation to make room for satellites with increased capability.

Since GPS satellites do not carry the amount of fuel required for de-orbit maneuvers, they are instead pushed to a higher orbit, roughly 1,000 kilometers above the operational GPS orbit.

During the final contact with the vehicle, the satellite is commanded into the safest, lowest energy state possible. This means all fuel has been depleted from the fuel tanks, the batteries are unable to hold a charge, and the vehicle is in a spin-stabilized configuration.

Bus component degradations and navigational issues, among other reasons, usually kill a satellite. Fortunately for SVN 27, there were no major flaws throughout its life span.

"SVN 27 was disposed of because its navigation payload could no longer perform up to the GPS standards," said 1st Lt. Shannon Sewell, 2 SOPS subsystem analysis chief. "In 1993, a year after it launched, it had a suspect component we never tested out until we disposed of it. The decoder wasn't fully powered. Since it was a backup, we made a decision to leave it in the same configuration. However, this did not cause any major effects during its life span."

In the last two years, the unit conducted six disposal operations. For Sewell, even though she has witnessed final commands given during past disposal operations, this marked the first time she sent the kill command.

"It's a rite of passage to send out the last command to vehicles," said Sewell. "This was my sixth and final disposal in the shop before I move on, but the first kill command I sent. It was a great way to end my tenure here and was a unique opportunity."

So far, there have been 28 disposal operations in 2 SOPS history, which support the Air Force's GPS modernization efforts.

by GPS World staff

# Surveying Education

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

believe it's important to keep practicing surveyors aware of the evolving state of surveying education. I can't speak for all surveying programs, but I can speak for the surveying program at the University of Maine. There are many excellent surveying programs and surveying faculty members across the United States, and programs in any state probably have similar initiatives.

Surveying education at the University of Maine takes place in the Surveying Engineering Technology program, one of four programs within the School of Engineering Technology. The School is part of the College of Engineering.

The Surveying Engineering Technology program is an ETAC/ABET accredited program. ABET establishes standards for engineering and surveying programs nationwide.

Faculty within the Surveying Engineering Technology program must have at least a master's degree in surveying or related field, have at least three years of practical experience, and must be licensed as a surveyor. Currently, all faculty within the program have a Ph.D. and are licensed as surveyors in at least two states. Two of the faculty are also licensed as professional engineers, and one is licensed as an attorney at law.

Graduates of the

program meet the minimum education qualifications for licensure in every state. They also meet the minimum educational qualifications for licensure as a professional engineer in Maine.

Students at UMaine can opt to obtain a dual degree in surveying and forestry without taking any extra credits, but those who choose this option get no elective courses.

Students that pursue only the surveying engineering technology degree have a heavier concentration on engineering aspects, geodesy, construction, and land development.

As with many surveying programs across the nation, student enrollment is less than optimal and is always a concern to the university administration. While there are plenty of jobs with excellent salaries for graduates, it is hard to attract students to the surveying program. Enrollment in the surveying program at the University of Maine is around 70 students. Recent trends show the enrollment is rising.

In the future, the surveying program plans to expand distance education courses, allowing students to obtain many if not all surveying courses utilizing distance education. There is now a Professional Science Master's degree in Engineering and Business with a concentration in surveying offered entirely on line.

As an aid to distance education students, the tuition for distance education courses for non-Maine residents enrolled in the Professional Science Master's degree program is only 1.25 times the in-state tuition. Veterans receive instate tuition rates.

In the near future, the surveying program plans to partner with community colleges, engineering, or forestry programs in those states that do not have a surveying program in order to be able to offer dual degrees to provide surveying graduates for that state. For example, a student entering

an engineering program in XY state university would have the option of taking surveying courses online that are offered by UMaine. Judicious use of electives in their engineering program, established through cooperative arrangements between the programs, would allow the student to obtain both degrees without taking excess credits. Upon graduation, the student would receive a bachelor of science degree in engineering from XY University and a bachelor's of science degree in surveying engineering technology from the University of Maine.

If the distance education surveying engineering technology program is approved the tuition rate will be 1.25 times the Maine in-state tuition. Veterans already receive in-state tuition rates.

To learn more, contact Raymond.Hintz@maine.edu You can also contact Ray if you would like information on the master's degree with a surveying concentration.

While there are plenty of jobs with excellent salaries for graduates, it is hard to attract students to the surveying program. Enrollment in the surveying program at the University of Maine is around 70 students. Recent trends show the enrollment is rising.

#### Dwight Baker (March 8, 1943 – October 5, 2017)

Vermont L.S. 317



MARSHFIELD, VT-Dwight Baker, 74, of English Cemetery Road, died on Thursday, Oct. 5, 2017, surrounded by loving family.

Dwight was born March 8, 1943, in North Adams, Massachusetts, the son of Warren and Ruth (McKay) Baker, of Clarksburg, Massachusetts. Dwight graduated from Drury High School in North Adams,

Massachusetts, and attained his B.S. in civil engineering and land surveying from Worcester Polytechnical Institute.

Dwight was a practicing professional engineer and land surveyor for 52 years, working for the Vermont State Department of Transportation for several years and then managing a longtime successful engineering and land surveying business. He was a long-time, active member of the Vermont Society of Land Surveyors, the National Society of Professional Surveyors and the American Society of Civil Engineers.

Dwight was a loving husband, father, brother, generous friend to many, and he spent his life in service to others. He was a dedicated, volunteer firefighter for 46 years with

the Marshfield Volunteer Fire Department. During that time, he served as assistant chief for many years and was chief of the department for seven years. After retiring as chief, Dwight continued to be an active member of the fire department until his death. Most recently, Dwight supported the Covenant Hills Christian Camp in Cabot as caretaker, and was a friend to the camp for over 30 years beginning with his participation in the original campus development. Dwight was also an avid skier all his life and was part of the Dutch Hill Ski Patrol for many years.

Dwight is survived by his daughters, Jill Baker, Kara Baker-Holroyd, and sister, Brenda Gabel, several nieces and nephews, and many dear friends.

He was predeceased by his beloved wife, Mary Baker, whom he married on June 23, 1968.

A remembrance and reception was held at the Christ Covenant Ministries Church, 83 Creamery Road, Marshfield, on Thursday, Oct. 12, 2017, at 3 p.m. The family thanks the many friends who shared Dwight and Mary's life over the years and is especially grateful for the outpouring of love and support during the last few months of Dwight's life.

In lieu of flowers, contributions may be made in Dwight's memory to the Marshfield Volunteer Fire Department, c/o Dwight Baker, 122 School St., Marshfield, VT 05658.



**Dwight with Debra Daniels** Mithoefer at the Fall 2016 Conference in Killington.

A few comments the VSLS office received upon hearing the news of Dwight's death...

"Dwight always had a way of keeping us grounded. It was a great opportunity being able to serve with him on the Executive Committee."

- JOE FLYNN, L.S.

"It's a sad day for the Vermont surveying community."

- PAUL HANNAN, L.S.

"The profession has lost a great surveyor, and the association a great member."

- GAYLE BURCHARD, L.S., VSLS PRESIDENT



#### July 18, 2017 · 6 p.m. · Conference Call

This meeting was called to order at 6:06 PM.

Attending were Gayle Burchard, Keith Van Iderstine, Lisa Ginett, Ian Jewkes, Brad Holden, Nate Yager and our administrator, Kelly Collar. Mark Day was absent.

#### SECRETARY'S MINUTES

Members reviewed minutes from the June 16, 2017 Executive Committee meeting. Upon motion duly made and seconded it was unanimously RESOLVED: to approve the minutes of the June 16, 2017 Executive Committee meeting.

#### TREASURER'S REPORT

Treasure's report for the period of Jan. 1 to July 19, 2017: Total income for the period was \$33,822.55, expenses were \$34,614.51, and net income was \$ -791.66. Our yearly budget still looks good. We are still experiencing problems with getting access for Kelly to our online account reports, although Keith and Kelly have been working with the bank to address this issue. It was decided that we would go back to receiving paper reports to alleviate this problem.

Kelly reported that our expected advertisement income (as per our budget) for ads in "The Cornerpost" was \$1,000.00, but due the death of Wayne Kelloway and financial transitions at Eastern Topo, they will be unable to advertise this year. So VSLS will only receive \$ 870.00 worth of advertisement income this year.

#### ADMINISTRATOR'S REPORT

Kelly has been working on "The Cornerpost," which will be mailed during the first week of August. The Executive Committee should receive a first draft next week. The Fall Conference is up on our website, earlier than usual, but there have been only three registrations to date. Waypoint and VCGI are our only exhibitors signed up to date. Cost to exhibitors to attend the conference is \$325.00 for VSLS members and \$425.00 for non-members. Tom Wetzel of Repro has expressed interest in being an exhibitor and has downloaded a registration form, but we have not received the Repro registration to date.

Kelly received authorization from the Vermont Board of Land Surveyors to have attendees sign in and out just once a day at the conference. Likewise, they will receive just one certificate per day with a list of all the seminars they attended. Many people found the multiple signins confusing, and it was extra work for Kelly to produce certificates for every seminar.

#### **VIDEO PROGRESS**

Brad said that the projected dates of June 29 and 30 for the video shoot were both rained out. Brad will be trying to redo the schedule for July 28 or August 4. He found a fabulous site at a picturesque farm with lots of open land, many stone walls, and located on a town line. Kelly has four young surveyors interested in being in the video who she will email to see which dates will work best for them. Brad will coordinate the dates with the videographer.

#### CERTIFIED FLOODPLAIN SURVEYOR

The group discussed a letter received by VSLS from Christy Davies, the Executive Director of the North Carolina Society of Surveyors, regarding a program they've been running since 2002 called "Certified Floodplain Surveyor." The NC Geodetic Survey oversees and provides education for the certification. FEMA is backing the program to provide training for people to train the surveyors to be certified for this program, and they may provide some funding for one of our members to attend the training session in Raleigh, N.C., on August 29-31 this year. Brad expressed an interest in attending the session and will check in with Christy for further information.

Kelly mentioned that we are under our travel budget to date, but Tricia Kules and Ethan Gilmour have not yet attended the NSPS meeting, which will be in the West or Mid-West of the country this autumn and will probably take up most of the remaining travel budget.

#### **COMMITTEES**

Based on our discussion at our last meeting about the need for a Preservation Committee, Gayle has talked with Leslie Pelch from VCGI, who appears to be willing to speak to the preservation committee about making the old surveys digital and available. Unfortunately, although several likely candidates to serve on the committee were discussed, there is no official committee to date. There will be a half hour of time during the fall conference for that committee to meet should anyone volunteer. Gayle stated that we need to have the committee to complete important work and, if no one will volunteer, she proposes that we raise membership dues so that we can pay someone outside the society to complete the work.

#### OTHER BUSINESS

There was no other business. The Executive Committee will meet next month on August 18 aboard the Ethan Allen for a supper cruise and meeting.

The meeting was adjourned at 6:44 PM.

Respectfully submitted,

Lisa Ginett

VSLS Executive Committee Secretary



#### October 26, 2017 · 6 p.m. · AIV Building, Montpelier

This meeting was called to order at 6:01 P.M.

In attendance were Gayle Burchard, Mark Day, Keith Van Iderstine, Lisa Ginett, Nate Yager, Brad Holden (by phone) and Kelly Collar. Absent: Ian Jewkes. We were also joined by Nick Connizzo, a digital archivist with Vermont State Archives.

#### ARCHIVING, SCANNING AND INDEXING OLD MAPS

Nick Connizzo had some good advice on archiving, scanning and indexing our old maps and plats. First he mentioned that the very best way to store the plans is paper. While paper copies may slowly degenerate over time and be subject to floods and fires, digital copies are subject to these same problems as well as computer crashes and the inability to read files over time due to changing digital storage devices.

Nick noted that we don't need to copy plats that are already on record in town clerks offices, as those maps are already being preserved. We discussed that any plats before 1971 (and the plat laws) could be recorded for \$15, but town clerks may balk at having to store them all. That leaves VSLS going through any old maps and plats to identify only those that have not been recorded, which seems like a lot of work. It might be best to see if the cost of scanning the plats will be offset enough by sorting them to make it worthwhile. He noted that the State Archives will not take unrecorded plats.

Nick suggested different avenues for finding repositories for our paper copies and offered several ways in which we might obtain grant monies (or help from the designated repositories) to offset the cost of scanning and indexing the plats and maps for membership use. Nick recommended that we create parameters for what we are willing to take from retired or deceased surveyors, realizing that we would need to have an ascension agreement for whoever takes the paper copies as to where they go if the group taking them dissolves. Nick will send us his "Digitization Management Guide" and offered to help through the digitization process.

A brief discussion with Brad ensued as to what records he had stored in our storage building. Brad says that so far he gets about five calls per month from surveyors hoping to find something in the records already scanned by VSLS and that he looks for the requested plans immediately. It was pointed out that the process could become burdensome for Brad if there were, say, five calls per week or more. We will place a clipboard sheet at the next Seminar to ask attendees which records they might have from retired or deceased surveyors.

#### SECRETARY'S MINUTES

The group reviewed the minutes for the Executive Committee meeting dated May 18, 2017. Upon motion duly made and seconded it was unanimously RESOLVED: to approve the minutes of the May 18, 2017 Executive Committee meeting.

#### TREASURER'S REPORT

Treasurer's report for the period of Jan. 1 to Oct. 23, 2017. Total income for the period is \$ 59,658.57. Total expenses were \$ 63,265.45 for a Net Income of \$ -3,606.88. Bank Account Total = \$55,303.32. Keith mentioned that with the income from the December Seminar, we will be very close to our budget.

#### ADMINISTRATIVE SECRETARY'S REPORT

Kelly is working on the next "Cornerpost". She will be putting a photo by Mark Day on the cover. This year's December Seminar will not be the usual Round Table format. Instead we will be having a morning seminar on Lidar issues. Leslie Pelch and a colleague from VCGI will speak on how to access the Lidar and derivatives, and Thadd Eldredge will discuss using the Lidar and derivatives. The afternoon seminar will be a panel of local attorneys discussing Vermont Title Issues.

The Spring Seminar will take place at Lake Morey on April 20, 2018, but the subject matter is unplanned to date.

#### OTHER BUSINESS

It was discussed that we would like VSLS to donate some funds in memorial for Dwight Baker and also for Knud Hermansen's wife, Sue. RESOLVED: that VSLS will donate \$100 to the Marshfield Fire Dept. on behalf of Dwight Baker and will donate \$ 50 to the United Baptist Church of Old Towne, Maine, on behalf of Sue Hermansen.

We also discussed next year's budget and the possibility of a dues increase for 2019. More people are charging travel time for our budget due to the NSPS attendees and young surveyors. We also need to offset our life members' lower dues which, as the membership ages, is becoming more of an issue. We discussed the possibility of offering Associate memberships to licensed engineers to gain more members. The VSLS Executive Committee will want to have hard figures for the cost of our projects before asking the membership for a raise in dues to cover the projects.

Slate of Officers for 2018: Mark Day, VSLS President; Nate Yager, Vice President; Keith Van Iderstine, Treasurer; Lisa Ginett, Secretary. Gayle will stay on the Executive Committee as a member, as is normal for the past president. Tricia Kules would like to retire from being the NSPS director, and Brad would like to step down from the Executive Committee. Brad will ask Becky Gilson if she would like to replace him. We need to ask Ian Jewkes if he wants to continue.

There being no other business the meeting was adjourned at 7:55 P.M. The next Executive Committee meeting will be held November 16, 2017 at the AIV building in Montpelier.

Respectfully submitted, Lisa Ginett, VSLS Executive Committee Secretary



#### VSLS Business Meeting • April 21, 2017 • Inn at Essex, Essex, Vermont

This meeting was called to order at 12:42 P.M. Attending were the general membership as well as Executive Committee Members Gayle Burchard, Mark Day, Keith Van Iderstine, Lisa Ginett, Brad Holden and Kelly Collar. Absent from the Executive Committee were Ian Jewkes and Nate Yager.

#### SECRETARY'S MINUTES

Members reviewed minutes from the December 16, 2016 Annual Business meeting. Upon motion duly made and seconded it was unanimously RESOLVED: to approve the minutes of the December 16, 2016 Annual Business meeting.

#### TREASURER'S REPORT

Treasure's report for the period of Jan 1st to April 19th 2017: Total income for the period is \$ 29,135.05, Expenses = \$21,100.87 for a Net Income of \$3,034.18. Bank Account Total = \$66,301.38.

#### NSPS DIRECTOR'S REPORT

Tricia Kules spoke about the focus of NSPS for the year, which is "workforce development." A survey will be coming out to the membership canvassing for ideas as to how to attract new surveyors. NSPS has developed a "sandbox" to take to events, when kids run their fingers through the sand they generate contours. Kids enjoy it and it promotes surveying as a profession to consider.

There will be a spring lobby of representatives' offices on Capitol Hill. Vermont is pushing on FEMA to support updates. NSPS hopes to sponsor or co-sponsor a legislative bill to update FEMA mapping. They also plan to ask the legislators if they will sponsor an addition to the infrastructure bill in support of hiring of surveyors from the private sector, where possible, instead of other government agencies.

#### VCGI UPDATE

Leslie Pelch informed us that VCGI now has the 2016 Orthophotos for Rutland and Windsor Counties available at 0.3 meter pixels and down to 0.15 pixels in the villages. She notes that Lidar has been delivered and is ready for download as well as 1' to 2' contours. The East side of the state, North of Windham County will be available later this year. VCGI is hoping to do the Missisquoi River area, with the date to be collected this fall hopefully. She mentioned as well that the parcel data will either be re-done by VCGI or by a separate company in the next several years.

#### PROGRAM COMMITTEE

Tim Rockwell mentioned that he had been approached by Jay Peak to have a seminar there. They suggested that we have our two day conference there on Friday and Saturday. The membership was alright with a seminar at Jay Peak but not enthusiastic about a Saturday event. Tim also mentioned that they needed ideas for seminars and that the committee was trying to forward topics in surveying related to new technologies.

#### BYLAW REVISIONS

The membership asked that we make one change to our bylaw revisions; to change the NSPS director to read the State NSPS Director. The revision was approved and it was RESOLVED: to approve the new Bylaw Revisions as published with that one change.

There being no other business the meeting was adjourned at 1:16 P.M.

The next Executive Committee meeting will take place at the AIV building in Montpelier on May 18, 2017 at 6:00 P.M.

Respectfully submitted, Lisa Ginett, VSLS Executive Committee Secretary



## attention members

Executive Committee meetings are held on the third Thursday of every month. All members are welcome to attend. Email kelly@vsls.org for more information.



#### VSLS Business Meeting • September 22, 2017 • Stoweflake Resort & Conference Center

The meeting was called to order at 12:45 P.M. Attending were the general membership as well as Executive Committee Members Gayle Burchard, Mark Day, Ian Jewkes, Nate Yager, Lisa Ginett and our Administrator, Kelly Collar. Absent from the Executive Committee were Keith Van Iderstine and Brad Holden.

#### SECRETARY'S MINUTES

The Secretary's minutes for the April 19 meeting were unavailable.

#### TREASURER'S REPORT

Treasurer's report for the period January 1 to September 20, 2017: Total income for the period is \$57,159.19, net income for the period is \$14,461.11. Bank Account Total = \$73,898.12. The Spring seminar raised \$4,707.34.

There was a welcome for our out-of-state guests and speakers.

We were addressed by Wayne Zirolli, the President of the Connecticut Association of Land Surveyors, who invited Vermont surveyors to the CALS joint convention with NESS on Friday, Nov. 3 & 4 at the Sheraton Hotel in Rocky Hill, Ct. There will be a President's Round Table discussion and the keynote speaker will be presenting the topic of unmanned aircraft systems and mapping. There will also be a meeting of the Young Surveyors group as well as the famous CALS auction on Friday afternoon.

#### RIGHT OF ENTRY STATUTE

Paul Hannan spoke to the group about his recent experience in trying to use our Right of Entry Statute (Title 27, Section 4) into private lands in order to complete his survey work. After sending an email to an adjoining landowner to his project asking to go through a short section of the adjoiner's property, he received a threatening response. Paul then contacted the local sheriff's office, only to be told that they would not help him gain entry as it was a civil matter. They told him that he would need a court order for them to come onto the job site. Paul spoke with the sheriff's attorney to see how he would recommend changing the statute so the court order would not be required. The attorney suggested some language to revise the statute, but it would take some legislative action to create a better working Right of Entry Statute. He also mentioned that in the case of a lawsuit, a no-trespass order (Rule 34) trumps our right of entry.

Joe Flynn mentioned that his office, O'Leary-Burke Civil Associates, PLC, now has all the old files of John Marsh, RLS. His office has scanned all of the Marsh plats and he will make them available to whomever sends him a thumb drive.

#### NSPS DIRECTOR'S UPDATE

Tricia noted that there is a spring competition at NSPS for plats in the following categories: ALTA ASCM, Boundary, Cadastral, Miscellaneous and Topographic. There is an application to submit, including an entry fee, but there is also a monetary award. Tricia informed the group that the next NSPS meeting will be on October 4-7 outside Dallas, Texas.

#### PRESIDENT'S REPORT

Gayle discussed her frustration in never being able to accomplish some of our goals as a society. We have been talking for years about some projects, most notably the scanning and indexing of all of the plats of former surveyors. It seems that we no longer have the ability to do this job within the society. Gayle requested that the membership consider raising our dues to create a pocket of money that could be used to do some of the things that we have been discussing. Some of the money could be used for lobbying for a revision to the Right of Entry Statute, scanning and indexing our historic plats, lobbying efforts in general, workforce developments and traveling to other states. One attendee suggested raising the life members' dues. Tim Rockwell and Doug Henson think that we should get a fair estimate of what it will take to do some of these projects, the scanning and indexing of plats being the likeliest highest cost, so that we can see what amount we would need to raise the dues to cover the costs discussed. Other state society dues are already higher than ours, with both Maine and New Hampshire at \$225.00 per year.

Leslie Pelch of VCGI thinks that it might be a good fit to store the plats and index within the VCGI historic imagery. VSLS needs to find out if their use by the general public would be a conflict with the gift of the plats for the use of surveyors only, which was attached to some of the plats. The membership agreed that they wanted to know the cost of scanning and indexing the plats before deciding on raising our dues.

Finally, the VSLS video has been taped and Brad Holden is working on the script.

There being no other business the meeting was adjourned at 1:20 P.M.

The next Executive Committee meeting will take place on October 20, 2017 at 6:00 P.M.

Respectfully submitted,

Lisa Ginett VSLS Executive Committee Secretary

# 2018 Budget & Officers

#### 2018 Proposed Budget

#### Income

Advertising \$1,000.00 Donations \$19,250.00 Membership Dues Program Revenues \$45,000.00 **Publication Sales** TOTAL \$66,650.00

#### **Expenses**

Accountant Fees Association Dues \$4,150.00 Bank Fees \$1,500.00 Donation Expense \$750.00 Memorial Contributions \$200.00 News Magazine \$4.000.00 Office Supplies \$1,000.00 \$19,750.00 Postage \$300.00 \$25,150.00 **Public Relations** \$1.550.00 \$6,000.00 TOTAL \$66,650.00

#### 2018 Slate of Officers

**PRESIDENT** Mark Day, L.S.

**VICE PRESIDENT** Nate Yager, L.S.

**SECRETARY** Lisa Ginett, L.S.

**TREASURER** Keith Van Iderstine, L.S.

**DIRECTORS** Gayle Burchard, L.S.

> Rebecca Gilson, L.S. nomination from floor

#### 2018 NSPS Director

Gayle Burchard, L.S.

#### 2018 VSLS **Education Foundation Directors**

MEMBERS AT LARGE

Pete Chase, L.S. Mike Raboin, L.S. Norm Smith, L.S. **VSLS OFFICERS** 

Mark Day, L.S. Nate Yager, L.S. Lisa Ginett, L.S.

Keith Van Iderstine, L.S.

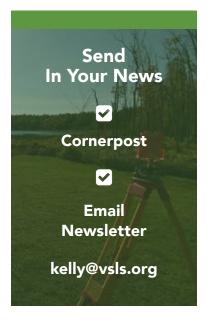
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# Random Notes



#### **GETTING INTO THE FALL SPIRIT**

Kathleen Kurland, Executive Director of the Connecticut Association of Land Surveyors, sent this photo of a roadside exhibit in Old Wethersfield, CT. "It was a team effort from VHB, with everyone adding their own personal touches." Kathy says. "But we had a few superstars who did the heavy lifting: Kaitlyn Jacobson, Molly Otero, Andria Kowalczyk and Joshua Eannotti."





#### **GOOD FENCES MAKE GOOD NEIGHBORS**

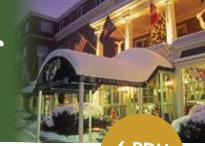
Harris Abbott, L.S., sent in this photo from Essex Junction, looking along the north lot line of 2 Juniper Ridge Road and the south lot line of 4 Juniper Ridge Road. "The zoning ordinance requires that fences not be constructed on the property line," Harris says. "Consequently, this leaves a so-called 'no man's land' which is hard to maintain between the two properties."

**ALL IN A DAY'S WORK** Gayle Burchard, L.S., put on her waders for a recent project she completed with Tricia Kules, L.S. Tricia explains, "We were doing a topographic/ bathymetric survey of the pond at the ninth fairway at Stowe Country Club. We're all set for golf balls."



# December Seminar

Friday, December 15, 2017 Capitol Plaza Hotel • Montpelier, Vermont



6 PDH APPROVED

#### **Program Schedule**

**7:15** AM Registration & Breakfast

(bagels, assorted pastries, fruit, yogurt, granola, coffee, tea, juice)

8:00 AM Overview of Vermont Lidar Program

8:45 AM How to Access Lidar Data

and Derivatives

9:30 AM How to Use Vermont Lidar Data

and Derivatives

12:00 PM Luncheon & Business Meeting

1:30 PM Panel Discussion:

Title Insurance Issues in Vermont

3:30 PM Concluding Remarks

Registration Fee	Through Dec. 6	After Dec. 6
Member in Good Standing*	\$125.00	\$150.00
Life Member	\$93.75	\$118.75
Non-member	\$175.00	\$200.00
Non-member technical staff attending with member	\$106.25	\$131.25
Three attendees from same firm (one must be member)	\$106.25	\$131.25

<sup>\*</sup>Must be current with dues to qualify for the member rate. Members of kindred associations qualify for the member rate. Education credits are valid in Vermont and New York.

#### **Morning Presentations**

Overview of the Vermont Lidar Program

**Presenter:** Mike Brouillette, Vermont Center for Geographic Information (VCGI)

- Brief History
- Derivative Data Products
- Specifications
- Future Data Collection

#### How to Access Lidar Data and Derivatives

Presenter: Leslie Pelch, VCGI

- View on Map Viewers
- Find at Open Geodata Portal
- Download Data
- Connect via Services
- Quick Demo of what you can do with services

# How to Use Vermont Lidar Data and Derivatives Presenter: Thadd Eldredge, Eldredge Surveying & Eng.

Before the event, we will provide a link to download a trial of Global Mapper, so attendees can tap along while Thadd runs through some routines. There will also be a number of links for other Lidar packages that will help to use the point clouds available from the State. Then we'll look discuss visualization, classification, surface modeling and more.

#### Afternoon Panel: VT Title Insurance Issues

The panel will be discussing the changes in the "Minimum Standard Detail Requirements For ALTA/NSPS Land Title Surveys." The panelists will be given a set of bullet points to discuss, and then the floor will open up for questions.

Moderator: Doug Henson Panelists: (below)

- Liam Murphy, Murphy Sullivan Kronk
- Robert Rushford, Gravel & Shea, Attorneys at Law
- Mark Schittinas, State Manager & Counsel, Commonwealth Land Title Insurance Company
- Jonathan Wiedman, Connecticut Valley Title Services

Registration (please complete this form and mail it with your payment, or register online at vsls.org)

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mail	_
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