



Journal of the Vermont Society of Land Surveyors
Volume 54, Number 1 | Spring 2023

The Cornerpost

REMOVING EXAMINATION PREREQUISITES

PAGE 10

SPRING SEMINAR REGISTRATION

PAGE 23

WHAT'S UP WITH NSPS?

PAGE 7

SURVEY SMARTER, FROM START TO FINISH.



SCAN HERE

Topcon's digital tools improve your productivity, period. You'll see simplified workflows, seamless integration, and dramatically increased accuracy. You'll also speed your billing collections with digital confirmation of as-builts. So, what are you waiting for? Discover these solutions today. And do it with the help of your local Topcon Solution Store.

Accelerate Productivity.

TOPCON
SOLUTIONS
Store

Learn more at topconsolutions.com/productivity-bundle



The Cornerpost

Volume 54, No. 1 • Spring 2023

Published by the Vermont Society of Land Surveyors, a professional society dedicated to the advancement of the science of surveying and mapping.
802.777.6507 | www.vsls.org

EXECUTIVE COMMITTEE

Randy Otis, President
Nate Yager, Vice President
Lisa Ginett, Secretary
Keith Van Iderstine, Treasurer
Mark Day, Director
Becky Gilson, Director
Paul Hannan, Director

EDITOR

Birgit McCall

GRAPHIC DESIGNER

Kelly Collar

SUBMITTING MATERIALS

Send any materials to:
Email: birgit@vsls.org
Vermont Society of Land Surveyors
P.O. Box 248
Montpelier, VT 05601

ADVERTISING RATES

Size	Member/Non-memb
Full page	\$400 yr/\$500 yr
Half page	\$225 yr/\$300 yr
Quarter page	\$125 yr/\$225 yr
Business card	\$75 yr/\$125/yr

- Ad subscriptions are for one full year (three issues).
- Ads must be print-ready.

Material taken from other publications must have permission to copy. Please include the publication editor's name and email address so we can request permission.

CONTRIBUTE AN ARTICLE
Send it to birgit@vsls.org

CONTENTS



FEATURE ARTICLES

President's Corner	4
What's Up With NSPS?	7
Best Evidence vs. Best Available Evidence: Are They the Same?	8
Removing Exam Prerequisites	10
Correction from Fall Issue	11
Geometry Challenge	12
Six Key Tax Questions for 2023	17
Meeting Minutes	18
In Memoriam	21
Survey Markers	22
Spring Seminar Registration	23

OUR ADVERTISERS

TopCon Solutions Store	2
CADNET Services	5
Keystone Precision Instruments	6
Maine Technical Source	15
Murphy Sullivan Kronk	19

SEND IN YOUR NEWS

Have you ever contributed to *The Cornerpost*? Its success depends on all of our members. Please consider making a contribution to an upcoming issue. Send your articles, news and photos to birgit@vsls.org. Everything is welcome that may be of interest to your fellow surveying professionals.



ON THE COVER

Carroll Peters, L.S., took this photograph on Nov. 10, 2022 at a job site in Jeffersonville, Vt. The image shows Memorial Rock, which is located at the intersection of Main, Church and Mill streets. Carroll and his son, Seth, standing atop the rock, were surveying the property at 15 Church Street to try and resolve boundary problems that included ownership of the "Memorial Rock" area. He remarks that it was a beautiful sunny day, 68 degrees, warm wind out of south, American and POW flags waving in the gentle breeze. "As we waded through the snow and deal with the cold," Carroll says, "we relish the picture of days soon to return!"

PRESIDENT'S CORNER

VSLS PRESIDENT
RANDY OTIS, L.S.



We could use your help!

Would you like to help choose speakers and locations for VSLS conferences? We could use more volunteers to serve on the Program Committee. This group meets several times a year and oversees planning for VSLS conferences. The time commitment is manageable, and we could use more people getting involved.

If you're interested, please contact: Doug Henson, Program Committee Chair, (douglas.henson@tcevt.com) or Birgit McCall (birgit@vsls.org), VSLS Administrator.

Winter is still here, or is it? The change in the winter weather characterized by such little snow, and the warm days, has definitely caught me off guard. I never thought in February I would be searching for property corners, digging on a metal detector reading without even an inch of frost in the ground to slow my shovel.



Growing up in Vermont I often mark the passage of time with the change of the seasons, but this change in the character of the winter season has me wondering where our profession is going in the nostalgic way that I miss snowmobiling.

The theme of my post this quarter is “change” and a call for us as a group of professionals to recognize that we have more in common than actually separates us. We can and should have disagreements as professionals without being disagreeable to each other. We are a very small group of professionals that need each other at the end of day.

While my faith in our politicians doing anything about global warming is low, we must be better leaders and work towards the common good of the public, the profession, and the society. A change that we are all aware of is that the current state-specific test to achieve licensure in Vermont is a take home exam. This, in my opinion, is not in the public's best interest, as it waters down our image as professionals. I encourage the membership to reach out to your representatives, get involved, and pick up the torch of leading our profession into the future.

With change in mind, technology is also changing our profession, with a lack of staff, as well as COVID as catalyst to speed the change along. My career started in a time period where I worked on a three-person

survey crew, using a field book, and traditional EDM total station that had upper and lower motions. These tools would be short lived in my career as the industry struggled to recruit new surveyors to take up the profession. Lacking the staff, the vendors picked up the slack with newfangled tech. A data collector quickly replacing my #3 pencil and field book, and the art of legible handwriting died with this change, though surveys got faster. A change of companies later and my new truck got a survey-grade GPS unit gathering coordinates from the sky. Training on this black box apparently was not in the budget yet, but a robot soon was. That robot was not much for conversation, and stole another good job that no one showed up for anyway. Today I fly drones, scan things, and my robot has artificial intelligence, but I miss the employee power that the three-person crew had.

Nostalgia aside, I'd like to remind everyone that the spring seminar is going to be held at Lake Morey in Fairlee, Vermont on April 14 with a panel set to talk about the impacts of new technology on our profession. I hope to see you there, and I hope to see you all working together to lead us through changing times. 🌱

Sincerely,

Randy Otis

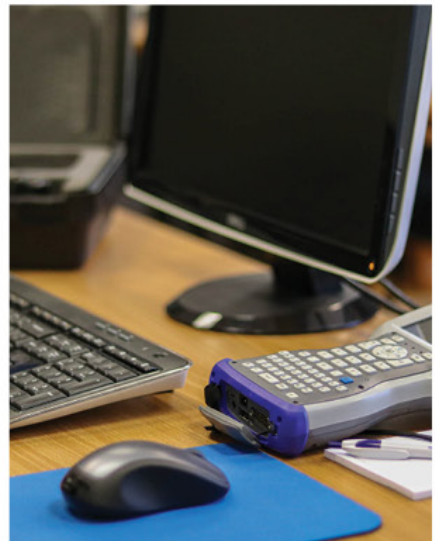
VSLS PRESIDENT



**MORE GROUND COVERED,
FEWER STEPS TAKEN.**

CADNET Services – Where you can find the hardware, software, expertise and training to improve efficiencies while maintaining quality in the field or office.

Serving technology needs of the AEC Community since 2002



100 CARL DRIVE | MANCHESTER, NH | (866) 522-3638 X 201 | INFO@CADNETSERVICES.COM
WWW.CADNETSERVICES.COM



MORE THAN JUST EQUIPMENT

Innovative Technological Solutions

Increased Productivity & Profitability

State-of-the-Art Service Expertise

We provide measurement solutions for the surveying, construction and engineering markets – building collaborative teams that increase our customers' productivity and profitability.

Together we help you stay ahead of the fast-growing pace of technology – providing innovation, detailed training and customized service options.

- **Geospatial & MGIS System Support**
- **Flexible Service Options**
- **Certified Level 3 Repair Facility**
- **Comprehensive Rental Program**
- **Certified Trainers on all Equipment**
- **Monthly Training Seminars**



Contact us today –
800.833.9250 • keypre.com



Allentown, PA



What's Up with NSPS?

The new year is here and with it are new NSPS Officers. The member votes have been tallied and NSPS is pleased to announce that Davey Edwards and Linda Foster have been elected to serve as the President-Elect and Vice President, respectively, for the 2023-24 term. They will be sworn in as officers at the Spring Business Meeting in March. Robert Miller, the NSPS incumbent Treasurer, was unopposed and will serve another two-year term. Please join us in congratulating them on their election and also thanking Steve Gould, Danny Martinez, and Matt Morris for their candidacies.

The Spring NSPS Meeting will be held in Arlington, Va., again this year from March 30 to April 1, with our annual Day on Capitol Hill scheduled for March 29. We'll focus on the following topics when we speak with legislators on Capitol Hill:

- 1) the need for improved broadband mapping and deployment of the related telecom infrastructure, given the billions of Federal infrastructure dollars to be invested.
- 2) reauthorization and reform of the National Flood Insurance Program (NFIP) in the Federal Emergency Management Agency (FEMA), including the NSPS-backed legislation known as the IMAGES Act.

3) recognition of the importance of professional licensing in surveying and other design professions to protect public health, safety, and welfare and distinguishing these disciplines from other occupational licenses that have been the subject of de-licensing efforts.

We're also hosting a student competition in conjunction with the Spring meetings. We have 25 teams in two categories from all over the country — five associate of science teams and 20 bachelor of science teams. This is a great turn out and a fun time for everyone.

Later this spring, NSPS has the honor of hosting the work week in Florida for FIG, the International Federation of Surveyors. We look forward to an exciting conference from May 28 - June 1 that brings the international community of surveying and spatial professionals together to experience a mix of interesting technical sessions and workshops, a trade exhibition and a variety of side events and social functions. NSPS is hosting a cornhole competition, a golfing tournament and a sporting clay competition after FIG closes. Come join us, and stay an extra day and have some fun. 🍷

ATTENTION PLEASE

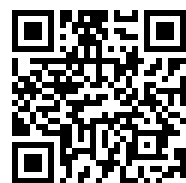
News for Students and Young Surveyors

The FIG and the local Young Surveyors Network organizers have created an outstanding opportunity for young surveyors. Those who are early in their careers can participate in both the FIG Congress, with its variety of sessions, and a special Young Surveyors Conference. The Young Surveyors Conference will include a tailored program for young professionals. More information about the Young Surveyors Conference will be published soon.

A reduced fee is available for bachelor's and master's-level students, or professionals who have graduated within the last five years.

To learn more about the FIG working week, please use the QR code below or visit:

<https://fig.net/fig2023/index.htm>



NSPS Officers Elected This Year



Davey Edwards
President-Elect
Texas



Linda Foster
Vice-President
South Dakota



Robert Miller
Treasurer
Pennsylvania

Are They the Same?

BY DONALD WILSON

First, what is evidence? Some researchers and surveyors are better detectives than others, and find more things, some of which may relate to evidence they are seeking, some may be irrelevant, some may have been significant at one time, but no longer. However, there is a certain minimum that any researcher must consider. To illustrate, evidence has been defined by various legal scholars. Courts and legal scholars recognize at least five kinds of evidence which the surveyor should become familiar with: Written, or documentary, evidence, real evidence, oral evidence, judicial notice, and circumstantial evidence. This latter category may be the most important of all the forms of evidence when it relates to ancient boundaries.¹

Some practitioners rely solely on physical evidence – perhaps just what was shown to them, or what was readily found, without further analysis or verification. What is the goal, and what did the investigator actually agree to do? Usually it is “surveying the client’s land, or property.” Not the client’s deed, although in a few cases, that may have been the request from the client, but usually the property and inherent associated rights.

Does the evidence reflect the original survey? The standard is for the retracing surveyor to “follow the footsteps” of the *original* surveyor.² There is no other standard, either in the private sector or the federal system. When viewing a so-called survey, certain questions come quickly to mind. How much did this surveyor actually examine the title, not do a title examination, but establish a chain to the creation of a line or the creation of the property and property rights.

Federal Best Evidence Rule

In the United States Federal courts, the best evidence rule is part of Article X of the Federal Rules of Evidence (Rules 1001-1008). The rule specifies the guidelines under which one of the parties of a court case may request that it be allowed to submit into evidence a copy of the contents of a document, recording or photograph at a trial when the “original document is not available.” If the party is able to provide an acceptable reason for the absence of the original then “secondary evidence” or copies of the content in the original document can be admitted as evidence. The best evidence rule is only applied in situations in which a party attempts to substantiate a non-original document submitted as evidence during a trial. Admissibility of documents before state court systems may vary.³

Best available evidence. What is the availability to the surveyor at a point in time. What if not available at the time, but later becomes available, and changes the conclusion(s).

Fortunately, the federal courts recognize the value of definitions, and have provided us with one explaining the “best evidence rule.” We are not so fortunate with “best available evidence,” since the phrase seems to be no more than an off-the-cuff convenient expression for investigators and some surveyors, to follow as a standard. The danger in that is that different projects and different practitioners develop their own rules, for convenience, for lack of time, lack of funds and lack of patience. Not to mention lack of knowledge of the hierarchy of evidence. Everyone believes they know, but in reality, few actually know, or appreciate the value of evidence and its evaluation. So best available evidence is a matter of opinion, by someone, based on something, which may be totally incomplete and incorrect.

Attempting to find a good definition of “best available evidence” results in an elusive chase. The recently revised text of *Evidence and Procedures*⁴ contains the use of the term on four pages, all under the explanation and evaluation of evidence. Under the section titled Duties of Surveyors in Finding Evidence, the text states, “the surveyor must find the best available evidence that determines the location of boundaries and elements for the parcel of land described in the deed on the ground. In those areas in which there has been widespread obliteration and loss of evidence, it may become necessary to accept evidence of an inferior type, such as hearsay and reputation, but whatever is accepted, it must be the best of that found after an extensive and complete search of the record, the ground, and adjoining is completed.”

The best evidence that is available may change in the future. Consequently, it may change or alter the outcome, or may conflict with one’s previous opinion, even render it invalid.

The bottom line is if the agreement was to survey the boundaries, or some variation thereof, such as one or two lines, one might ask themselves before the plan goes out the door: did I actually do that, or did I merely produce a best guess within certain imposed parameters, viz., time allotted, limited funds, and available resources? 🌐

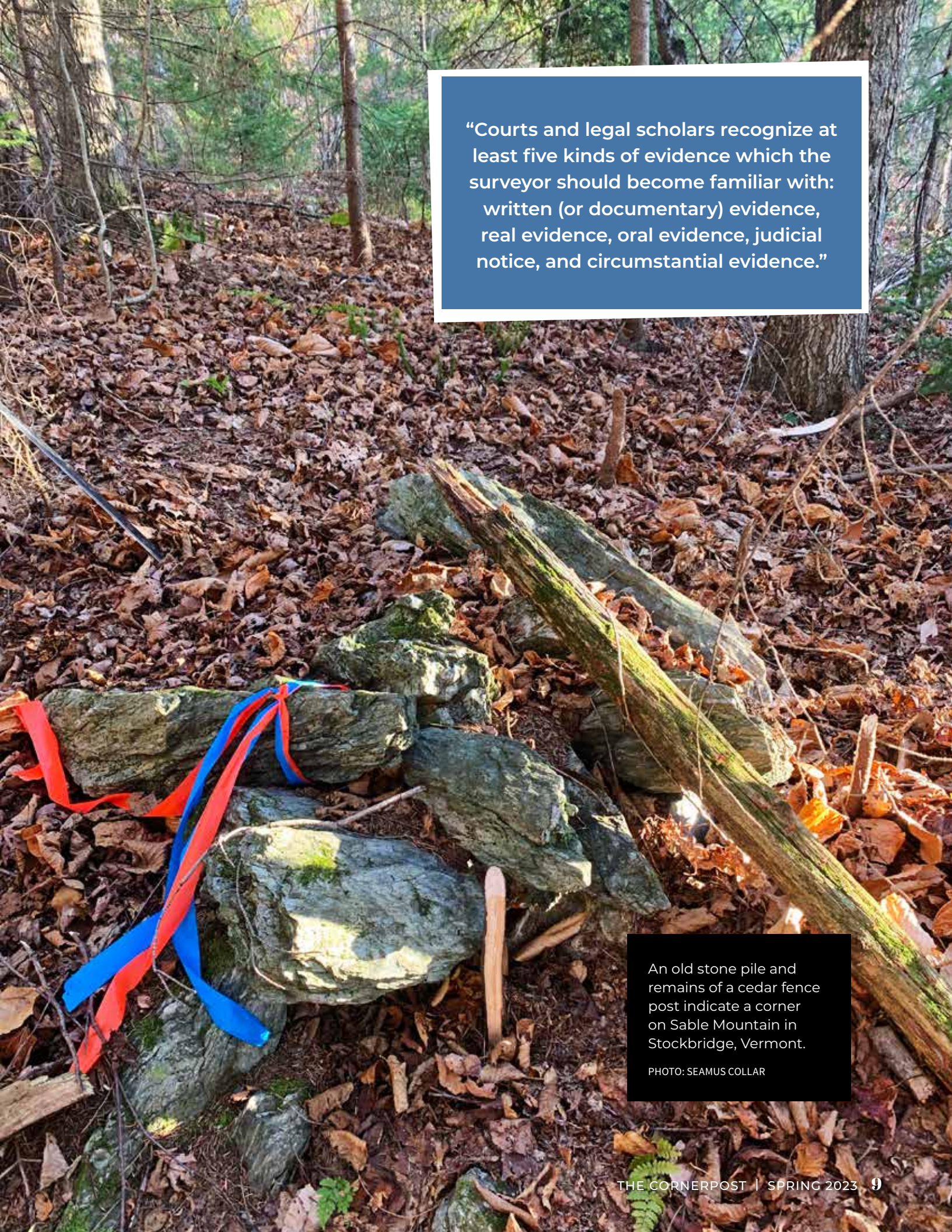
Donald A. Wilson is the author of surveying texts “Interpreting Land Records” and “Forensic Procedures for Boundary & Title Investigation.” He is co-author of “Evidence and Procedures for Boundary Location” and “Boundary Control & Legal Principles.” Don is also a contributing author to Red Vector Online Courses.

1 Wilson, Donald A., Charles A. Nettleman, III and Walter G. Robillard. Seventh Edition. Hoboken: John Wiley & Sons, Inc. 2021.

2 Rivers v. Lozeau.

3 Wikipedia.

4 Wilson, Donald A., Charles A. Nettleman, III and Walter G. Robillard. *Evidence & Procedures for Boundary Location*, Seventh Edition. Hoboken: John Wiley & Sons, Inc. 2021.



“Courts and legal scholars recognize at least five kinds of evidence which the surveyor should become familiar with: written (or documentary) evidence, real evidence, oral evidence, judicial notice, and circumstantial evidence.”

An old stone pile and remains of a cedar fence post indicate a corner on Sable Mountain in Stockbridge, Vermont.

PHOTO: SEAMUS COLLAR

Examination Prerequisites



ARTICLE 5

*Thoughts on
Professional
Practice
& Education*

This is the fifth article I have prepared in the series offering thoughts on professional practice and education. In this article, I wish to discuss the timing of professional exams. In particular, I wish to advocate allowing an applicant to take their licensing exams before obtaining any required experience.

There are two common models of examination sequence found in the United States. The first model, that appears to be most common at the present time, requires the applicant take the professional surveyor exam and state specific exam after the experience requirements have been met.

The second model is to permit an applicant to take all three exams at or

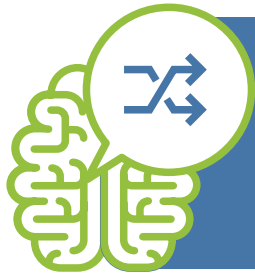
near graduation and before meeting minimum qualifications.

There was a third model that may still be present in some states, that required the experience first and then allowed the applicant to take all the exams within a short window of time. When I was first licensed almost fifty years ago, I took the first exam one day and the second exam the very next day.

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

In this article, I would like to advocate that states allow an applicant to take the exams on sequential days at or near graduation. I offer two reasons for my position.

For my first reason, I would suggest that taking the professional exams near graduation is the best time in life's journey to schedule and have time to take the exams. By the time the graduate achieves the pre-requisite experience for licensure, they are often married – perhaps with young children, involved in community activities, and have a full employment commitment. It is difficult to find time to study or even take time



“Broad knowledge of surveying is usually at a maximum retention just before or soon after graduation. Therefore, the best chance to pass all three exams with minimum study is at or near graduation.”

off from work for testing. College breaks are usually far less stressful and a less busy time than the hectic and stressful work schedule a graduate will encounter after graduation. To emphasize this, let me remind surveyors that as a full-time student in college, the student could count on two to three weeks off at Christmas, one week off during Thanksgiving, and a one or two-week spring break. College breaks were known well in advance, allowing for professional test scheduling.

Once the graduate is employed, vacation time or personal days must often be used for testing. Time off from work must often be scheduled in advance and authorized only when work allows. While college can be stressful, the stress of college often pales in comparison to balancing family responsibility, home, and work commitments.

The second reason for allowing all tests while in college or shortly after

graduation is the extent of retained surveying knowledge. Broad knowledge of surveying is usually at a maximum retention just before or soon after graduation. Therefore, the best chance to pass all three exams with minimum study is at or near graduation.

Some would argue that testing the graduate on knowledge retention after the graduate has some experience is a reasonable procedure to protect the public's safety. Perhaps this statement is true. Yet, on that basis, all licensed surveyors should be tested from time to time to insure knowledge retention after the passage of time. I suspect there are very few licensed surveyors that would advocate that they be subject to periodic retesting to ensure knowledge retention.

Having given my opinion, I now offer advice by suggesting professional societies encourage statute or rule changes allowing all exams be taken at or soon after graduation. Of course,

the soon-to-be graduate has another option. The student can apply to test in a state that does allow all testing at or near graduation. The applicant does not need to journey to a particular state since NCEES offers the same exams at testing centers throughout the United States. Perhaps the applicant would have to delay taking the state specific exam until they are eligible for licensing within that state. Of course, the one hurdle that may arise from this recommendation is a state that will not accept the NCEES test score for an exam taken before experience was achieved. I know of at least one state that will not accept the PE exam score if the PE exam was taken before experience was met. I know this does not make much sense but bureaucracies and their rules often do not make sense. 🙄

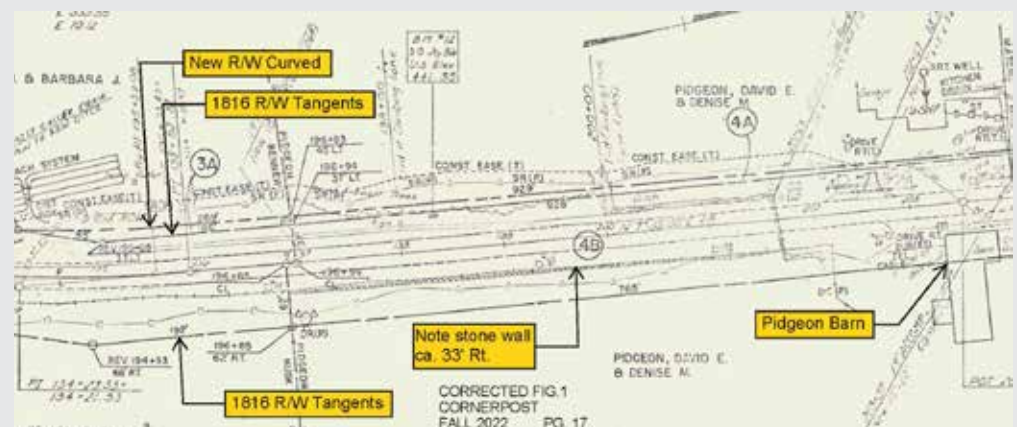
Other books and articles by Knud can be found at <https://umaine.edu/svt/faculty/hermansen-articles/>

CORRECTION



Scan the QR code to view the Fall *Cornerpost* with the corrected article (page 16).

In the Fall 2022 issue of *The Cornerpost*, we printed the second installment of the article, “Use & Abuse of the ‘Three-Rod Rule.’” In the Figure 1 map, we inadvertently left off the yellow informational markings shown below. To read the article with the corrected map, please visit vsls.org/cornerpost-magazine or use the QR code at left. Our apologies for the error.



GeometryChallenge

Geometry problems are fundamental to surveying. They involve all aspects of the usual surveying calculation problem, such as getting the “picture” of the problem in mind or sketched (somewhat to scale), understanding what is known and what is required, then applying algebra and trigonometry to reach a solution, then considering if the answer seems reasonable. Frequently the solution requires units conversions and an awareness of significant digits.

Practicing solving geometry problems seems mundane today, but they are fundamental and should remain an

important part of high school mathematics curricula.

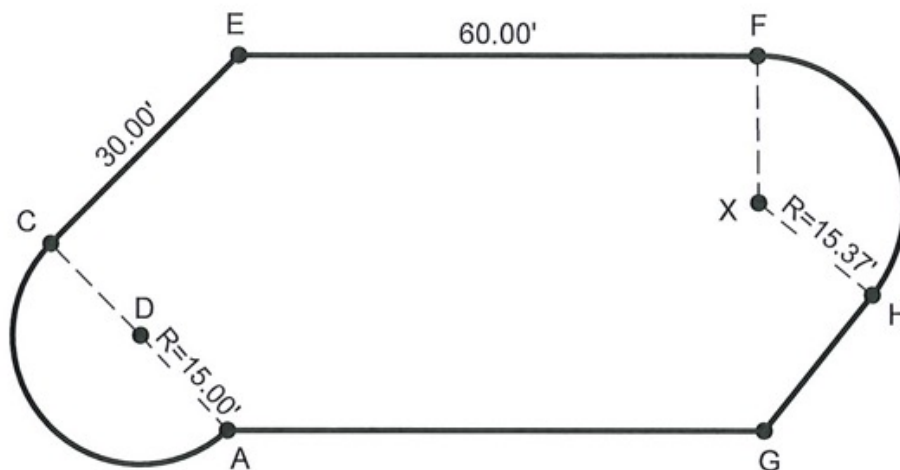
(IMO: If high schools taught more algebra, trigonometry and geometry and less AP calculus, college students entering surveying and engineering programs would be much better served!) So, here are some geometry problems to challenge those entering or beginning the surveying profession.

Handwritten solutions are provided on pages 14-15. 🌐

— BY DR. RICHARD L. ELGIN, PS, PE
ROLLA, MISSOURI

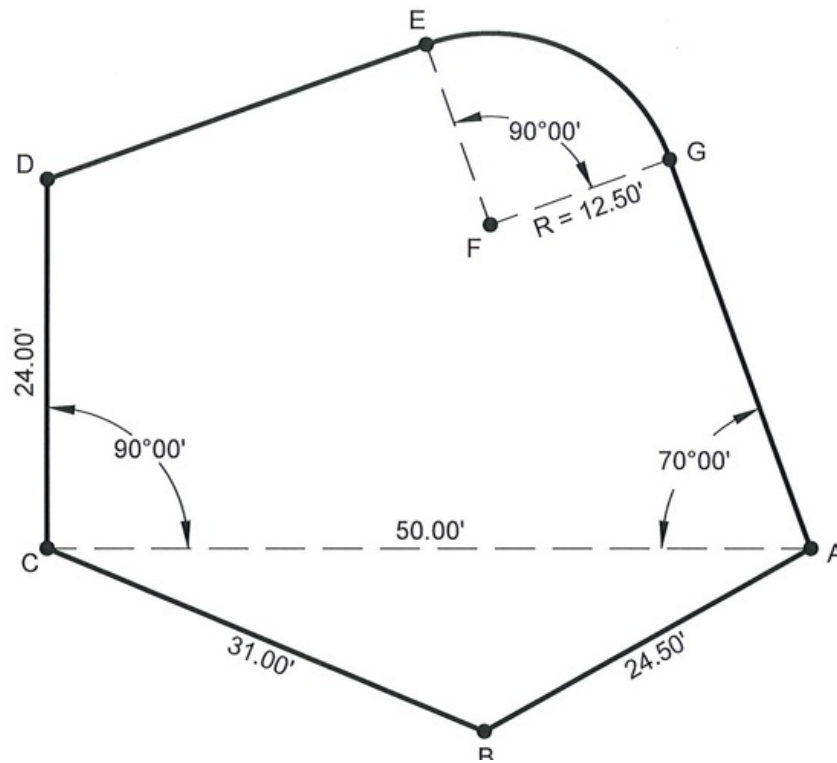
1

For the figure, compute its area to the nearest 0.01 square foot. Consider the dimensions given to be exact. Lines EF and AG are parallel and the same length. At C, line CE is tangent to the semicircle centered at D, with radius 15.00 feet. Angle FGA is exactly 90° . X is the radius point for circle sector FH. The radius is 15.37 feet. At H, line HG is tangent to the circle centered at X.



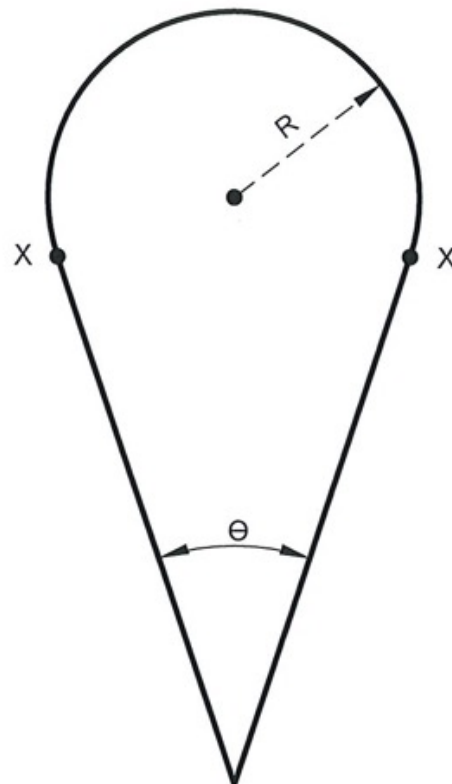
2

For the figure, compute its area to the nearest 0.01 square foot. Consider the dimensions given to be exact. Lines GA and ED are tangent to the circle centered at F.



3

For the figure, derive an equation for its area as a function of R and Θ . That is: $\text{Area} = f(R, \Theta)$. At X, the line is tangent to the circle. Reduce the equation to its simplest form. [To check your solution/equation, let Θ be exactly 45° and R be exactly 100 feet. If your equation does not result in the area being 43,777.09 square feet, your derived equation is wrong.]



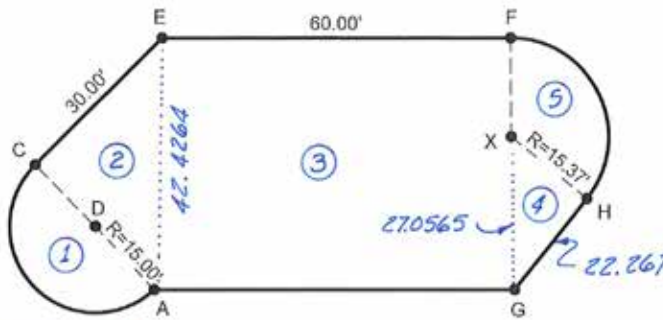
Find solutions on the next page.

1

Solution:

No. 1

Divide the figure into parts 1 through 5:



Semicircle 1:

$$\pi R^2/2, \text{ Area} = \dots\dots\dots 353.429$$

Triangle 2, a right Δ

$$(CA)(CE)/2, \text{ Area} = \dots\dots\dots 450.000$$

Rectangle 3

$$\text{Area} = \dots\dots\dots 2545.584$$

Triangle 4, a right Δ

$$(GH)(HX)/2, \text{ Area} = \dots\dots\dots 171.121$$

Sector 5

$$\text{Angle } HXF = 124^\circ 36' 56.6''$$

$$\pi R^2 (\angle HXF / 360^\circ), \text{ Area} = \dots\dots\dots 256.902$$

$$\text{Figure's Area} = \underline{\underline{3777.04 \text{ ft}^2}}$$

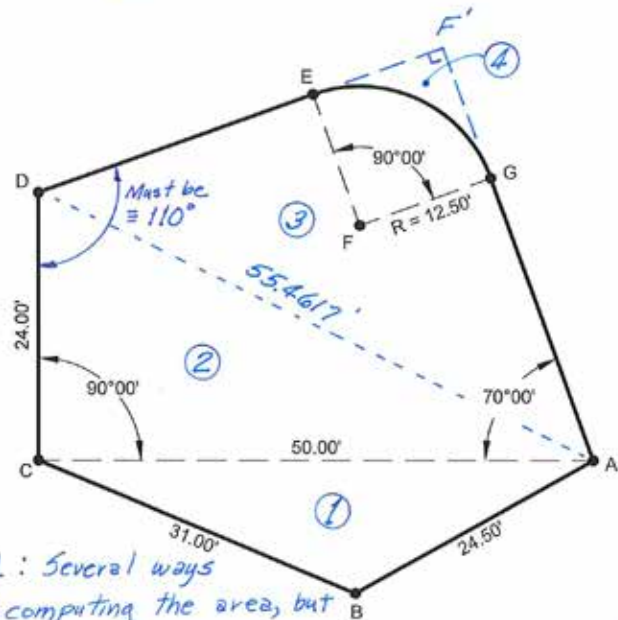
Solution to geometry problem
posed by Dr. Richard Elgin, PA

2

Solution:

No. 2

First recognize $\angle F'DA \equiv 110^\circ$ ($\angle CF' \equiv 90^\circ$)
Cut the figure into Δ 's 1, 2 and 3 and
the fillet, 4.



$\Delta 1$: Several ways
of computing the area, but

$$\text{Area} = \dots\dots\dots 298.550$$

$$\Delta 2: \text{ Simple, Area} = \dots\dots\dots 600.000$$

$$\Delta 3 (DF'E): \text{ Several ways, Area} = \dots\dots\dots 768.810$$

The fillet, 4:

$$R^2 - \frac{90}{360} \pi R^2, \text{ Area} = \dots\dots\dots (-) 33.532$$

Solution to geometry problem
posed by Dr. Richard Elgin, PA

$$\text{Figure's Area} = \underline{\underline{1633.83 \text{ ft}^2}}$$

Solution and a check:

No. 3

So -
 $\alpha = 360^\circ - 2(90^\circ - \frac{\theta}{2})$

$$\alpha = 180^\circ + \theta$$

Total figure area =

$$RT - \frac{\alpha}{360^\circ} (\pi R^2)$$

Substituting:

$$\text{Area} = R \left(\frac{R}{\tan \frac{\theta}{2}} \right) + \frac{\alpha \pi R^2}{360^\circ}$$

$$\text{Area} = R^2 \cotan \frac{\theta}{2} + \frac{(180^\circ + \theta) \pi R^2}{360^\circ}$$

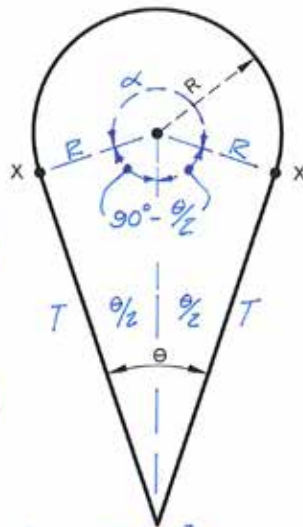
$$\text{Area} = R^2 \cotan \frac{\theta}{2} + \frac{1}{360^\circ} (180^\circ \pi R^2 + \theta \pi R^2)$$

The
Equation \rightarrow $\text{Area} = \cotan \frac{\theta}{2} R^2 + 1.570796327 R^2 + 0.00872665 \theta R^2$

The
Test \rightarrow For $\theta \equiv 45^\circ$ and $R \equiv 100$ ft,

$\text{Area} = 43,777.09 \text{ ft}^2$

Solution to geometry problem
posed by Dr. Richard Elgin, PS.



About Richard Elgin

Dr. Richard L. Elgin, PS, PE is a surveying practitioner, educator, researcher, collector and author. He authored the books *The U.S. Public Land Survey System for Missouri*, *Riparian Boundaries for Missouri* and *Shoulda Played the Flute* (memoir of his year flying helicopters in Vietnam). He coauthored the Lietz/Sokkia ephemeris and codeveloped the "ASTRO" celestial observation software products. Dick owns a large collection of early American surveying equipment, rides a Moots bicycle and drives a 1976 Alfa Romeo 1600 GT Junior. He can be reached at: elgin1682@gmail.com

MTS is your Measurement Technology Source...

Be Captivated



For over 45 years, engineers, architects, surveyors and contractors have relied on **MTS** as their source for the latest in precision measurement technology. **MTS** has an experienced team that can partner with you to provide the right solution for your application and the training to be confident that the job is done right.

From the sky or on the land, underwater or underground, **MTS** has the most advanced measurement solutions to fit your needs.



Whether it's UAV, Terrestrial Positioning, GNSS, 3D Laser Scanning or Underground Detection, the professionals at **MTS** can present and provide training/service on all the products we sell.

For more information about the one **source** that can meet your measurement technology needs - from Field to Finish, call **MTS** today at **800-322-5003**.



www.mainetechnical.com

800-322-5003



Yarmouth, ME

Woburn, MA

Syracuse, NY

Wappingers Falls, NY

Six Key Tax Questions for 2023

&

Is Your Business At Risk of Retirement Plan Leakage?

Right now, you may be more concerned about your 2022 tax bill than you are about how to handle your personal finances in the new year. However, as you deal with your annual tax filing, it's a good idea to also familiarize yourself with pertinent amounts that may have changed for 2023.

Not all tax figures are adjusted for inflation. And even if they are, during times of low inflation the changes may be slight. When inflation is higher, as it currently is, the changes are generally more substantial. In addition, some tax amounts can change only with new tax legislation. Here are answers to six commonly asked questions about 2023 tax-related figures:

- 1 How much can I contribute to an IRA for 2023?**
If you're eligible, you can contribute up to \$6,500 for 2023 to a traditional or Roth IRA (up from \$6,000 for 2022). If you're age 50 or older, you can make another \$1,000 "catch-up" contribution.
- 2 I have a 401(k) plan through my job. How much can I contribute to it?** For 2023, you can contribute up to \$22,500 to a 401(k) or 403(b) plan. You can make an extra \$7,500 catch-up contribution if you're age 50 or older. (These figures for 2022 were \$20,500 and \$6,500, respectively).
- 3 I sometimes hire a babysitter and a cleaning person. Do I have to withhold and pay FICA tax on the amounts I pay them?** The threshold for when a domestic employer must withhold and pay FICA for babysitters, house cleaners and other domestic employees has increased to \$2,600 for 2023 (up from \$2,400).
- 4 How much do I have to earn in 2023 before I can stop paying Social Security tax on my salary?** The Social Security tax wage base is \$160,200 for 2023, up from \$147,000 for 2022. That means that you don't owe Social Security tax on amounts earned above that. (You must pay Medicare tax on all amounts that you earn.)
- 5 On my last income tax return, my itemized deductions didn't exceed my standard deduction. What's my standard deduction for 2023?** If the total amount of your itemized deductions (such as charitable gifts and mortgage interest) is less than your applicable standard deduction amount, itemizing won't save you taxes. The Tax Cuts and Jobs Act eliminated the tax benefit of itemizing for many people by increasing the standard deduction and reducing or eliminating various itemized deductions. For 2023, the standard deduction amount is \$27,700 for married

couples filing jointly (up from \$25,900 for 2022). For single filers, the amount is \$13,850 (up from \$12,950), and, for heads of households, it's \$20,800 (up from \$19,400).

- 6 How much can I give to one person without having to file a gift tax return for 2023?** The annual gift tax exclusion for 2023 is \$17,000 (up from \$16,000 in 2022). This amount is adjusted only in \$1,000 increments, so it typically increases only every few years.

Is Your Business At Risk of Retirement Plan Leakage?

Generally, the term "leakage" has negative connotations. So, it's not surprising that the same is true in the context of retirement planning, where leakage refers to pre-retirement withdrawals from a retirement account. Now, as a business owner who sponsors a qualified retirement plan, you might say, "Well, that's my participants' business, not mine."

However, there are valid reasons to address the issue with employees who participate in your plan. For starters, leakage can lead to higher plan expenses. Fees are often determined on a per-account or per-participant basis. When a plan loses funds to leakage, total assets and individual account sizes shrink, which tends to hurt administrative efficiency and raise costs. Also, if your employees are taking pre-retirement withdrawals, it could indicate they're facing unusual financial challenges. These issues may have a negative impact on productivity and work quality and leave them unable to retire when they planned to.

What can you do?

The most important thing business owners can do to limit leakage is to remind employees how pre-retirement withdrawals can diminish their accounts and delay their anticipated retirement dates. Consider providing broader financial education to help workers better manage their money, amass savings, and minimize or avoid the need for early withdrawals.

Some companies offer emergency loans that are repayable through payroll deductions to reduce the use of retirement funds. Others have revised their plan designs to limit the situations under which plan participants can take out hardship withdrawals or loans.

Can you eliminate the problem?

According to a 2021 report by the Joint Committee on Taxation, roughly 22% of net contributions made by people age 50 or younger leaks out of the retirement savings system in a given year. Some percentage of retirement plan leakage will probably always occur, but becoming aware of the problem and taking steps to minimize it are worthwhile for any business. 🌱

Reprinted courtesy of New Hampshire Land Surveyors Association

October 20, 2022 • 6 p.m. • Montpelier City Hall

This meeting was called to order at 6:07 P.M. In attendance were: Randy Otis, Paul Hannan, Mark Day (by Zoom), Keith Van Iderstine, Becky Gilson, Lisa Ginett and our Administrator: Kelly Cochrane-Collar. Absent: Nate Yager.

Important Business

The group found out several days ago that Kelly Cochrane-Collar, who has been our stalwart and very capable Administrator for the past 8 years, has determined that this is the time for her to move out of her role with the society in order to pursue her other business full time. She will be very difficult to replace!

Kelly is willing to train whoever we hire to replace her in the position, she will stay on as long as needed but she wants to get the process started. Kelly tried to find a job description for the position from when she was hired but was not successful, so we asked that Kelly write a job description for the advertisement. It will emphasize familiarity with communications as well as web design with a degree in the communications field or related experience. It was determined that the advertisement should be placed in "Seven Days," both print and online, as well as "The Times Argus" and perhaps on Craigslist. We will need to form a hiring committee to go through the resumes and interview any perspective people for the position. It is apparent that a local person would be necessary to take the job so only local advertisement will be made. Kelly is hoping that there will be a new person in place for training by the time the next dues cycle begins, in December. The position is for a 15 hour week. Kelly says that she spends approximately 20 hours preparing "The Cornerpost" for printing. Kelly mentioned that she might be open to continuing on in reference to the production of "The Cornerpost." She will prepare a calendar for the new Administrator of what needs to be done throughout the year.

Secretary's Minutes

Minutes for the Executive Committee meeting for August 18, 2022 were reviewed. The motion was duly made and seconded and the vote was unanimously: to approve the minutes of the August 18, 2022 Executive Committee meeting.

Treasurer's Report

Treasurer's report for the period of Jan. 1, 2022 through October 18, 2022. Total income for period was \$54,181.59, total expenses were \$58,268.35 leaving a net income for the year of \$-4086.76 and a bank total of \$ 55,571.35. Keith noted that the Fall Conference had a low attendance and high cost. We would probably not be in the negative except that we were not invoiced by Okemo until this year. The society earned extra money last year but has spent the excess this year. Keith is of the opinion that we will need to charge more for our online conferences, maybe 10% - 15% more. The group discussed having in person meetings in the spring and fall and doing the winter conference online as that is the likely to be the worst time to travel. If that becomes the case, it would be a good idea to move the Round Tables to take place at the Spring Conference.

Administrator's Report

Kelly reports that the Program Committee canceled a recent meeting, but plans are proceeding for the Round Tables on Thursday December 15 at the Capitol Plaza in Montpelier. She will be starting work on the next "Cornerpost." The Preservation Committee met recently by Zoom and is made up of Eric Morse, Malcolm Moore, Scott Taylor and Harris Abbott. They discussed in part that we need some options for taking in old records. One suggestion was that we find hosts for the records with surveyors in the local area; the files would still be available to society members, and the host could charge a maintenance fee for sending out the requested information. There are plans to have a Preservation Committee table at the December meeting with an emphasis on preserving your own records and perspective guidelines on how to proceed if you are hosting records. We had a brief discussion about how the society keeps track of surveyors who have adopted others' records.

Proposed Budget

The proposed budget shows minor changes from past years. The line item for "publication sales" has been eliminated, as the Law Manual is now available for free online. The line item for "public relations" has been divided into "website" and "advertising." The VTC calendar, our largest advertising expense is \$400.00. Office supply costs are down but the telephone cost is up.

The group has discussed previously that we might add a members-only section to our website where people could look up their PDH's among other things, but it would add a fair amount of cost. To cover this expense, we would have to either raise dues again (it is felt that this move would be extremely unpopular) or earn more revenue from our conferences. One person asked if we could sell webinars from our online library of conferences; however, at this time, the Board does not offer credit for viewing webinars from past renewal periods. This is something we might ask the Board about, because it would help to get some extra earnings out of our program revenues by widening the audience for these legacy online offerings. We also discussed marketing our conferences to engineers and out of state surveyors.

There being no other business the meeting was adjourned at 7:33 PM

Respectfully submitted,
Lisa Ginett, VSLS Secretary

**send in
your news**

Send your photos or articles for the next issue
of *The Cornerpost* to birgit@vsls.org.

November 17, 2022 • 6 p.m. • Montpelier City Hall

This meeting was held at City Hall on Main Street in Montpelier and was called to order at 6:07 P.M. In attendance were, Randy Otis, Paul Hannan, Keith Van Iderstine, Nate Yager, Lisa Ginett and our Administrator: Kelly Cochrane-Collar. Absent: Becky Gilson and Mark Day

Progress on Search for New Administrator

The hiring committee, being Randy Otis and Keith Van Iderstine, had a brief chance to print out and read the most promising applicants' resumes for the position. Keith found the time to read through all the more promising resumes (it was decided that it only made sense to seriously look at local applicants) and quickly summed up the six chosen picks in terms of strengths and weaknesses. Based on that work the group chose three of the best qualified for Randy and Keith to hopefully interview, with Kelly sitting in, by Zoom in the next few weeks. Kelly has agreed to stay on for foreseeable future in her role of getting out "The Cornerpost." She said that our figure from last month's meeting of \$2,500.00 per year would be adequate for her work on "The Cornerpost." The group decided that we should continue advertising for another two weeks but discussed several revisions to the advertisement: revise from "work remotely" to "independent, work from home" and to put less importance on the requirement of a background in graphic design. It was decided to once again place the advertisement on Craigslist as well as Front Porch Forum. We will not renew the ad in "Seven Days" as it was very expensive. If it is thought that we need to reach a wider local audience it was suggested that we could send a general email to the membership with the ad language and ask everyone to put it on their local Front Porch Forum.

Secretary's Minutes

Minutes for the Executive Committee meeting for October 20, 2022 were reviewed. Paul had one revision to the minutes and with that revision made the motion was duly made and seconded and the vote was unanimously: to approve the minutes of the October 20, 2022 Executive Committee meeting.

Treasurer's Report

Treasurer's report for the period of January 1 through November 15, 2022 Total income for period of the report was \$54,649.16, total expenses were \$60,224.96, leaving a net income for the year of \$-5575.80 and a bank total of \$53,075.78.

Administrator's Report

Kelly had the proof of "The Cornerpost" with her and said that it was being printed and would be mailed out early next week. Kelly reports that the tables are now filled for the Round Tables, with Paul Hannan and Tim Cowan manning a table on Right-of-Way so that there will be 7 or 8 tables for the Round Tables coming up on Thursday, December 15 at the Capitol Plaza in Montpelier. Gerald Stockman will present a two-hour afternoon program on the Certified Flood Plain Surveyor. Randy took the first New England course and stated that it was very worthwhile and that he learned a lot.

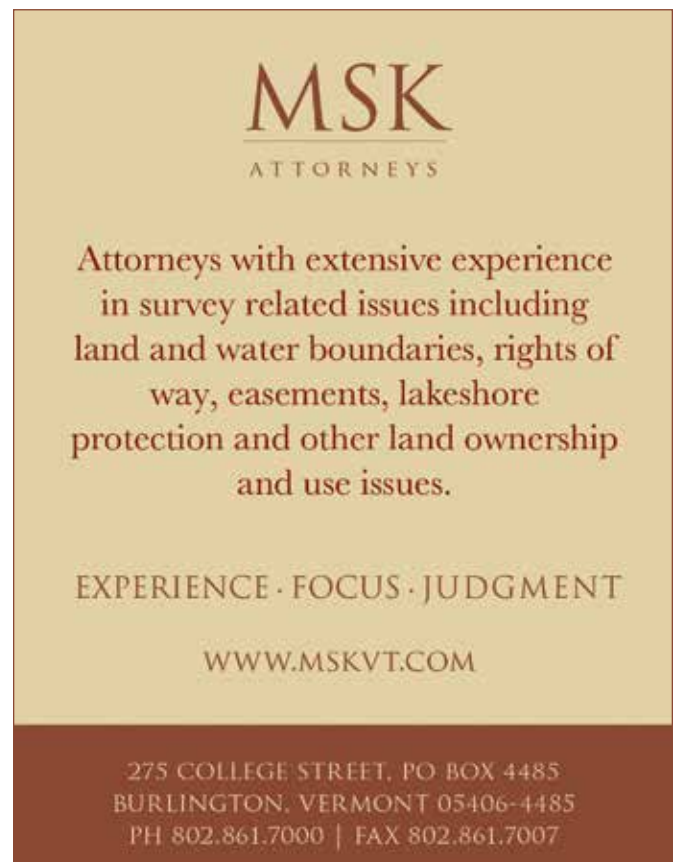
Forty people have signed up for the next class. Kelly will be starting work on the renewal letters for the next dues cycle in the first week of December.

VSLs Representative at Upcoming Regional Conferences

The regional meeting for New Hampshire will be held on Dec. 1 and 2. Randy Otis will attend to represent the VSLs. The regional conference in New York will be held on Jan. 18-20 and the group wondered if perhaps Mark Day might represent the VSLs as he just obtained his New York license. It was briefly discussed that Gayle Burchard, our NSPS Director, has exceeded the yearly travel budget in order to attend the two yearly meetings in 2022. Kelly will ask Gayle what her plans are for travel in 2023 in the hope that we can plan better for it. The group briefly discussed some ideas for what Randy could take as a gift when he attends the New Hampshire conference.

There being no other business the meeting was adjourned at 7:09 PM.

Respectfully submitted,
Lisa Ginett, VSLs Secretary



MSK
ATTORNEYS

Attorneys with extensive experience
in survey related issues including
land and water boundaries, rights of
way, easements, lakeshore
protection and other land ownership
and use issues.

EXPERIENCE · FOCUS · JUDGMENT

WWW.MSKVT.COM

275 COLLEGE STREET, PO BOX 4485
BURLINGTON, VERMONT 05406-4485
PH 802.861.7000 | FAX 802.861.7007

January 19, 2023 • 6 p.m. • Zoom Conference Call

This meeting was planned to be held on at City Hall on Main Street in Montpelier but due to the impending storm was held instead via Zoom. The meeting was called to order at 6:07 P.M. In attendance were, Randy Otis, Paul Hannan, Keith Van Iderstine, Nate Yager, Lisa Ginett, Becky Gilson and our both our current and future Administrators: Kelly Cochrane-Collar and Birgit McCall. Absent: Mark Day

Our New Administrator

The hiring committee, being Randy Otis and Keith VanIderstine with help from Kelly found and hired a new Administrator; Birgit McCall. Birgit has been working with Kelly to get up to speed on her new position. Birgit put out the materials for this meeting and was in Attendance along with Kelly who joined us for the last time.

Secretary's Minutes

Minutes for the Executive Committee meeting for November 17, 2022 were reviewed. The motion to approve the minutes was duly made and seconded and the vote was unanimously: to approve the minutes of the November 17, 2022 Executive Committee meeting.

Treasurer's Report

The committee reviewed the year-end financial report for 2022. Total income for period was \$66,430.07, total expenses were \$ 69,605.00, leaving a net income for the year of \$-3174.93 and a bank total of \$53,702.43. Also reported were total income and expense of the Spring Seminar, the Fall Conference and the December Roundtables. The additional expenses which left the deficit are mostly due to not being billed by Okemo for the Fall Conference of 2021 in that year so that what should have been paid from the 2021 budget instead was paid from the 2022 budget.

The group then reviewed the treasurer's report for January 1 to 18, 2023. Total income for period of the report was \$ 14,335.00, total expenses were \$5,798.03 leaving a net income for this portion of the month of \$8,536.94 and a bank total of \$53,577.33. Keith reports that 61% of dues have been paid. Birgit included a chart showing how many members of differing membership status we had and the percentage paid, which Keith thought was very helpful.

Administrative Secretary's Report

Kelly has been focusing on helping to find our new Administrator and training Birgit for her new position so that the Society experiences a smooth transition. Birgit now has the Society laptop and all of the VSLs files. Kelly made up a list of duties for each month so that Birgit will have a reminder of what needs to happen at what time and date. They have also visited the storage unit. Birgit needs to get her name onto the bank accounts

and Society credit card. Birgit will collect the articles for "The Cornerpost" and Kelly will do the lay-out work.

Birgit will be getting the Program Committee together to agree on 1 or 2 additional speakers for the Spring Seminar which will be held at Lake Morey on April 14. Kevin Bagwell of the International Boundary Commission will present two hours on the maintenance and integrity of the U.S.-Canadian International Boundary.

Kelly also discussed that the Program Committee has agreed that December will now be our webinar meeting and that the other two meetings per year will be in person. The Spring Seminar will now become our Roundtables meeting.

Update on the Preservation Committee

The Preservation Committee has become very busy but with our Administrator transition period lots of emails to Kelly regarding this committees' work will be taken over by Birgit. We need to update our spread sheet of who has which old surveyors' records. There is an ongoing discussion about what to do with the scans to make them available. Kelly thinks it would be beneficial if members could directly access the scans to download what they need from those records. She would also like to see the website become more useful to the members by providing information as to how many PDH credits they have. This would likely require paying more for the website.

Other Business

Kelly considers that she is done as our Administrator as of this meeting except for answering any questions that Birgit might have. She reminds us that Birgit will need to notify both Randy and Gayle Burchard, our NSPS rep. to turn in their regular articles in time to meet the publications date for "the Cornerpost".

There has been a request from Crossett Brook Middle School for the Society to send some people to take part in their career fair. Before Covid, Becky and Gayle manned a table for this fair and enjoyed their time there. Keith's boss says that they will send a surveyor along and perhaps an Engineer so it appears that along with Becky, who agreed to present at this event once again, we have enough volunteers for the presentations.

It was intended to complete the process of investing Society funds with North Country Credit Union in 2022 however the process was put on hold until the Administrative transition was complete. Keith and Randy, along with Birgit will try to have this done before our next scheduled meeting in February.

There being no other business the meeting was adjourned at 6:33 PM

Respectfully submitted,
Lisa Ginett, VSLs Secretary

David Peatman | VERMONT L.S. #602 | MAY 29, 1956 - DEC. 1, 2022



David James Peatman, 66, of Eden Mills, died on Thursday, December 1, 2022.

David was born in Burlington to Mary Parker and Norman Peatman on May 29, 1956. He went to elementary school in Johnson and graduated from Lamoille Union High School.

While living in California he received an associate degree in anthropology. Dave has left this life for his next adventure. He'd said he planned to careen into heaven with a beer in one hand and a cigarette in the other, hollerin' "Whooooee, what a ride!" And he did.

Dave lived life to the fullest and at hummingbird speed. He excelled at all he pursued, from baseball and basketball, skiing, tennis and golf, pool and darts, and his favorite,

horseshoes. Intelligent, ambitious and energetic, he became a licensed land surveyor in 1987, running his successful business until failing eyesight and declining health forced his retirement in recent years. He was a member of the Vermont Society of Land Surveyors.

Dave, gregarious and garrulous, teller of Sufi tales and hilarious stories, was a juggler, stargazer, cookie baker and spiritual seeker of cosmic connection. A loyal friend, a loving dad, a dear heart and a striving soul, Dave was beloved by his family and his many friends.

David was predeceased in death by his parents Mary and Norman; as well as his brothers, Chris and Pete. David is survived by his wife Cindy; his children, Matthew, Damien, Josh and Marie; his brother; Michael and former wife Kate.

Visiting hours were held on December 16, 2022 at the Morrisville VFW.

Warren Robenstien | VERMONT L.S. #48 | MARCH 27, 1935 - FEB. 26, 2023



Warren A. Robenstien, 87, passed away unexpectedly at home on Sunday, February 26, 2023.

Warren was born on March 27, 1935 in Hackensack, New Jersey, the son of William A. and Matilda (Gerecka) Robenstien. He served his country honorably with the United

States Marine Corps during the Korean Conflict.

In 1966, he married Colleen Leveillee, who passed away in January 2016. He later married Nadia Sekow.

Warren was a land surveyor for close to four decades and a member of the Vermont Society of Land Surveyors. He raised and bred Morgan Horses. Warren was a devout Catholic and served as a Eucharistic Minister at St. Francis Xavier Church in Winooski.

He is survived by his wife, Nadia; his daughter, Ann Robenstien, MD; three grandchildren: Nathaniel, Samuel and Danielle; step-children and spouses: Brenda, Landis and Wendi, Liza and George, Darren and Kelsey and Becky and extended family.

Along with his parents and first wife, he was predeceased by all his siblings and their spouses: William and Allen Robenstien and Barbara.

A Mass of Christian Burial was celebrated on Thursday, March 2, 2023 at 1:30pm in St. Francis Xavier Church in Winooski.

Spring Interment, with Military Honors, will take place at St. Francis Cemetery in Winooski. Arrangements have been made by Elmwood-Meunier Funeral Home in Burlington, Vermont.

A Deer Hunt GONE AWRY

It was a beautiful Fall day in early November.

No wind, sunny, and warm. One of those gems that we get if we're lucky, before the snows and the ice descend on Vermont's Northeast Kingdom. I was on my deer stand on "Buck Ridge" on Stannard Mountain, with my deer rifle across my lap. We call it "Buck Ridge" because our experience showed us that the bucks passed through that ridge in the early morning and late afternoon. They were in the habit of going down to the old fields and scattered apple trees on the old farms in the lowlands for their nightly feeding and meeting with the does. Then back up the mountain to "bed down" for the night. We had never seen a doe on the ridge!

"As I followed his tracks up the mountain, I found blood in the tracks that indicated that some of my later shots had found their mark."

I was in the habit of getting to my stand about half an hour before daylight, eating my lunch there, and staying until it became dark enough so that I could not see the sights on my rifle. That was the case on this day. I had been on the stand for many hours and was getting sleepy. I have to admit that I was dozing off, when the rustling of the leaves brought me to full attention. The noise came from across the little valley in front of me, and on the up-slope to the mountain. Big noise, what can it be ... a buck, I hope! Nope, a big black bear coming down the slope in front of me! In those days, I was carrying a 32/40 rifle. This caliber has a pretty good range, but not much hitting power. Looking at what was coming, I figured that my best chance for a kill would be a head shot, so I sighted for the head and let her rip. Now that bear hit the brakes, dug his front paws into the leaves and snow, came to a dead stop, and looked across that valley and directly into my eyes.

He seemed to say something like, "You darn fool, do you have any idea what you're doing?"

He whirled in place, turned around and headed back up the mountain on a full run! I did get a few more shots off until he disappeared. Then it was try to calm down, gather my wits, settle down and think about it! I decided to go over to the spot where I first shot at him and see what the sign was. So across the little valley I went, and found the ruffled leaves where he turned, and then found a clump of bear hair in the snow behind where he turned that was in the shape of a "V." I took this as where my first shot had creased his scalp and took off the hair. Then as I followed his tracks up the mountain, I found blood in the tracks that indicated that some of my later shots had found their mark.

It was beginning to get dark, and not a very good idea to be tracking a wounded bear in the dark with the 32/40 rifle. Best let him go and go down to our hunting camp for supper. This is what I did with my "tail between my legs," and a story to tell! We all hunted the next day and the following weekend until the end of deer season. The guys that hunted up there on the mountain came back with stories of seeing bloody bear tracks and saying, "He's up there, Dick, LOOKING FOR YOU!" Scary thought, don't you think? 🐾

— DICK BOHLEN, L.S.#7 (1926-2020)



SPRING SEMINAR

Friday, April 14, 2023
Lake Morey Resort, Fairlee, Vermont

6 PDH APPROVED



SCHEDULE

- 7:00 AM** Registration and Breakfast
8:00 AM Update on the Datums and the Deprecation of the U.S. Survey Foot
10:00 AM How NGS Plans to Support Passive Control in the Modernized NSRS
12:00 PM Luncheon
1:00 PM Intro to Sitech Northeast
2:00 PM Panel: Changes in Surveying
3:00 PM Final Announcements

FEES	THROUGH APRIL 4*
Member in good standing of VSLS or kindred society	\$175.00
Life Member	\$131.25
Non-member technical staff attending with member	\$148.75
Group rate (3 or more from same firm; must include a member)	\$148.75
Non-member	\$275.00

* \$25 late fee after April 4, 2023

SEMINARS

Update on the Datums & Deprecation of the U.S. Survey Foot Daniel J. Martin, NOAA/NOS/National Geodetic Survey

NGS has updated the blueprint for the modernized National Spatial Reference System to include Part 3: "Working in the Modernized NSRS." This document describes new types of coordinates, the role of passive control, and the role of OPUS. This workshop will introduce participants to these new concepts as they pertain to the new datums. We'll also discuss the official deprecation of the U.S. Survey Foot and what it means for surveyors.

How NGS Plans to Support Passive Control (Daniel J. Martin)

When NGS first announced plans for the Modernized NSRS, there was little support for Passive Control. Since then, NGS' stance has changed significantly, and there is a renewed effort to streamline the process for submitting data to NGS. We will discuss the role of Passive Control in the Modernized NSRS and NGS' plans to support it, plus new developments in OPUS-Projects that support modernized surveying methods.

Introduction to SITECH Northeast

Mike Burnor, Survey Support Engineer, Sitech Northeast

SITECH Northeast is an authorized, independent provider of TRIMBLE position and machine control technology, training, support and service. This workshop will give a better understanding of SITECH and its services.

Panel Discussion: Changes in Surveying

We will discuss the impact of new technologies, including GNSS Base/Rover, Scanning, drones, GIS databases and online records. Panelists include VSLS President **Randy Otis**, LS, Survey Department Manager, DuBois & King; Past President **Mark Day**, LS, Owner of Day Land Surveying; Program Committee Chair **Doug Henson**, LS, Past Partner, Lamoureux & Dickinson; Vermont Board Land Surveyors Chair **Joe Flynn**, LS, Survey Manager, O'Leary-Burke

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

Name _____

Address _____

Email _____

Dietary Restrictions _____

☐ Check enclosed (payable to VSLS) for \$ _____

☐ Credit card payment: ☐ VISA ☐ MC ☐ AMEX ☐ DISC

Card Number _____

Exp. Date _____ Security Code _____

Please return form with payment to: VSLS, P.O. Box 248,
Montpelier, VT 05601-0248. Questions? birgit@vsls.org



The Cornerpost

P.O. Box 248, Montpelier, VT 05601-0248



ASK OUR PANELISTS...

VSLs will be finishing the Spring Seminar with a panel discussion, and we want your input. Please use the QR code to take a survey and let us know what you'd like to hear about.



PHOTO: SEAMUS COLLAR