



# The Cornerpost

Journal of the Vermont Society of Land Surveyors

Volume 48, Number 1 | Spring 2017



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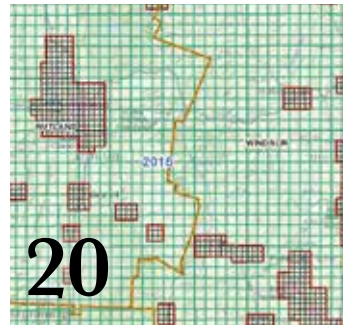
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## Send In Your News

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](mailto:kelly@vsls.org)**.

**About the Cover:** Allan Hopkins, L.S., submitted this photo that his son, Tom, took at an air show in Dayton, Ohio. Tom sent his dad a number of photos of the antique surveying exhibit that was on display; you can see more on page 15. Allan receives a \$50 gift certificate to the restaurant of his choice for sharing this image for the cover.

# President's Corner



Gayle and  
Cinnamon

“““

Connecticut is having its 50th anniversary conference this fall, and they are planning to have an NESS forum-style meeting with all the state boards attending. I hope many of you will plan on attending.

I t's hard to believe that March is close to being over. I hope that everyone has had a healthy and happy winter.

Things have been quite busy since the December Round Tables. In January, I attended the NYSAPLS Annual Conference along with Ethan Gilmour, our representative to the Young Surveyors Network. It was a great conference at the Turning Stone Resort, with lots of seminars and vendors. There was a day when students could come and shadow a surveyor to meet other surveyors and students, and to network among their peers. Maybe this is something we could do at our meeting – maybe not just students but our technicians – so that they could have a chance to network among themselves and employees from other companies.

The following week, our NSPS Director Tricia Kules and I went to the MSLS Annual Conference at the Samoset Resort in Rockland, Maine. It also was well

attended, and the group at the NESS meeting had a lot of great ideas. Connecticut is having its 50th anniversary conference this fall, and they are planning to have an NESS forum-style meeting with all the state boards attending. I hope many of you will plan on attending; I will keep everyone updated on the different topics that will be discussed.

MALSCE is the next conference coming up, in Leominster Mass., on March 24 and 25. If anyone is interested in coming with me to future conferences, please send me an email at [gayle@littleriversurveyvt.com](mailto:gayle@littleriversurveyvt.com).

Again, I encourage everyone to be as involved in VLSL as possible. It is your association, and it needs you.

*I hope to see you all at the Spring Meeting!*

*Gayle*

Gayle Burchard  
VLSL President

📅 THE SPRING SEMINAR IS FRIDAY, APRIL 21. | 📄 SEE PAGE 27 FOR DETAILS AND TO REGISTER.



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U.S. Fish and Wildlife

A first-hand account of a  
benchmark densification project  
spanning 750 coastal miles.

# Geodetic Leveling

BY JOSEPH FLYNN, L.S.  
Survey Department Manager  
DuBois & King

**A**s a professional surveyor in Vermont, I have provided boundary survey services for 27 years. In early 2014, I had the opportunity to work with the U.S. Fish and Wildlife Service to provide geodetic leveling, a type of service I had not previously provided. While I had performed numerous leveling projects over the course of my career, this project would be much more of a challenge.

Under an on-call contract with U.S. Fish and Wildlife, DuBois & King's Survey Department was provided an assignment for a benchmark densification project for Salt Marshes, ranging from Virginia Beach, Va., to Moosehorn, Maine. As this was a new type of survey work for me, I contacted Dan Martin, National Geodetic Survey Northeast Advisor, for his guidance. Dan turned out to be an invaluable resource throughout this project.

Due to concerns about increasing coastal water levels, U.S. Fish and Wildlife wanted to establish a datum of benchmarks for salt marshes lying between Virginia Beach and Moosehorn, roughly 750 miles along the East Coast. The assignment involved setting 40 new benchmarks to be published in NGS's OPUS Shared Data Base and the NGS Integrated Data Base, and performing roughly 122 miles of level loops. The projects involved survey services in Maine, Massachusetts, Connecticut, Rhode Island, New Jersey and Virginia.

**"The more we became involved with geodesy, the more engaging the discipline became. The similarities to boundary surveying were notable."**



Joe Flynn at the Sachuest Point National Wildlife Refuge in Middletown, R.I.

Logistics included transporting two Invar 11-foot rods, as well as transporting and housing a rotating survey crew of seven.

According to the National Geodetic Survey website: "In geodetic surveys executed primarily for mapping, geodetic positions are referred to an ellipsoid, and the elevations of the positions are referred to the geoid. However, for satellite geodesy, the geoidal heights must be considered to establish the correct height above the geoid. Precise geodetic leveling is used to establish a basic network of vertical control points. From these, the height of other positions in the survey can be determined by supplementary methods. The mean sea-

level surface used as a reference (vertical datum) is determined by averaging the hourly water heights for a specified period of time at specified tide gauges."

In preparation for this assignment, our team attended a three-day training class in Second Order Class II levels in Corbett, Va., taught by NGS, and numerous one-on-one sessions with Dan Martin. Throughout the 18-month project, Dan was instrumental in assisting our team with the assignment. Dan would respond with suggestions on how to deal with particular situations, such as existing benchmarks not agreeing with published elevations, not having the right turning turtles as specified by NGS, how to use OPUS observations to pinpoint elevation issues, or satisfying NGS Bluebook recording requirements.

The more we became involved with geodesy, the more engaging the discipline became. The similarities to boundary surveying were notable: the

reconnaissance of existing benchmarks that match the published elevations is the same as looking for two property corners that agree; deciphering of old benchmark descriptions is the same as trying to break down an 1802 deed description; and understanding the history of how a mark was set and by whom is also similar.

This was the most challenging and enjoyable project I have ever had the pleasure of working on; however, it did have its stressful moments, such as the 12 to 16 hours days and midnight strolls to pick up GPS receivers.

## Technical Challenges of the Project

➡ Keeping track of the number of leveling sites presented issues. While processing one loop with NGS TRANSLEV program a warning appeared that the difference between the forward run and backwards run varied by 200 meters. The NGS TRANSLEV software could not make corrections for getting lost, which happened at times

➡ Work at the Chatham, Mass., sites added a new variable. Two of the three monuments needed were located on a point, accessible only by boat, which had to be capable of handling the Atlantic Ocean in March. If not for some great assistance from U.S. F&W and a hardy boat, the survey crew would have had to spend a night at the abandoned lighthouse.

➡ The State of Maine coast also handed us a new issue. While tide changes elsewhere had posed few problems, the 25-foot tide changes in Maine were extreme. Monitoring and coordinating with the tide changes were essential when performing the leveling and GPS observations. The logistics of planning loops was difficult; compensating for the tide added another level of complexity. We only had to use a canoe for one loop (although getting an 11-foot long rod in a canoe was a bit tricky!).

➡ Looking for USGS disks with snow cover that do not contain any magnetic properties is difficult enough, but compensating for nonexistent buildings, whose descriptions were used as ties 40 years ago, added to the puzzle. Along

## PROJECT STATISTICS

196

Total kilometers of level loops run

208

Total hours of actual time spent leveling



Total number of recovered NGS marks

5

New software programs learned and used



436

Total number of photos taken

277

Total hours spent on OPUS observations



106

Total number of hotel stays



8,244

Total number of miles driven

2,794

Total number of leveling set-ups

A Fish and Wildlife employee heads out into the Atlantic Ocean in Chatham, Mass.







## PROJECT STATISTICS

- Elevation of the highest new benchmark set = 32.519 meters in Rhode Island
- Elevation of the lowest new benchmark = 0.5111 meters at Virginia Beach area.
- Most northerly new benchmark = Moosehorn Maine at N44°53'15.50210"
- Most southerly new benchmark = Virginia Beach at N36°37'50.56745"

Randy Otis and Chad Russo work on a benchmark recovery in Westbrook, Conn. "Occasionally it took a team to dig out an existing benchmark," Joe Flynn explained.

the coast of Rhode Island, Sachuest Point is an open wildlife refuge that has numerous ledge outcrops and was at one time a naval operation base with buildings. The task of recovering the existing benchmarks without any real distance ties, and only scaled latitude and longitude values, was as difficult as finding a stone bound in the middle of the National Forest in Glastenbury, Vermont. After much shoveling, scraping and magnetic bearings, two monuments were found, but as luck would have it, they didn't check within the allowable tolerances of the project, and a third one needed to be recovered 1,780 feet away!

Eighteen months later the project is closed and being wrapped up. All thirteen of the benchmarks that were subject to publication within the OPUS Shared data base have been included and the miles of level loops, data reduction files, pictures, descriptions, and reports for the remaining twenty-seven have been submitted to NGS for inclusion into the IDB.

## What Did We Learn from All This?

We learned many lessons from this project, most importantly:

- ➡ The survey profession extends well beyond boundary surveying.
- ➡ Geodesy requires more challenging data analysis than other survey disciplines.
- ➡ High quality equipment is a necessity; skimping will *not* save the budget and the data *always* suffers.
- ➡ Committed professionals who are willing to take on new challenges and work long hours are the backbone of such an undertaking and the key to its success.

Along those lines, I would like to thank those who played key roles in this project, in particular, Dan Martin, NGS Northeast Advisor, and the D&K survey crew members, Gerald Stockman, Randy Otis, Chad Russo, Garrett Organek, James Goodall and Branden Martin. 🇺🇸







# Affording a Surveying Education

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

I am a faculty member in the surveying program at the University of Maine and a parent of three college-educated children. I am often asked, mostly by parents, what financial aid is available for their children. I will share the guidance I provide on how to afford a quality four-year surveying education.

## Apply for Scholarships

Almost every state surveying society has scholarships available for aspiring surveyors. National professional societies such as NSPS have scholarships available to students. Scholarship committee members often lament how few scholarship applications they receive. The fact is that a majority of surveying students do not apply for the numerous surveying scholarships that are available.

In order to encourage students to apply for scholarships, I will often suggest to students that the hour or two that may be required to prepare a complete and quality application will often garner some of the best hourly pay the student will ever earn. To obtain a \$2,000 scholarship for two hours of effort is equivalent to \$1,000 per hour.

My advice is usually ignored. (I suspect if the parents heard my advice, more scholarship applications would be forthcoming from their children.) Accordingly, students that do apply for a scholarship have an excellent chance to obtain one. The odds of receiving a scholarship are better than any lottery.

Many employers offer scholarships to employees. In the past, the Bureau of Land Management (BLM) provided educational funding for students that worked for the BLM as summer survey interns. Several private surveying firms often provide scholarships to summer interns upon their return to college after working for the firm during the summer so long as there is a commitment to work for the firm in the future.

The most notable work related scholarships available to employees are National Guard and military reserve scholarships. Serving one weekend a month and two weeks a year will often provide a student with full tuition toward a four-year degree.

Many colleges offer general scholarships. Scholarships are often available to students that are in certain disciplines, the residents of certain towns, members of certain minority ethnic groups, or have achieved notable academic standards.

## Enroll in a Community College

Students can save considerable tuition expense by attending a community college. Tuition is often considerably less at community colleges than the tuition for similar courses at a four-year university. Students should be encouraged to take as many credits as possible at a community college. Mathematics, English, speech, physics, and many other general subject classes can be taken at a community college. These courses will usually transfer to a four-year surveying program. If there is some doubt, check on transfer credits at the four-year program before taking the course at a community college.

Students who intend to embark on a surveying career should consider getting an associate degree in surveying at a community college before transferring to a four year surveying degree program. In the alternative, the student can take almost all their general course work at a community college and take the engineering and surveying courses at a four-year college in order to complete a degree requirement leading to a bachelor of science degree in surveying.

## Consider the Advice I Gave My Children

While I've given this advice to many students and parents, parents are curious and ask me what advice I gave to my own children. How did I handle financing my children's education? My advice to my three children was simple and direct. They could go to any college they could afford.

I see so many young students enroll in university programs that have very little future for employment (not so in surveying). Students enrolled in majors without future employment

**Students who intend to embark on a surveying career should consider getting an associate degree in surveying at a community college before transferring to a four-year surveying degree program.**

prospects will pile up debt with little hope for paying off the student loans in a reasonable period. At least

half of the students at the campus where I teach would have a much brighter economic future and more rewarding career had they gone to a technical school and learned a trade rather than attend a university where they majored in, for example, Medieval Literature.

To further compound their future financial difficulty, many students attend expensive private colleges where the students enroll in majors with little prospect for future employment.

My advice and opinions were communicated to my three children. My daughter and son became engineers. My youngest son is a nurse. All are gainfully employed without student loan debt. Two financed their education with Army scholarships. One financed her electrical engineering education with a merit scholarship that covered all four years of her education.

You might ask how I funded my own education. I used the G.I. Bill (Marine Corp veteran). I followed the advice I gave. I earned a two-year degree before transferring to a four-year program. My graduate degrees were funded by my employment as a teaching assistant. I will also give credit to my wife, who also worked to support the family while I attended college.

I hope this advice helps prospective students and parents. We need more surveying students. In 2016, surveying graduates had at least three employment offers each. Surveying is a great major and a rewarding career. Encourage more students to enroll in a surveying program and give the prospective students and parents my advice. 🙏

# An Interesting Example of Deed Structure

## A Look at “Surveying” Styles from the 1950s and 1960s and Unique, Idiomatic Letter-writing

BY KEN WESTON, L.S.

I

n the spring of 1960, I started employment as forester and surveyor for The A. Johnson Co. in Bristol, responsible for managing their woodlands and for surveying their

properties which had been previously acquired but that contained numerous boundary questions. One of the most memorable surveying problems for me had been created in 1956, when the company acquired most of a farm and woodlot in Salisbury. The problem was contained in a reservation that included a residence, along with a spring and some small ponds. The reservation reads as shown at right. ➡

Although somewhat convoluted, one would think that with a considerable amount of measuring, the description could be followed. However, the letter printed on the opposite page (first page only) indicates considerable confusion over the actual boundaries. It also represents an idiomatic way of putting one’s thoughts on paper that expressed the writer’s point of view, and also put his proposals to the receiver in a very non-confrontational manner. It was written by Fred Johnson, the senior partner (at the time) of the company. The letter refers to some sketches that he made, but I have not seen any record of them. For years I have admired Fred’s ability to express his thoughts in his own way.

The final settlement of the boundaries was made after 1960 through a boundary agreement. A most memorable part of this was that one of the first things I did when starting the survey was to go to the company’s attorney in an attempt to get at the intent of the reservation. His comment to me was approximately “... I don’t see why there is a problem with that description, because Miss Anderson’s lawyer and I went down there and measured out those lines ourselves ...”! 🤔

### 1956 RESERVATION FROM SALISBURY LOT

“...beginning at a point to be marked by an iron pin in the easterly line of the highway leading from Lake Dunmore ... in a generally northerly-southerly direction, which point is in the northly edge of the bridge or culvert over the brook located northerly from the dwelling ... herein reserved; thence easterly in a straight line running at right angles with the ... said road 194 Ft., said line being on the northerly bank of said brook; thence southerly at right angles in a straight line roughly parallel with the line of said road 110 Ft. to a large pine tree, said tree being the northerlymost of two large pine trees on the parcel herein reserved; thence easterly at right angles 170 Ft. to a point just easterly of the first of three pools of water; thence southwesterly in a straight line running along the base of the hill just easterly of said pools of water to a point to be marked by some suitable marker, which said point is 165 Ft. southerly of a point located 6 Ft. easterly of said large pine tree; said line running southerly in a straight line roughly parallel with said highway, said last ... point being also 200 Ft. easterly from said easterly line of said highway; thence southerly in a straight line roughly parallel with said highway 100 Ft.; thence westerly at right angles 150 Ft. to a point 50 Ft. easterly from said easterly line of said highway; thence southerly in a line roughly parallel with and 50 Ft. easterly from said highway 285 Ft. to a point; thence westerly in a straight line perpendicular to ... said highway 50 Ft.; thence northerly along the easterly line of said highway 660 Ft. to the point of beginning. ...”

**“One of the most memorable surveying problems for me had been created in 1956, when the company acquired most of a farm and woodlot in Salisbury...”**



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## THE A. JOHNSON CO.

BRISTOL, VERMONT

PHONE 3401

March 29, 1960.

Miss Margeret Anderson,

Salisbury, Vt.

Dear Miss Anderson:

Early in the winter I took one man and went down to run out the lines on the parcel you reserved when you sold to us. The snow was pretty deep, we found no marks, and the description did not seem to fit into the picture. We went home after an hour or two.

Yesterday I went down again, this time using two men working on the job, to help run the lines according to description in deed, mark up the lines and corners, and set iron rods at all corners. Deed called for running at right angle with highway, but if we had done that we would have crossed the brook in just a few feet, and been out into open land before we got out that first 194'. So, we started over again, running farther to the north, but still crossing before we got anywhere near the Big Pine. By the way there are no pine along the northerly side of brook, unless you switch over on the other brook, the ones the ponds are in. We finally ran a line 282' from pin at culvert, right up to the Big Pine, because we thought you might like that as a marker, for which it would be very good indeed. We suggest to you that it would be still better to start at iron pin by culvert and take the center of the brook from iron pin at culvert to a point in brook, just northerly from a large marked Hard Maple on bank of brook, and about two rods, North 10 degrees west of Big Pine. - The brook is a good marker, and there is little to mark on as you go along the brook. The iron pin at culvert, the pin beside Big Pine, and the big Hard Maple gives a north boundary good enough for anyone.

Think the ponds are along the line marked "S. 48.5 degrees W., 73', and possibly going down onto line marked "S. 73 degrees W., 176' ". This line so far described does include the three ponds, and also the spring that has been boxed in. Am pretty sure this latter is correct. We did not run out the area described in your reservation, because it did not look as tho the ponds would all be included. The sketch at right hand is not quite accurate, but the lines and corners as marked out do include the ponds. If you want us to do so, we will run out the plot just as reservation call for, but I do not think it would include all the ponds. If we were to stay on northerly side of the brook, the one where the iron pin is driven in, am sure you would not get any of the ponds. (There is a pencil sketch on left map showing where such a line would go.

Lines in both sketches are based on line along highway, from iron pin at culvert to pin 660' southerly along road, at edge of road. No attempt made to follow road, which does "belly some."



# Preserving the Town's Land Records for the Future

BY HEATHER MCKIM

*Reprinted with permission from the Oct. 19, 2016 edition of The Shelburne News.*

**S**helburne's land records are currently being digitized. The process takes records written in cursive and converts them to type.

Planning for the future, while preserving the past. That is the driving force behind the project Colleen Haag began during her tenure as town clerk: the digitization of all of Shelburne's land records. "It's a great foundation for the town, for the future," Haag said.

Over the past four months, Haag has been discussing the project with the Essex-based preservation company Kofile Technologies. A contract was just signed this past month, and the project will be completed within about a month.

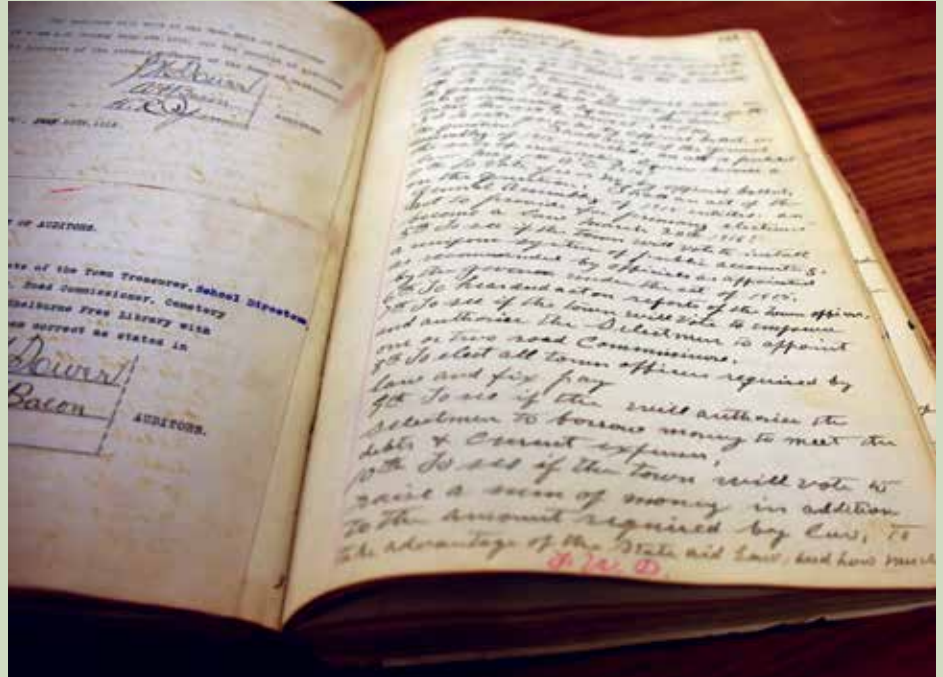
The reason for undertaking the project is twofold. Given that the records are written in cursive, some people are not able to read them. With the societal shift away from the teaching of cursive, this will likely become more of an issue in coming years.

Another concern with the records is that the writing in some is fading. That is especially true of ones from Shelburne's beginnings in the late 1780s.

With more than two centuries' worth of land records, there will be extensive work for the Kofile employees engaged in the project. Bob Gerencser, Kofile sales director, described the process as straightforward but labor-intensive.

Handwritten records will be put into typed format. Kofile staff will proofread every bit of it to ensure accuracy. Then, once things are complete, the entire project will be available to the public in digital format.

The project is unique, Gerencser said, describing Haag as a pioneer. The complete digitization of town



BOSTON NEARY

**The Town of Shelburne has been digitizing all of Shelburne's land records, including the document above, because of the societal shift away from the teaching of cursive and the fact that many documents are beginning to fade.**

land records is a first for his company and, from what he can tell, is likely only the second such project anywhere in the United States.

While the project moves the town's land history into the digital age, it is also a continuation of something started early in the last century. Haag pointed to several volumes of records that had been put into typed format due to efforts of the Work Progress Administration.

Indexes have been computerized since 1992. Now, though, the full records will be available. Images of the land records will be accessible, and maps have also all been converted.

While the project will benefit the town as a whole, Haag said that no taxpayer dollars have been used to fund it. User fees wholly cover the cost of the project.

"Colleen has taken a wise two-pronged approach," said Dennis Curran, Kofile Technologies Vice President of Sales. "She has kept ahead of those handwritten permanent records

that were fading and difficult to read by properly treating them according to proven paper conservation techniques. Many Land Records and Vital Statistic books have undergone de-acidification, dry-cleaning and repair and are safely back on the shelf for the public to use over the next centuries. That's smart records management."

New Town Clerk Diana Vachon echoes this sentiment. While she is just beginning to get acquainted with the land records, she said that she finds Haag's work amazing. "The town has been very fortunate that Colleen has worked so hard and had the foresight to digitize the records," she said.

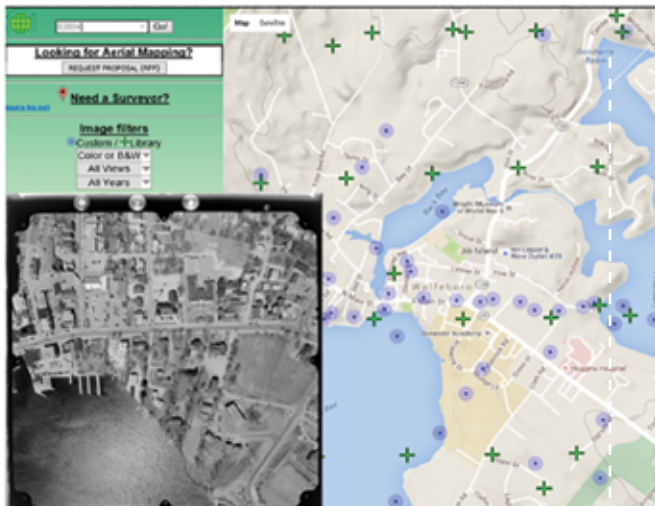
Special thanks to Pete Chase, L.S., who brought this article to our attention and encouraged us to reprint it in *The Cornerpost*, as an item of particular interest to our members.



aerial mapping - online imagery

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# Round Tables 2016

VSLs members trekked to the Capitol Plaza Hotel on Dec. 16 for the annual Round Tables Seminar. Paul Hannan, L.S., Paul Gillies, Esq., and Byron Kidder, L.S., gave an afternoon presentation on "Vermont Town Boundaries," and our round table moderators kept the discussions lively in the morning. Thanks to everyone for sharing your time and expertise:

- Connecting to NAVD88 and NAD83: **DAN MARTIN**
- Highway Issues: **BRAD HOLDEN**
- Property Parcel Mapping Program, **LESLIE PELCH**
- Attracting Young Surveyors to the Profession: **ETHAN GILMOUR**
- Permitting in the Vermont ANR: **JOHN BENSON**
- Scanning and New Software: **THADD ELDREDGE**
- Old-Timer Survey Methods: **GAYLE BURCHARD**
- FEMA: **TIM ROCKWOOD**
- Vermont Board Issues: **JOHN DIEBOLD**
- Public Relations: **TRICIA KULES**

## Summaries of a few of the topics that were covered:

### FEMA

Participants shared various experiences with eLOMA, LOMA, LOMR-F, CLOMR-F and Elevation Certificates. About 90% of the table's surveyors work on or have worked on these FEMA processes. The discussion turned to work with an A Zone. A variety of submission methods have been used with positive results. Most of us determine site elevation using GPS. Experiences obtaining Community Acknowledgment Forms signatures were interesting as many do not understand the process. These towns are turning to the state's FEMA coordinator for guidance. Discussion included whether the state has jurisdiction in the FEMA process. One conclusion of our various discussions is that our work within FEMA's process, similar to boundary survey, includes educating and guiding the public.

### Scanning & Software

There were concerns about the cost of the equipment, but the discussion provided a means to use the data from Vermont GIS for free, then followed with an example of an inexpensive program to get the most

out of the same data. Some folks had no idea what a point cloud is, so they learned a bit through the discussion, and many were interested.

### Public Relations

**Publications:** The group discussed the excellent work Kelly Collar has done for our publications, as well as for the NSPS brochures and posters **Who should our publicity be targeted toward?** The group thought we should focus on the public, potential new surveyors, realtors, and attorneys. **What form should our publicity take?** We could send out news releases, with general blurbs about land surveying to educate the public. We could also relate real "horror stories," for example using a tax map for conveyance. For this we would need input from our members. **Ideas for Surveyors Week:** Some of our members have located Vermont breweries (with GPS) and we could continue that theme. Also, apparently the Canadian border is not exactly the 45th parallel; the 45th parallel is southerly of the reputed international boundary. We could monument the 45th parallel at road crossings or other convenient places for a good publicity item. 📍







## MAKING A CASE FOR MILD WINTERS

Joe Flynn, L.S., sent this photo of the O'Leary-Burke rear office door in Essex Junction the winter of 2010–2011. "I thought it was a sober reminder of just how hard winter can be," he said.



## EQUAL OPPORTUNITY EMPLOYER

Craig Chase, L.S., snapped this photo in 2009 in Roxbury, off the Warren Mountain Road. "I thought it was cute," he said, "but I was also a little nervous having him/her stand next a \$30K instrument."



**BLAST FROM THE PAST** Ⓢ Allan Hopkins, L.S., received these photos from his son, Tom, who took them at an air show in Dayton, Ohio, where he lives. Asked if his son is a surveyor, too, Allan replied: "He went out surveying once, but there were too many bugs. I never saw him out in the woods again."



## PICTURE PERFECT

Joe Flynn also sent these images of concrete bound that he set before a sidewalk was poured around it. "It was kind of neat to be able to have a monument blend in so well."

# Vermont Society of Land Surveyors By-Laws

**Following are the amended VSLS By-Laws, which were reviewed during the December 2016 Round Tables. We will have a vote to approve the amended By-Laws during the Spring Seminar on April 21, 2017. Please take a moment to read through the By-Laws prior to the vote.**

## **ARTICLE I: Name.**

The name of the organization shall be: Vermont Society of Land Surveyors, Inc., hereinafter referred to as the Society.

## **ARTICLE II: Object.**

The Society is a nonprofit organization whose objectives shall be:

1. To advance the sciences of surveying and mapping in their branches, in furtherance of the public welfare and in the interests of both those who use maps and surveys and those who make them, and to establish a central source of reference and union for its members.
2. To contribute to public education in the use of surveys and maps and to encourage the prosecution of basic surveying and mapping programs.
3. To establish and maintain uniformly high professional standards of work and ethics in the practice of surveying and mapping.

## **ARTICLE III: Membership.**

### **A. Full Member.**

Full Membership shall be open to any person who is a land surveyor licensed by the State of Vermont whose application, filed in the proper manner, has been approved by the Executive Committee. Full Members shall also be members of the National Society of Professional Surveyors (NSPS).

### **B. Associate Member.**

Any person interested in surveying and mapping who might not qualify for other membership. Associate members shall enjoy the same rights and privileges as full members, except that they shall have no vote in Society proceedings, nor be eligible to serve as officers

### **C. Student Member.**

Any full-time student in civil engineering, forestry, land surveying, geodesy, mapping, or other related field whose application, filed in the proper manner, has been approved by the Executive Committee. Student members shall enjoy the same rights and privileges as Full members, except they shall have no vote in Society proceedings, nor be eligible to serve as officers.

### **D. Sustaining Member.**

Any individual or firm desiring to support the aims and objectives of the Society, who may or may not be entitled

to one of the foregoing classes of membership, whose application, filed in the proper manner, has been approved by the Executive Committee. Sustaining members shall not be eligible to vote or hold any office in the Society; however, if a sustaining member also holds another class or other classes of membership, the sustaining member class shall not infringe upon such rights and privileges.

### **E. Honorary Member.**

Honorary membership may be awarded by vote of the Executive Committee to any person who has actively shown interest and assisted in the promotion of the object and purpose of the Society. Honorary members shall enjoy the same rights and privileges as Full members, except they shall have no vote in Society proceedings, nor be eligible to serve as officers. Honorary members shall be exempt from all dues and assessments.

### **F. Emeritus Member.**

Emeritus membership may be awarded by a two-thirds vote of the entire Executive Committee to any member over the age of 62 who has been a member in good standing for a minimum of ten years and has exhibited meritorious service to the profession and the Society. Emeritus members shall enjoy the same rights and privileges as Full members, but shall be exempt from all dues and assessments.

### **G. Life Member.**

Life membership may be granted by vote of the Executive Committee to any Full Member 65 years old or older who has held a current dues card as a Full Member for 15 consecutive years immediately preceding, and who requests in writing to be granted the status of Life Member. Life members shall enjoy all the rights and privileges as Full members, and dues shall be 50% of Full Member dues. Additionally, Life Members shall be granted a 25% discount on all VSLS Education Programs. Current Life Members shall also be eligible for the 25% Education Program discount. This article shall become effective with dues year 2009.

### **H. Out-of-State Member.**

Members of out-of-state Land Surveyors Associations may apply for membership under this category, subject to the following qualifications and restrictions:

1. The Applicant shall be an individual interested in land surveying, registered or nonregistered, who is not residing in Vermont and is not practicing Land Surveying fulltime in Vermont.



2. The Applicant shall belong to their home State Association or Society, as a member in the same category applied for (A, B, C) or equivalent. Proof of current membership shall accompany an application or renewal.
3. The Applicant's home State Association or Society must offer a similar arrangement through their By-Laws, to VSLs members.
4. The Member shall not have voting privileges in the Society.
5. The Member shall not hold any office in the Society.
6. The Member shall enjoy all Society benefits, publications and seminars.
7. The Member's dues shall be 50% of the regular dues of the category approved for membership.

#### **I. Expulsion from Membership.**

A member in any classification may be expelled or suspended from the Society by a two-thirds vote of the entire Executive Committee. Grounds for expulsion shall be:

1. Willful disregard of the Society's principles and purposes.
2. Violation of the Society's Canon of Ethics.
3. Conduct detrimental to the Society's welfare.
4. Conviction of a felony.
5. Revocation or suspension of a member's license.

The member shall receive a written copy of the charges against him or her, and shall have the right of hearing before the Executive Committee before final action is taken. A person whose membership has been revoked under this section may be reinstated only upon the affirmative vote of two-thirds of the Executive Committee.

#### **ARTICLE IV: Dues.**

1. Annual dues for all classes of membership shall be due and payable on the first of January of each year.
2. Annual dues may be subject to change at anytime upon recommendation of the Executive Committee and approval of the membership.
3. Any member whose annual dues shall remain unpaid for a one-year period and who fails to pay said dues within 30 days after written notification of said arrears, shall be dropped from membership.
4. Any member suspended for non-payment of dues may be reinstated upon approval of the Executive Committee and the payment of dues for the current year.

#### **ARTICLE V: Fiscal Year.**

The fiscal year of the Society shall be 1 January through 31 December inclusive.

#### **ARTICLE VI: Officers and Directors.**

1. The officers of the Society shall be a President, a Vice-President, a Secretary, and a Treasurer. These officers, together with the Board of Directors, consisting of three members, shall constitute the Executive Committee.
2. The officers and two members of the Board of Directors shall be elected each year at the annual

meeting. The third member of the Board of Directors shall be the immediate past president of the Society who shall serve for one year. If there is no immediate past president, the third member of the Board of Directors shall be elected at the annual meeting.

3. No person shall be eligible to serve as an officer or a member of the Board of Directors who has not been a Full member for at least one full year.

#### **ARTICLE VII: Election of Officers and Directors.**

##### **A. Method of Election.**

1. Officers and Directors shall be elected at the annual business meeting.
2. Voting shall be by ballot.
3. Officers and Directors shall assume their duties at the close of the meeting at which they were elected.

##### **B. Vacancies in Office.**

1. A vacancy in any office shall be filled for the unexpired term by a member elected by the Executive Committee.
2. Voting shall be by ballot if there is more than one nominee for the office.
3. A two-thirds vote of the members of the Executive Committee shall constitute an election.

#### **ARTICLE VIII: Duties of Officers.**

##### **President.**

The President shall:

1. Have a 2-year term that can be renewed for one additional 2-year term.
2. Preside at meetings of the Society and the Executive Committee.
3. Be an ex-officio member of all committees except the nominating committee.
4. Determine the duties of the Vice President.
5. Coordinate the work of the officers and committees, in order that the objectives of the Society might be promoted.
6. Submit an annual report to the Society at the annual meeting.
7. Appoint a member of the Executive Committee to be an ex-officio member of each standing committee.

##### **Vice-President.**

The Vice-President shall:

1. Have a 2-year term that can be renewed for one additional 2-year term.
2. The Vice-President shall perform the duties of the President in the absence or inability of the President to serve.

##### **Secretary.**

The Secretary shall:

1. Record the minutes of all meetings of the Society and the Executive Committee.
2. Be responsible for mailing to each member of the Executive Committee a copy of the minutes of all meetings of the Society and the Executive Committee.

3. Conduct such correspondence as the Society, the Officers, or the Board of Directors may direct.
4. Notify officers and standing committee chairs of their elections.
5. Present an annual inventory of Society property at the Annual Meeting.

#### **Treasurer.**

The Treasurer shall:

1. Oversee the work of the Administrator, who will collect and record funds in accordance with the approved budget and deposit the same in the name of the Society.
2. Review financial statements prepared by the Administrator and present at each Executive Committee meeting and at other times as requested by the President.
3. Review annual financial statement prepared by the Administrator, and present financial statement at the annual meeting.
4. Review payments prepared by the Administrator for running the Society, and sign all Society checks.
5. The Treasurer shall be bonded in amounts determined by the Executive Committee. The expense of these bonds shall be paid for by the Society.
6. Work with the Administrator to invest all funds not needed for current disbursements upon approval of the Executive Committee.

#### **All Officers.**

All Officers shall:

1. Perform the duties prescribed in the parliamentary authority, in addition to those outlined in these by-laws and those assigned from time to time.
2. Deliver to their successors all official material within fifteen (15) days following the close of the annual meeting at which their terms of office expire.

### **ARTICLE IX: Regular Meetings.**

1. Regular meetings shall be held at least three times a year.
2. The date, time and place of each meeting shall be determined by the Executive Committee.
3. A special meeting may be called in lieu of or in addition to a regular meeting.

### **ARTICLE X: Annual Meeting.**

1. The Annual Business Meeting shall be held in the month of December, and shall be considered a regular meeting.
2. The date, time and place of each annual meeting shall be determined by the Executive Committee.
3. The Annual Business Meeting shall be the governing body of the Society.

### **ARTICLE XI: Voting Body.**

1. The voting body of the meetings shall consist of the Full, Emeritus and Life members of the Society.
2. Each eligible voter shall have but one vote.

3. Ten percent (10%) of the eligible voters shall constitute a quorum. Two (2) of these members shall be members of the Executive Committee.
4. Any motion that comes from the floor at a business meeting, which involves spending \$1000 or more, requires that 70% of the membership in good standing be in attendance to be voted on at that meeting. If 70% of the membership in good standing is not in attendance, the motion shall be sent to all members for a vote by ballot or be warned in the next issue of The Cornerpost for voting at the next business meeting.

### **ARTICLE XII: Executive Committee.**

#### **Membership.**

1. The Executive Committee shall be comprised of the officers and the Board of Directors (see Article VI Sec. 1)
2. A majority shall constitute a quorum.

#### **Duties.**

The Executive Committee shall:

1. Meet at the call of the President.
2. Perform the duties delegated to it here and elsewhere under these by-laws.
3. Transact business referred to it by the membership.
4. Coordinate the work of standing committees and authorize and direct the work of each.
5. Select the date, time, and place of all meetings, including the annual meeting.
6. Submit to the membership such recommendations as it deems advisable.
7. Determine the amount and authorize payment of fidelity bonds for the Treasurer of the Society.
8. Take no action in conflict with that of the membership.
9. Appoint the editor of the Society newsletter who shall serve until a successor is appointed.
10. Have the authority to contract for administrative services.

### **ARTICLE XIII: Committees.**

1. Standing committees may be created by the Executive Committee as deemed necessary to promote the objectives and carry on the work of the Society.
2. All standing committees except the Executive Committee and the NSPS Committee shall be composed of not less than three (3) members of the Society
3. Each standing committee shall make an annual report to the Society membership at the annual meeting, a copy of which report shall be filed with the Secretary.
4. Special committees may be created and appointed by the President or Executive Committee.

### **ARTICLE XIV: Committee Chairs.**

1. Nominations for chairs of standing committees shall be made by the Committee on Nominations.
2. Only a member of the Society, whose consent



- has been secured, shall be eligible for nomination for chair of a standing committee, either by the Committee on Nominations or from the floor.
3. Election of chairs of standing committees shall be held at the annual meeting prior to the election of officers.
  4. Additional nominations may be made from the floor of this meeting. A majority of the votes cast shall constitute an election.
  5. If a vacancy occurs in the chair of a standing committee, the Executive Committee shall be empowered to fill such vacancy.

## ARTICLE XV: Standing Committees.

### A. Nominating.

A Nominating committee, consisting of three members, shall be appointed annually by the Executive Committee at the first regular meeting following the annual meeting and shall serve until the first regular meeting following the next annual meeting; shall select one nominee for each office to be filled at the next annual meeting and mail a list of these nominees to all members via the Society newsletter prior to said meeting. Said list to include Officers, Directors, and Standing Committee Chairs.

### B. Legislative.

The Legislative Committee shall monitor proposed local, state and national legislation affecting the profession and regularly inform and advise the Society thereon. The Legislative Committee may introduce and lobby for legislation relevant to the profession, with the approval of the Executive Committee.

### C. Program.

The Program Committee shall, in cooperation with the Executive Committee, make all necessary arrangements for general membership meetings, professional development programs and any other functions of the Society as a whole that are approved by the Executive Committee.

### D. G/L.I.S./Geodetic Control.

The G/L.I.S./Geodetic Control Committee shall monitor the activities of any agency or entity engaged in the implementation and/or use of Geographic Information Systems as they pertain to the survey profession in Vermont; Shall offer expertise in survey matters and promote the role of the surveyor in the development and maintenance of such systems; Shall promote the use of the Vermont Coordinate System and assist in the maintenance of Vermont's Geodetic Control Network.

### E. Preservation.

The Preservation Committee shall formulate procedures for preservation of plans and/or records of Vermont surveyors. The Committee shall implement said procedures to preserve any plans and/or records made

available to the VSLs and shall insure that copies of same are properly indexed and safely stored.

### F. NSPS.

The NSPS Committee shall be the state director. The director will have a 4-year term that can be renewed once if no new candidates show interest. The director will attend two NSPS meetings per year; if the director is not able to attend a meeting, he or she will appoint a member of VSLs to attend in their place. The NSPS director will provide a written update to members following every NSPS meeting, to be included in The Cornerpost.

## ARTICLE XVI: Amendments.

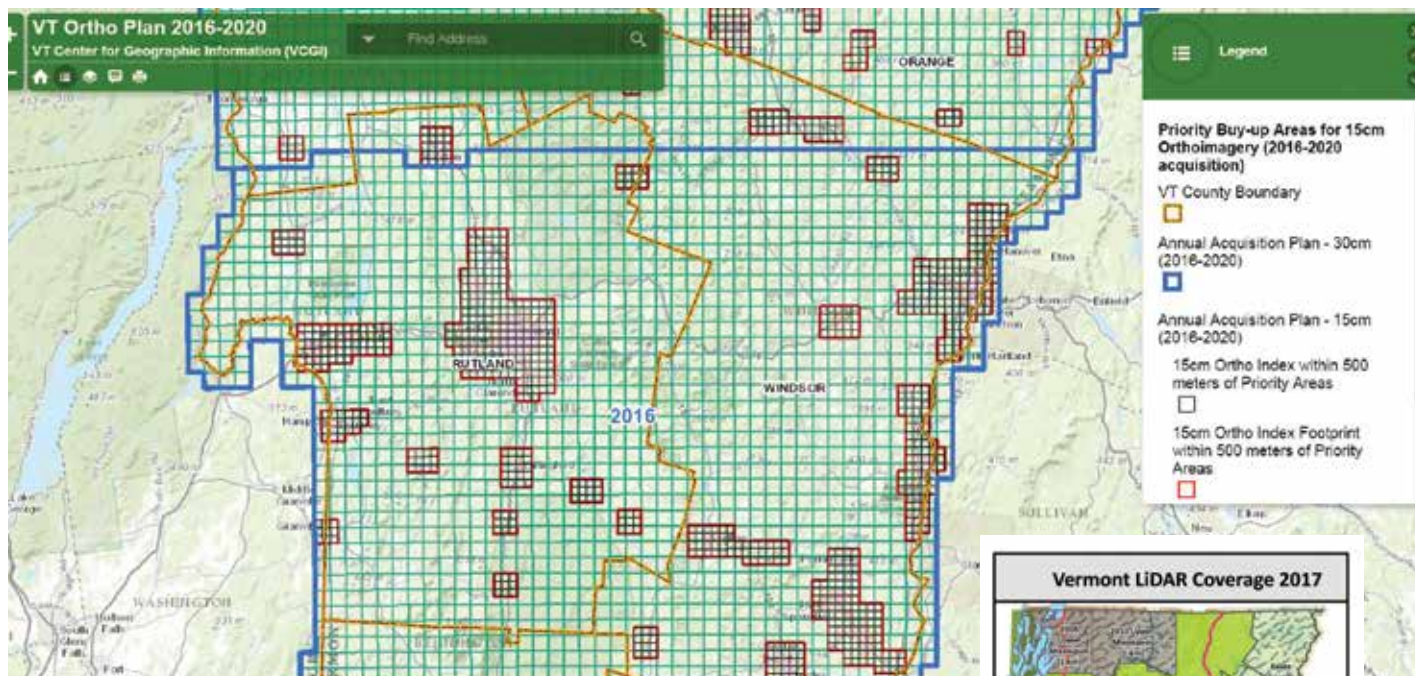
These by-laws may be amended at the Annual Meeting of the Society at which a quorum is present, by a two-thirds vote of the members present. Any duly warned proposed change to these by-laws may be amended from the floor by pertinent amendment at such Annual Meeting.

Adopted: February 11, 1965

Amended:

May 6, 1965	April 30, 1992
May 8, 1969	May 6, 1993
May 8, 1971	May 13, 1994
May 18, 1973	May 5, 1995
May 10, 1974	May 8, 1998
May 9, 1975	May 14, 1999
May 13, 1977	May 12, 2000
May 15, 1981	May 16, 2003
May 14, 1982	May 19, 2006
May 6, 1983	May 1, 2009
May 10, 1985	December 14, 2007
May 1, 1987	December 14, 2012
May 6, 1988	December 16, 2016
May 3, 1990	
May 2, 1991	





**Training:** There are still a few spots left in the Spring Intro to GIS and GPS Course at Williston Vermont Tech Campus (four Wednesdays in April/ May: 4-8 p.m.) Credit has been requested from the Vermont Board of Land Surveying.

➔ <http://greentrainings.vtc.edu/gis-trainings.html>

**Datum Note:** Datum changes will be reflected in new lidar and orthophoto data! Recent collections are being delivered as Vermont State Plane, NAD83 (2007), meters OR VT State Plane, NAD83 (2011). Please remember to check this before using the new data. Contact Mike Brouillette with questions about Lidar or datum changes:

➔ [mike.brouillette.vermont.gov](mailto:mike.brouillette.vermont.gov)

## Statewide Parcel Project

The Vermont Statewide Parcel Mapping Project is under way! Mapping contractor proposals were due Feb. 10, and work is likely to commence in May on about one third of the towns in Vermont. Data from the first year of the project will be available from VCGI in about a year, and the remaining two thirds of state parcel data will be created, updated and standardized over the following two years.

➔ <http://vcgi.vermont.gov/parcels>



## New Data Available

**New Lidar data** and orthoimagery are coming out very soon. The map above shows data that is becoming available: bright green areas were available in late February, lighter green has been collected and will be available within a year.

**Lidar web services:** hillshade and DEM - all parts of the state except Connecticut River Valley north of Windham County

**Lidar downloadable derivatives:** DEM, DSM, Contours - all parts of the state except Connecticut River Valley north of Windham County

**2016 VT Ortho Program Imagery:** .3 meter pixel, color, infrared, and black and white standard, with .15 meter in urban/village areas (Rutland/Windsor Counties). See the map or check out the online map showing the annual collection areas as well as the higher-resolution collection areas: <http://arcgis/2lrvun>

**2016 NAIP imagery** (.6 meter pixel, color, leaf on)





## October 20, 2016 • 6 p.m. • Conference Call

**Present:** Gayle Burchard, Kelly Collar, Keith Van Iderstine, Lisa Ginett, Brad Holden, Ian Jewkes and Nate Yager.

**Absent:** Mark Day. Also attending was Ethan Gilmour, our state representative for the Young Surveyors group, who recently attended the NSPS conference.

The meeting was called to order at 6:04 p.m.

### SECRETARY'S MINUTES

Members reviewed minutes from the July 18, 2016 Executive Committee meeting. Upon motion duly made and seconded it was unanimously **RESOLVED:** to approve the minutes of the July 18, 2016 Executive Committee meeting. No minutes were available from our Fall conference meeting.

### TREASURER'S REPORT

Treasure's report for the period of Jan 1st to October 17th 2016: Total income for the period is \$ 55,816.40, Total Expense is 54,799.83, Net Income is \$1,016.57 and our Bank Accounts total \$ 61,530.99

### ADMINISTRATIVE SECRETARY'S REPORT

Kelly has been working on "The Cornerpost" to be mailed out in mid November and she reports a good amount of content. The Round Tables meeting date is December 16 to be held in Montpelier. There will be round table discussions through out the morning along with a business meeting and then an afternoon presentation by Paul Gilles, Paul Hannon and Byron Kidder on Vermont Town Boundaries. Kelly has been searching for a location for the spring seminar to be held in late March or early May in the Burlington area and will report back to the Executive Committee at our next meeting.

### PRESIDENT'S REPORT

Gayle discussed the Bylaw amendments. She has added officer and director 2-year term limits with one renewal for a second 2-year period. The group felt that Secretary and Treasurer should have overlapping terms to help train the incoming officer. We discussed adding a section for NSPS director to the By-Laws. Gayle mentioned that it takes time to learn the ropes and we should elect the NSPS director for a term of 4 to 6 years. That officer should be added to the ballot or should have their own Article.

It was suggested that the NSPS director should be reimbursed for their travel expenses to the NSPS conferences and should provide a written report about the meeting to be published in the next Cornerpost directly after the meeting unless the publishing date is too close to the meeting date. If so the report would be published in the next Cornerpost.

In order to allow Brad to stay on as a director to the Executive Committee we need to put his name up for nomination, as his one year term as past president will be over at the December meeting. We discussed making the

Young Surveyors a committee and then when they become more organized they can become a standing committee. They would meet as part of the VSLs conference meetings.

### BUDGET

The proposed budget is substantially the same as last year with several changes to the travel line item; Ethan will be reimbursed for his trip to the NSPS conference and Trisha Kules (our NSPS rep) will also be reimbursed. In the past we have paid for two conferences a year with the spring conference being a shared cost (more local) and the fall conference, usually out west, being more expensive. We decided to suggest \$ 5,500.00 for the travel line item which will be made up from slightly higher program revenues. If we could get some other professionals to attend our Seminars and conferences that would be a big help in revenue.

### OTHER BUSINESS

Brad has been working on an outline for the text for the proposed video about surveying. Once that outline is completed he suggests that we pick a nice day and have several people (young and personable) come out to be filmed doing several types of survey projects (and with several types of instruments) to be filmed for the video. There will be no sound but a later voice over of the fleshed out outline will be added to the video. Officer slate for the upcoming elections in December were discussed, Brad would be willing to step aside as Director in favor of someone joining the Executive Committee who would be willing to take on becoming future President as the group thinks that Mark will not take the job. Plat Law, we need to touch base with Bob Krebs to help us find someone to sponsor a bill to change the verbiage in the new Plat Law to better reflect the media being used today for record plats.

Ethan thanked the group for supporting him to travel to the NSPS conference as part of the Young Surveyors group.

Meeting was adjourned at 7:07 P.M.

Respectfully submitted,  
Lisa Ginett, Secretary

## attention members

Executive Committee meetings are held at 6 p.m. on the third Thursday of each month at the AIV building in Montpelier, or via conference call. All members are welcome to attend. Email [kelly@vsls.org](mailto:kelly@vsls.org) if you'd like more information or meeting materials.



## November 17, 2016 • 6 p.m. • Conference Call

**Present:** Mark Day, Kelly Collar, Keith Van Iderstine, Lisa Ginett, Brad Holden and Nate Yager. **Absent:** Gayle Burchard and Ian Jewkes.

This meeting was called to order at 6:03 p.m.

### SECRETARY'S MINUTES

Members reviewed minutes from the October 20, 2016 Executive Committee meeting. Upon motion duly made and seconded it was unanimously RESOLVED: to approve the minutes of the October 20, 2016 meeting.

### TREASURERS REPORT

Treasure's report for the period of Jan 1st to November 16th 2016: Total income for the period is \$ 56,909.90, Total Expense is \$ 56,534.78, Net Income is \$ 357.12 and our Bank Accounts total \$ 60,083.49

### ADMINISTRATIVE SECRETARY'S REPORT

Kelly will mail out "The Cornerpost" tomorrow. She changed cover photo from the one that was on the first draft (sent to the Executive Committees' review) to a photo of better quality. She has added the opportunity for members and others to order a fleece vest with the VSLs logo patch as part of the sign up for the Round Tables meeting. Kelly will send out member renewal notices the first week of December.

Kelly has made an arrangement with the Inn at Essex for our Spring Seminar in 2017. The Fall Conference will most likely be held at the Stoweflake this coming year. She has had positive feedback regarding the Exhibitors presentation at last year's fall conference.

### PRESIDENT'S REPORT

Gayle sent in a copy of the proposed Bylaw Amendments. The Executive Committee agrees to the amendments. Gayle added language to Article VIII (Duties of Officers) to create term limits for the President and Vice President, deleted a number of Committees under Article XV (Standing Committees) and added one standing committee being the NSPS Director. The group thought that the NSPS Director

into section VIII as an officer and list a few responsibilities, including writing a report for *The Cornerpost* after the Director attends any NSPS meeting. After checking with Gayle about tonight's recommendation to put the NSPS Director under Section VIII, Kelly will send out the Bylaw Amendments to members of the Executive Committee for final review and then publish them as part of the materials for the Round Tables meeting. Hopefully they can be discussed there and then voted on at the Spring Seminar.

### OTHER BUSINESS

Brad has spoken with the videographer in reference to the proposed video about surveying. His outline is almost complete and he suggests that we get some volunteers and equipment together and do the video work within a month, with as diverse a cast and locations as possible. Both Keith and Brad have been thinking about how to get the Plat Law on the floor in the Legislature this coming year. We need to begin the process in December. Brad will talk with Bob Krebs to help us find someone to sponsor a bill to change the verbiage in the new Plat Law to better reflect the media being used today for record plats.

The group discussed options for new VSLs Officers. Ethan Gilmour, our representative to Young Surveyors group at NSPS, was thought to be a good candidate, but he will need to become licensed before becoming an officer. For now Kelly says that people who are interested in becoming a surveyor should contact her for information on pursuing a surveying career.

The group approved getting a VSLs credit card so Kelly does not have to run VSLs purchases through her personal card and then get reimbursed. Keith will look into the best credit card provider for VSLs need.

As there was no other business the meeting was adjourned at 6:45 p.m.

Respectfully submitted,  
Lisa Ginett, Secretary

## Team to Run a Booth for Surveying Merit Badge at Boy Scout Jamboree



VSLs recently contributed \$200 to help support a team of surveyors who will manage the Surveying Merit Badge booth at the 2017 National Boy Scout Jamboree. The event will be held in West Virginia this summer, and NSPS formally asked each state society to contribute \$200 to cover the registration for a 10-person team, plus their meals

and other expenses. If you're interested in being one of the volunteers for this effort, please contact Curt Sumner at NSPS: [curtis.sumner@nsps.us.com](mailto:curtis.sumner@nsps.us.com).

**"We owe it to the youth,  
and we owe it to our profession."**

NSPS DIRECTOR (OHIO) BOB AKINS





## December 16, 2016 • 1 p.m. • Capitol Plaza Hotel &amp; Conference Center

**Present:** General membership and Executive Committee Members Gayle Burchard, Mark Day, Keith Van Iderstine, Lisa Ginett, Brad Holden and Ian Jewke. **Absent from the Executive Committee** was Nate Yager.

The meeting came to order at 1 p.m.

#### SECRETARY'S MINUTES

Members reviewed minutes from the November 17, 2016 Executive Committee meeting. Upon motion duly made and seconded it was unanimously **RESOLVED:** to approve the November 17, 2016 minutes.

#### TREASURER'S REPORT

Treasurer's report for Jan. 1 to Dec. 14, 2016: total income for the period is \$65,575.50, expenses are \$64,269.10, for a net income of \$1,306.40. Bank account total is \$61,369.27.

#### VSLs OFFICERS

The VSLs Executive Committee officers' slate was approved as published in *The Cornerpost*. It was moved and seconded by the membership that one vote be cast for the entire officers' slate.

#### GEODETTIC ISSUES

Dan Martin informed us that the

State of Vermont Geodetic Survey Department is being reorganized and that there will no longer be anyone to overview the upkeep, both physically and informationally, of the various Geodetic marks in the state. Dan recommends that the Society create (or keep) our Geodetic Committee to help fill this gap and would be willing to spearhead this committee.

#### LEGISLATIVE REPORT

Brad Holden wants to thank Bob Krebs for all of his help in the past with Legislative initiatives and interfaces. Brad reminded the membership that the plat laws are once again in effect but that the VSLs Executive Committee has been working on verbiage for a revision to that law, where it refers to the medium and ink requirements for record plats. Brad also asked the membership to be aware of any pending legislation that might affect the profession and to inform the VSLs Executive Committee of the issue.

#### BYLAW REVISIONS

Gayle discussed the Bylaw revisions that were handed out as part of the Round Table Seminar material. They include cleaning up some of the language for the sake of clarity, the addition of term limits, subtracting the decided-upon standing

committees, and adding an NSPS Director as chairperson of the NSPS committee. We hope to vote on the revisions at our Spring Seminar.

#### NEW BUSINESS

Doug Hensen brought up the new budget and moved that we vote on the budget as published in *The Cornerpost*. The motion was seconded and it was unanimously **RESOLVED:** to approve the new budget for 2017 as published. VSLs Education Foundation Officers for 2017 were approved as presented in *The Cornerpost*.

#### OTHER BUSINESS

As representative for the VSLs Executive Committee, Gayle presented a gift to Kelly Collar, our Administrator, in appreciation for her fine work on our behalf. Gayle asked for anyone to step up with an idea for a new Round Table as well as a willingness to moderate that table next year. She also asked that anyone moderating a table today write a brief report about that table for publication in *The Cornerpost*.

There being no other business, the meeting was adjourned at 1:16 p.m.

Respectfully submitted,  
Lisa Ginett, Secretary

do you  
have a  
story  
to share?

Please send it to [kelly@vsls.org](mailto:kelly@vsls.org)



## Did You Know?

The surveying program at the University of Maine has an on-line master's program in surveying studies. Contact Raymond Hintz for more information.

more info: <https://engineering.umaine.edu/psm>  
contact: [Raymond.Hintz@umit.maine.edu](mailto:Raymond.Hintz@umit.maine.edu)

## C. Larry Collingwood *(December 22, 1940 – March 2, 2017)*

Vermont L.S. 515



Charles Lawrence Collingwood II “Larry”, 76, a resident of Our House in Rutland and formerly of East Dorset, passed away March 2, 2017. He was born in Natrona Heights, Pa., Dec. 22, 1940, the son of Charles Lawrence Collingwood and Myrtle E. (Bash) Collingwood. Larry

spent his childhood in Shanksville, Pa., with his brother Bill and his sister, Sally. Larry spoke often of growing up on his family farm, taking care of livestock and riding.

After graduating high school in 1958, Larry headed to Penn State where he received an Associate’s Degree in Land Surveying. After college, Larry worked for American Air Surveys, traveling across the Eastern United States, doing aerial mapping projects. Upon leaving this position, Larry married Marion Shugar, with whom he had his beloved daughter Victoria. Larry continued to advance his career working on major highway projects in Connecticut and New York, and as a railroad surveyor in Ohio, and later settled in Maryland where he worked in Washington, D.C., and the surrounding area. During this time, the Vietnam War was in full swing and Larry enlisted in the Army Reserves as an x-ray technician and was honorably discharged in 1972.

He and his family spent many weekends skiing in Vermont. With a love of skiing and wanting to leave the city, the Collingwoods moved to Manchester in 1977. During this time, Larry was Chief of Surveys for Dufresne Henry, Inc., ACI and EDL Associates. After several years of marriage, Larry and Marion divorced.

In 1990 Larry married Pat Meredith with whom he shared 27 loving years. Larry and Pat shared numerous

interests including ski patrol at Stratton Mountain, attending music festivals, traveling, and enjoying the company of their beloved Viszlas Murphy and George. Together they created and operated Collingwood & Meredith PC a successful land surveying company in East Dorset. Larry’s other passions included hunting, building, or fixing “anything” and gardening. He loved traveling in his Airstream to trap shooting events on weekends and longer trips between ski and surveying season. Active in the community, Larry was a Hunter Safety Instructor, a member of the Adoniram Lodge #42 F. & A.M., Lion’s Club, Stratton Ski Patrol, National Ski Patrol, Vermont Society of Land Surveyors, Hale Mountain Rod & Gun Club, and Manchester Rod & Gun Club.

Larry touched the lives and hearts of many through his friendship, career contributions and service to the community. His warm disposition and charitable attitude caused him to be a beloved man who was dear to many of us. He will be missed and his memory treasured by all who had the pleasure to know him.

Larry is survived by his wife and best friend, Patricia H. Meredith of Manchester, Vt.; his daughter Victoria Collingwood of Londonderry, Vt.; his grandchildren Evan Lackey and Abbie Lackey of Londonderry, Vt.; his brother William Collingwood of Juneau, AK; his nieces Mandy Homola and Lacey Homola; and his nephew William Collingwood of Juneau, Alaska.

He is predeceased by his parents and his sister, Sally Collingwood Homola. Special thanks to RAVNAH and the aides of Our House Outback who loved and cared for Larry.

A Celebration of Larry’s Life was held on March 11 at Bistro Henry. Donations in his honor may be made to the Vermont Chapter of the Alzheimer’s Association.



March 19–25, 2017 • Visit [nsps.us.com](http://nsps.us.com)

# 2017 National Surveyors Week

➡ Make every day a celebration of surveying. Volunteer in your community, and talk about it!



## Charles M. Stewart *(June 5, 1941 – February 26, 2017)*

Vermont L.S. 454



Charles M. Stewart, 75, died at Albany Medical Center, on February 26, due to head trauma incurred from an accidental fall. A resident of East Dorset, Vt., he is survived by his wife, Ruth; sons, Scott (Daniela)

Dorset, Vt., and Todd (Amber), Boulder, Colo.; a sister Bonnie Boyd, Norwood, N.Y., three grandchildren, Timothy, Benjamin, and Emily of Dorset; and two nephews, Andrew and Mark Boyd of Norwood, N.Y.

Charlie was born in Waterloo, N.Y., on June 5, 1941, to Charles A. and Dorothy Gerlach Stewart. A 1959 graduate of Waterloo High School, he subsequently graduated from Wanakena Ranger School in 1961. He later graduated from the State University College of Environmental Science and Forestry in Syracuse after serving four years as a photographer in the U.S. Navy.

While his career was that of a land surveyor, he was also well known for his natural ability to fix almost anything. He could be found working on a vehicle of some sort, plying his skills as a master builder for Bennington County Habitat for Humanity, gathering and working up his own firewood, milling logs of maple, cherry, butternut or pine for woodworking projects, fixing a light or an appliance, organizing whatever was

asunder, or growing vegetables and Christmas trees.

A competitive trap shooter, he secured several Vermont State Senior Veteran Singles Championships. He was a recreational member of the Manchester Rod and Gun Club and Hale Mountain Fish and Game Club, teaching adults and local youths shooting skills and hunter safety. In the 1970s and '80s he also shot competitive pistol.

While a riding member of the local Green Mountain Trailblazers snowmobile club, he preferred the satisfaction of setting a well-groomed trail and attending to Club memberships for the Vermont Association of Snow Travelers (VAST).

An anatomical gift of his body was made to Albany Medical College with assistance from Hans Funeral Home in Albany, N.Y.

Charlie will be greatly missed by his family, friends and community. In lieu of flowers, memorial gifts may be made to Bennington County Habitat for Humanity, PO Box 1159, Manchester, VT 05254 or the Hale Mountain Fish and Game Club, PO Box 1, Bennington, VT 05201. Condolences may be addressed to Ruth @ 324 Morse Hill Rd, E. Dorset, VT 05253; Scott @ POB 478, Dorset, VT 05251; Todd @ 30 South 31st St., Boulder, CO 80305.

A celebration of Charlie's life was held on March 4 in the vestry of the United Church of Dorset and E. Rupert.

*Published in The Bennington Banner on Mar. 1, 2017*

## Wayne J. Kelloway *(March 21, 1943 – February 12, 2017)*

Wayne J. Kelloway, 73, passed away peacefully on Sunday, Feb. 12, 2017, with his loving wife Erana by his side. He was born March 21, 1943 to Oscar and Beatrice Kelloway in Melrose, Mass. He attended Boston University and then joined the Air Force, where he studied Civil Engineering at Northeastern University and the University of Alaska.

He later specialized in Topographic Surveys at the U.S. Army School of Engineering. After returning from Alaska, Wayne moved to his family's favorite resort town of Wolfeboro, where he opened his surveying company, Lakes Region Survey Services, and his aerial mapping company, Eastern Topographics. He held a pilot license and flew his company airplanes for many years. Wayne was proud to have served on the committee to organize the New Hampshire Board of Registration for Surveyors. He is a past-president of the New Hampshire Land Surveyors Association and Fellow Member of the American Congress

of Surveying and Mapping as well as a member of the American Society of Photogrammetry and Remote Sensing and MAPPS.

Wayne enjoyed bicycling thru many different countries with Erana, with France being an especially favorite destination. He could often be seen riding his bicycle thru Wolfeboro, Portsmouth, and Central Park, N.Y. He loved nature, being outdoors and sharing his passion for protecting our beautiful land.

Wayne is survived by his wife Erana and her family, his brother Keith Kelloway and wife Donna, and the rest of the Kelloway family. Per his wishes, there will be no service. In lieu of flowers, donations can be made to Lakes Region Conservation Trust, PO Box 766, Center Harbor, NH 03226.



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

*What's a surveyor  
to do when the  
"iron monster"  
comes calling?*



**"We waved, jumped up and down, shouted, screamed, ran back and forth, and got no response from Bob. Terror reigned in our hearts, as we saw the locomotive bearing down..."**

### **T**rails come at you mighty fast!

In the years of doing survey work in the Northeast Kingdom, I can remember (with some degree of terror) two instances when this declaration became quite evident.

We were doing a boundary survey for the Caledonia County Fairgrounds in Lyndon. The property was bordered on the west by the Canadian Pacific Railroad, and we had set a couple of traverse (working) points in the middle of the tracks. I had the transit set up over one of these points and was taking information, looking in a northerly direction, when I heard the whistle of a locomotive on a train heading North out of Lyndonville ... behind me!

I turned around to see the train and satisfied myself that it was well South of me, and I had plenty of time to complete what I was doing before I was

in any danger from the train. With that judgement in mind, I turned around and continued collecting data. It seemed like only a few seconds, when I heard the whistle again, realized that it was pretty close, and turned around to see the locomotive bearing down on me at an incredible rate of speed! Wow!

I grabbed the transit and leaped for the ditch, just as the iron monster occupied the space that I had just vacated.

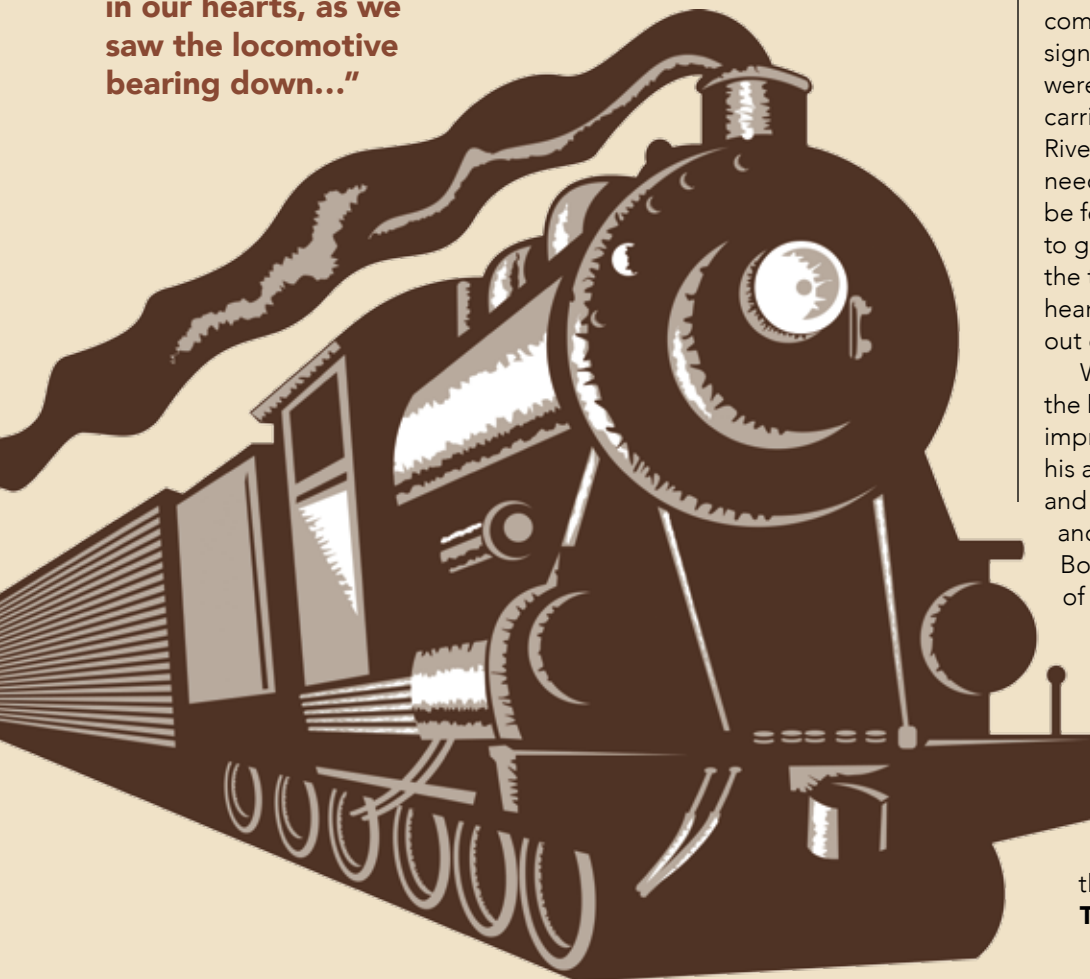
Bob Hallas came to work for us soon after we signed the contract for the survey work on Interstate 91. Bob had all of the right talents for the job, but he did have a hearing problem. We urged him to get a hearing aid, which he did. However, no hearing aide can take the place of the hearing ability that most of us are born with.

You must remember that we had no radios in those days, and all communication was by voice or hand signals. In the course of the work, we were working just south of the bridge that carries the railroad across the Passumpsic River, just south of St. Johnsbury. We needed some information that was to be found on that bridge, and sent Bob to get it for us. Lo and behold, about the time that he got to the bridge, we heard the whistle of a train coming north out of Passumpsic toward the bridge.

We were a good half mile from the bridge, and our shouts made no impression on Bob, as he was intent on his assignment. We waved, jumped up and down, shouted, screamed, ran back and forth, and got no response from Bob, as by now he was in the middle of the bridge heading away from us.

Terror reigned in our hearts as we saw the locomotive bearing down on Bob. Somehow the Lord got through to him, turned him around, and you never saw a man run faster down a railroad track to leap off the end of the bridge into the ditch as the train roared into the space that he had just vacated.

**Trains come at you mighty fast!** 🚂







# Spring Seminar

Friday, April 21, 2017

The Inn at Essex, 70 Essex Way, Essex, Vermont



## Program Schedule

- 7:15 AM** Registration Opens, Continental Breakfast  
**8:00 AM** Mapping with Drones in Survey Applications  
**10:00 AM** Use of Lidar/Scanning in Survey Applications  
**12:00 PM** Lunch and VSLs Business Meeting  
**1:00 PM** New Technology Survey Applications  
**3:00 PM** Final Announcements

Registration Fee	Through April 12	After April 12
Member in good standing	\$145.00	\$170.00
Non-member	\$195.00	\$220.00
Life Member	\$105.00	\$130.00
Non-member technical staff attending with member	\$116.00	\$141.00
Three attendees from same firm (one must be member)	\$116.00	\$141.00

Payment will be refunded in full if cancellation is received at least 72 hours prior to the event. Substitutions are allowed.

Overnight rooms: \$129/night plus tax. To reserve, call (802) 878-1100 and mention the VSLs Seminar.

### Mapping with Drones in Survey Applications (2.0 PDH)

*Presenter: Raymond Hintz, University of Maine*

Types of drones and their intended uses in survey work will be discussed. Following this will be an in-depth discussion of how the definition of photogrammetric product has changed dramatically due to automated processes and how this integrates into the drone mapping product. The project planning and processing of a job utilizing production software will be presented. A fixed wing drone will be brought to class and if time and weather permits a flight will occur.

### Use of Lidar/Scanning in Survey Applications (2.0 PDH)

*Presenter: Raymond Hintz, University of Maine*

Lidar is a form of 3-D survey data collection that can be thought of as an alternative product to photogrammetry. Static, mobile, and airborne Lidar will be discussed and how this information is integrated with survey grade GPS and Inertial units. Lidar data sets will be presented and processed in an example industry standard software.

### New Technology Survey Applications (2.0 PDH)

*Presenter: Tim Patch, Principal, SGC Engineering, LLC*

Continuing with the theme of the morning presentations, this section will explore the utilization of Lidar (static, mobile, and airborne) and drones on actual survey projects. Specific project examples will be presented and discussed. Additionally, although not necessarily a new technology, the utilization of GIS for data management as "the way we should do business" will be presented.



This event has been approved for 6.0 PDH credits by the Vermont Board of Land Surveyors.

## Registration (please complete this form and mail it with your payment, or register online at [vsls.org](http://vsls.org))

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# The Cornerpost

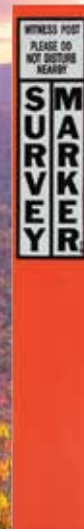
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