



The Cornerpost

Journal of the Vermont Society of Land Surveyors

Volume 46, Number 2 | Summer 2015

Summer Travels

VSLS Treasurer Keith Van Iderstine and his son Parker at the Four Corners Monument joining Colorado, New Mexico, Arizona and Utah.



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The Cornerpost

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Gayle Burchard, Director
Lisa Ginett, Director
Ian Jewkes, Director

EDITOR

David A. Mann, L.S.
(603) 357-5904
mannlls@ne.rr.com

SUBMITTING MATERIALS

Direct correspondence or any materials for submission to:
Kelly Collar, Administrator
P.O. Box 248
Montpelier, VT 05601-0248
kelly@vsls.org

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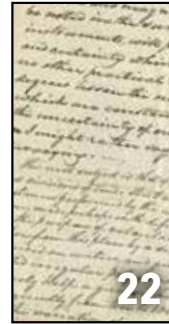
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About The Cornerpost

The Cornerpost is the official publication of the Vermont Society of Land Surveyors. It is published three times each year for the betterment of the surveying profession. The society assumes no responsibility for statements or opinions made or implied by the editor or any contributors. The editor welcomes contributions for publication. **The Cornerpost** is mailed to members and to similar organizations on a complimentary basis. Articles may be reprinted with due credit, unless written permission of the author is required. The VSLS is affiliated with the National Society of Professional Surveyors.

On the Cover

Keith and Parker Van Iderstine visited the Four Corners Monument during a Boy Scout trip earlier this summer. The Four Corners is the only point in the United States where four states meet. The NSPS helped with the last rebuild of the monument and placed informational plaques in each state, explaining the history of the establishment of the four corners point and surveying's involvement in the process.

President's Corner



“

Kelly has been working on the new VSLs website, and that is now live. Please log on to vsls.org and check it out. We welcome your feedback and encourage you to share any of your surveying related photographs.”

THE VSLs HAS RECENTLY gone through some major changes that everyone needs to know about. First, we have closed the office located at the Capitol Plaza in Montpelier. I was on the Executive Committee when we decided that we needed to have a presence in Montpelier: we thought it would be beneficial to set up shop near the capitol and have a permanent mailing address in the capital city.

That was more than 10 years ago, and since that time we have seen a change in membership which translates to less revenue. Decreased revenue is not the sole reason for this decision, though. As you all know, Meg has retired and Kelly, our new Administrator, lives in the Montpelier area. The VSLs office received very few visits and mostly served as a repository for the Society's records. We changed our address to a post office box a couple years ago.

As it stands now, Kelly is working from her home office, we have kept the same phone number we've always had (802-229-6358), we've kept our post office address in Montpelier, and we've moved all of the Society's records and belongings to a secure, climate-controlled storage facility in Montpelier.

I believe we will still have a presence in Montpelier — we will continue to have meetings at the Capitol Plaza, and the Executive Committee will continue to meet at the AIV building

located across from the Capitol Plaza.

Kelly has been working on the new VSLs website, and that is now live. Please log on and check it out. We welcome your feedback and encourage you to share any of your surveying related photographs. I think the new site looks great, so please visit vsls.org and give us your input.

Well, I've been busy recovering from my first of two hip replacement surgeries. My first operation on June 17 went very well — a short overnight in the hospital, then back home. People ask me, why did you have it done in the summer? My thinking: the living is easy, with no snow to remove, no wood to lug, and no danger of falling on slippery surfaces. I will be having the second surgery in early September. I was in denial for three years and tried every alternative therapy I could find.

My only advice to someone who is struggling, like I was, is don't wait see your doctor. Modern medicine and particularly orthopedics have come a long way. Even the most respected alternative new age healers say, for some people, surgery is the best choice. For me I now know that is was the best choice, and I can't wait to get back into the woods this fall, stronger than ever.

Thanks, and I look forward to seeing you at the Fall Conference on September 18. 🍄

Brad

Brad Holden, L.S.,
VSLs President

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Early Explorers & Settlers

IN THE VERMONT WILDERNESS

Rediscovering early surveys through the journal writings of Richard Hazzen.

It has always struck me as to how durable the early settlers must have been as they made their way into the New England wilderness.

One of my most interesting pursuits is to peruse old diaries in search of firsthand accounts of the triumphs, trials and tribulations of early explorers and settlers. One of the earliest accounts of activities in what will become the State of Vermont is the journal of Richard Hazzen. I particularly enjoy his accounts of the survey of the Massachusetts Bay and New Hampshire Provincial boundary. This event probably had more to do with the establishment of Vermont than any other singular event in that time period, although that is highly arguable.

The King's proclamation as it pertains to this line probably (definitely) inspired Benning Wentworth to begin chartering towns west of the Masonian Patent Line but more importantly west of the Connecticut River. Richard Hazzen's account of the survey and their crude accommodations along the new provincial boundary make you wonder how they survived to its completion.



Hazen's
Map

"I have included some USGS views, but they are not necessarily linked to the text; you'll need to do that for yourself. I think you can follow his route pretty well without me pinpointing it."



The following are excerpts from Hazzen's journal as his team traveled along the south boundary of Vermont.

Monday April Ye 6th 1741. We left Captain Field's at Northfield a little after Sunrise, and with great difficulty passed Connecticutt River in a canoe, the wind being high and flawey, and the ice above coming down verry often. We travail'd up to the place against where we left Our line on the East Side of the River; which was about six poles above the Little meadow brook and the same day measured 4:1:20.

Remarks: At Two Miles and an half from Connecticutt River we Ascended the Topp of a verry high hill, a small narrow pond lying on the Northerly Side of it, with Two small islands at the Easterly end of Said pond from this place we had a fair View of Fort Dummer bearing from us near North & by west, & distant as I Judged About four Miles, The first Two Miles From Connecticutt River the land was Open and but little Snow, the remainder of this days travell the Snow was about Two feet Deep, on which we Lodged, the Weather was fair & wind Northwest.



Tuesday April 7th: This Morning we set Out before Sunrise & Measured 5:3:28.

Remarks: at the End of 240 poles We came to Falls River, an Exceeding high hill lying on the East Side of it, and the Stones upon the Hill were all Slate Stones & large we therefore named it Slate Hill at an hundred Rods further we Came to Another branch of said River; and at the end of Our Measure this day, we came to Green River; and Lodged on the East Side of it. This day was fair & Cold, the wind Northwest and travelling good The Snow about Two feet deep for the greatest part of the way, The land Mountainous & broken, but good for Pasture and the Timber it produc't Beech Maple Hemlock and some Chestnutt.



Wednesday April 8th: This day we Measured 5:3:40.

Remarks: At the End of One hundred poles from where we began to Measure this Morning we crossed a large brook: Supposed by us to be a branch of North River & One Mile, Three Quarters, and forty poles further; we Came to the said River; on the West Side of which was an Exceeding high Mountain, and to the End of this days measure from the afores'd River; the land was exceeding good & covered with Beech Maple Chestnutt & The Snow was Mostly Three feet Deep, and in Many places more; The forenoon the Crust was so hard we walk'd upon it without Snowshoes, in the afternoon it was soft, The weather was fair and the wind Northwest and this Night we lodged on the Snow.



Thursday April 9th: This day we measured 5:3:10

Remarks: At the end of Three miles we Came to a large brook, running Southwesterly, and at the End of this days Measure we Came to Another large brook running Southerly, by which we took Our Lodging; here we trac't a large Bear & therefore Nam'd it Bear Brook, both these Brooks are branches of Deerfield River; The land this day was exceeding good; and the produce Beech, Maple, White Ash & & for three Miles the Pigeons Nests, which I Supposed were made last Year, were so thick that five hundred Might have been told on the Beech Trees at One time, And Could they have been counted on the Hemlocks as well, I doubt not but five thousand at One turn Round, The Snow was for the Most part Three feet deep, the weather fair & wind Northwest.



Fryday April 10th: This day we Measured 2:1:20

Remarks: At the end of half a mile from where we Set Out this Morning we Came to Deerfield River verry high and & Steep mountaines being on Each Side of it & so up & down the River as far as we Could See, by Information at least fifty Miles we mett with great difficulty in passing the River, first attempting to Wade & One only got Over with great damage to Our bread by wetting it, Then we Attempted to Raft, but that faild ye water ran so Swift, at length we found a place where we all waded over, tho' with utmost Hazzard; The Mountain on the west side was so steep, we could not Carry the Chain to Measure, but in four or five hours time, When we had ascended the Top of it, We judged we had gott forty Rods forward & no More on Our Course at the furtherest, The Snow this day was about Three feet Deep, The weather fair & wind Northwest, At Sunsett we built a fire on the Snow, and Lodged by it.



Saturday April 11th: We began to Measure before Sunrise and Measured this day Seven Miles 7:0:0

Remarks: At the end of four Miles three Quarters and Twenty poles, we Came to a small River Running North; and where we Cross't was good intervale Land, on both Sides & a large English Camp a little North of Ye Line and o the East of Said River, and at the end of Seven Miles Two large brooks mett; One Came out of the westward; and the Other out of the Northward, and then ran Southeasterly, we thought both these streams ran into Deerfield River; and that the Camp was made by Capt Welles & Company, the land all this days Course was good & fit for Settlements; The Snow About Three feet Deep; and where we lodged near five; which was where the Two Brooks mett, we left a Bottle there and therefore called it Bottle Brook; it Snowed a little the greatest part of the day and the wind was Northwesterly.



Sunday April 12th: This day we Measured 4:1:50.

Remarks: At the end of three Miles we came to the Top of an exceeding high Mountain from whence we discovered a large Mountain lying South westerly of Albany as Also a Row of Large Mountains on Each Side of us, bearing North and South or North-westerly and Southeasterly Nearest and a Ridge of Exceeding high Mountains, three or four Miles before us, bearing near the Same Course, and a fine Valley betwixt them & us, on Each Side of the line together with said Hills bigg Enough for Townships. At One hundred and thirty poles further we Cross't a branch of the Hosek River running Southerly thence to the Main River of Hosek running Northwesterly, with difficulty we waded it & lodged on the West Side of it that Night; the first part of the day was good travelling but heavy by Noon and betwixt the Two Rivers the Snow was Mostly gone; it clouded Over and rained in the Night, which Caused us to Stretch our Blankits and lye Under them on the Bare ground, which was the first Bare ground we lodged on Since we left Northfield. There was little wind this day.

Monday April 13th: This day we Measured from Hosek River four Miles and an half 4:2:0 which was only over one mountain, which Mountain was exceeding good Land, bearing Beech, Black birch, and Hemlock, White Ash &c Over this Mountain We Concluded the line would Run, betwixt, this Government and New York, when determined and therefore named it Mount Belcher; that it Might be as Standing a boundary as Endicotts Tree had been here we Lodged Again on a spott of Bare Ground by a Large Brook running Southwesterly, which being full of Clay we Named Clay brook We had some Thunder Showers in the Night, which Oblidged us to rise and Stretch Our blankits. The weather was Cloudy all day and no Wind stirring, The Snow for the last Three Miles about Two feet Deep; for the first Mile and half but little.

Tuesday April 14th: This day we began to Measure at Clay Brook and Measured 5:2:60.

Remarks: At the End of Two hundred and Twenty poles, we Cross't the afores'd Clay Brook again Running Northerly, at Two hundred & Eighty poles more we Crossed a small River, running Northeasterly and verry Swift and 540 poles more, we Came to A Large Brook running Northeasterly all which we Supposed were branches of Hosek River. This day we Cros't no verry Large Mountaines & there was little Snow for three Miles, and in Many places None, but the Remainder of this days Measure it was near Two feet Deep, and where we Lodged about Two and half; the land was good for Settlements bearing Large White Oaks in Some places, in Others Cherry Tree of Two feet Over; Beech, black birch, Rock Maple White Ash &c The weather was fair & wind North westerly & near Night Meer Hurricane.



At this point Mr. Hazzen's survey has passed into what is New York. It appears that he is still qualifying the territory for future townships and appears to be of the opinion that New Hampshire's claim might extend at least as far as that of Massachusetts Bay. I have included some USGS views. They are not necessarily linked to the text; you'll need to do that for yourself. I think you can follow his route pretty well without me pinpointing it. The historic USGS maps are available on the UNH website. Just Google historic USGS maps and it'll pop up. The above is from the transcribed version of the journal. 📍

>> LOOK FOR PART 2 IN THE FALL CORNERPOST!

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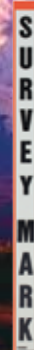
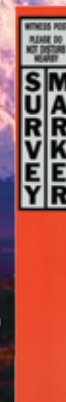
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This course is not an FS review course but an in depth class on boundary law and history in both public lands and metes and bounds states. It has proven helpful in mastering boundary law issues for the FS examination.

INSTRUCTOR: Jay Doody, PLS & PE (Connecticut)

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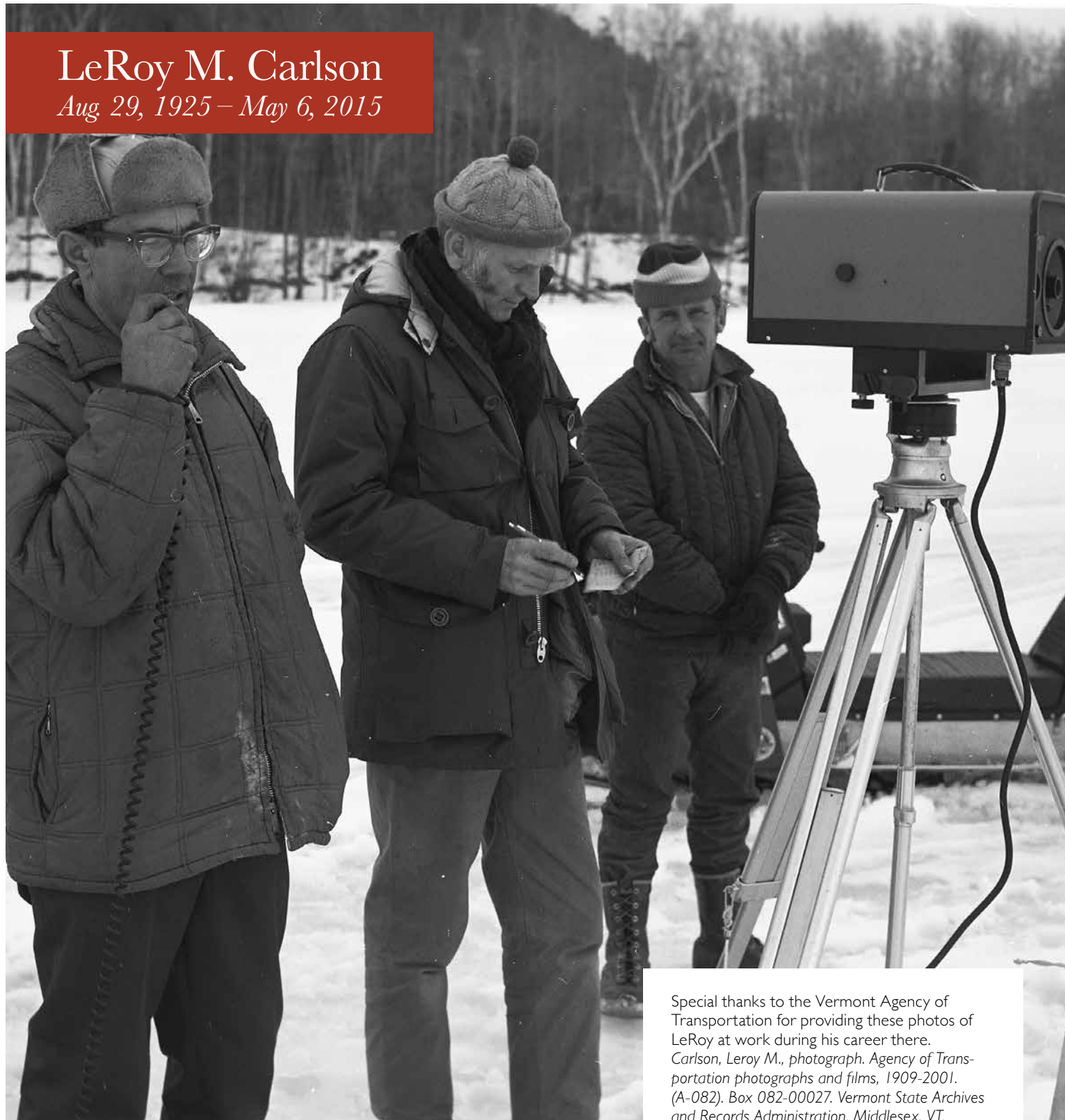
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Memories of LeRoy Carlson

A tribute to Vermont's first licensed surveyor and the first VSLs president

LeRoy M. Carlson
Aug. 29, 1925 – May 6, 2015



Special thanks to the Vermont Agency of Transportation for providing these photos of LeRoy at work during his career there. Carlson, Leroy M., photograph. Agency of Transportation photographs and films, 1909-2001. (A-082). Box 082-00027. Vermont State Archives and Records Administration, Middlesex, VT.

BY HARRIS G. ABBOTT, L.S.

I first met LeRoy Carlson in late 1965, at one of the society's meetings at the Hotel Emery in Bethel. It was during one of these early meetings that LeRoy demonstrated the Vermont Highway Department's (now VTrans') recently acquired Geodimeter electronic distance measuring equipment (EDM).

The EDM looked rather large, like a box sitting on top of the tripod, with several dials used to acquire the distance. It was powered by a generator, so one didn't venture far from one's vehicle. When the EDM was turned on, it drew so much power that the generator labored from the power demand. Since the private sector was still measuring with steel tapes, it was very impressive to see how longer lines could be measured electronically.

By the early seventies, short range EDMs were being developed that the smaller surveying firms could acquire. This meant that surveyors were wanting to tie their surveys to the Vermont State Plane Coordinate system, so they needed to understand the computations when working with the VT NAD27 coordinate system. LeRoy volunteered to put on several seminars so that Vermont surveyors could understand how to work in the system.

One thing that I took away from



LEROY BECAME THE "GO TO" PERSON FOR UNDERSTANDING HOW TO WORK IN THE VERMONT STATE PLANE COORDINATE SYSTEM.

his seminars was that surveyors were turning to fixed targets at the end of the line. The target width needed to be wide enough so that the cross hairs of the instrument would not cover the target. He explained that a target needed to be three times the width of the instrument cross hairs. The computation to determine the width of the target over the longer lines involved multiplying the estimated distance of the line by the sine of three seconds to arrive at a target that would be three times the width of the cross hairs at the end of the line.

LeRoy became the "go to" person for understanding how to work in the Vermont State Plane Coordinate System in the early stages of the short range EDM's that surveyors were acquiring, as the computer programs used by surveyors today were not available. 🌐

Reprinted from the Barre-Montpelier Times Argus, May 9, 2015

MIDDLESEX - LeRoy M. Carlson, 89, of Middlesex, Vermont, died May 6, 2015, at Dartmouth-Hitchcock Medical Center in Lebanon, New Hampshire, surrounded by his loving family. He was born in Norwood, Massachusetts, on Aug. 29, 1925, the son of Manfred and Ellen (Whittier) Carlson. He is predeceased by his sister, Priscilla A. (Carlson) Holman.

Roy attended Northeastern University in Boston, Massachusetts, and worked for the Vermont state Transportation Department for 31 years as a land surveyor and civil engineer.

He served in the Coast Guard during World War II and in the Navy during the Korean conflict; he was also in the U.S. Coast Guard Reserves for 20 years and retired as a quartermaster first class petty officer (expert navigator of USCG vessels).

Roy served the town of Middlesex in various offices during his 60 years as a resident. He was a longtime member of Bethany Church in Montpelier and a proud member of the Fairbanks Family in America. He was a founding member and the first president of the Vermont Society of Land Surveyors. He is

listed as the No. 1 surveyor of the state. He was recently feted for his 50 years of membership at the VSLs 50th anniversary conference last fall.

Roy was an avid gardener, dog lover, outdoorsman, and carpenter and woodworker. He attended boat building school in Eastport, Maine, after retirement. During the last 20 years, he proudly and lovingly tended his blueberry bushes and sold the berries locally.

Roy is survived by his loving wife of 61 years, Joan H. (Seale) Carlson, and their daughters, Elizabeth and husband Alan

Curler, of New Haven, Vermont, Kristen Carlson-Lewis and husband Paul Lewis, of Concord, Massachusetts, Barbara Morton, of Burlington, and Ritva Carlson-LaFlower and husband Greg LaFlower, of Barre, Vermont. Their grandchildren were Heather, Matthew and Jesse Curler; Benjamin and Bell Morton; and Kelsey and Teagan Lewis.

Roy's memorial service will be held at Bethany Church, 115 Main St., Montpelier, Vermont, on May 23 at 1 p.m. Memorial contributions in Roy's memory may be made to Bethany Church or to the Coast Guard Mutual Assistance program. For more information: www.cgmahq.org.

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

Many surveyors perform a record research back in time but fail to perform a search forward in time. As a consequence, the surveyor will often miss recorded out-conveyances from a parcel. The surveyor will also fail to find other recorded documents (e.g., boundary agreement) related to the boundary of the parcel being researched.

the decedent had never been recorded. The executrix recorded the deed for the five-foot strip on August 23, 1989. Although the deed was executed in 1950, the deed was indexed in the indices covering the 1989 time period when the deed was finally recorded.

If a surveyor fails to perform a forward search, the surveyor will not discover the recorded deed conveying the five-foot strip of land to the neighbor. The surveyor, with Bill as a client, would believe the fence was encroaching on Bill's property

What this example illustrates is that a complete record search entails using the name of a previous

Assume a research of the records has disclosed that Randy owned a residential lot from June 4, 1932 to August 16, 1974. On June 13, 1950, Randy conveyed a five-foot strip of his residential property to his neighbor, by a properly executed deed. The neighbor built a fence along the new boundary on May 2, 1954 (thereby providing notice).

On August 16, 1974, Randy conveyed the residential lot to Bill. The deed from Randy to Bill used the original description and did not mention the five-foot strip conveyed to the neighbor 24 years previously.

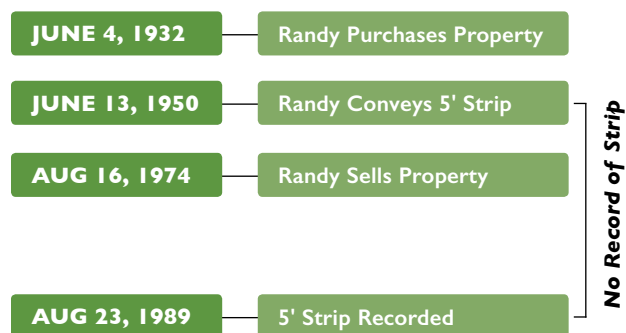
On August 23, 1989 the executrix (personal representative) of the neighbor's estate discovered that the deed for the five-foot strip from Randy to

owner and searching every grantor index from the time the property was conveyed to a predecessor in title up to the present time. This procedure is known as a forward search. Unless a forward search is performed, the surveyor will not discover some conveyances that were made, properly indexed, and are effective against the title to real estate.

Bringing to light a surveyor's failure to perform a forward search will not necessarily convince surveyors to undertake the tedious and time

consuming research necessary to overcome this limitation. Yet, the failure to perform this task could expose the surveyor to liability. At the very least, the surveyor should inform the client that these deficiencies in the research exist at the completion of services. Should the client want to compensate the surveyor for the time to perform a thorough search, these limitations can be overcome.

Knud is a professor in the surveying engineering technology program at the University of Maine. He offers consulting services in the area of boundary litigation, title, easements, land development, and alternate dispute resolution.



1925 TO 1931

The 1925 to 1931 Underhill—Jericho Town Line Dispute

101 VT. 41 (1928) AND 102 VT. 367 (1930)

PART I OF 2

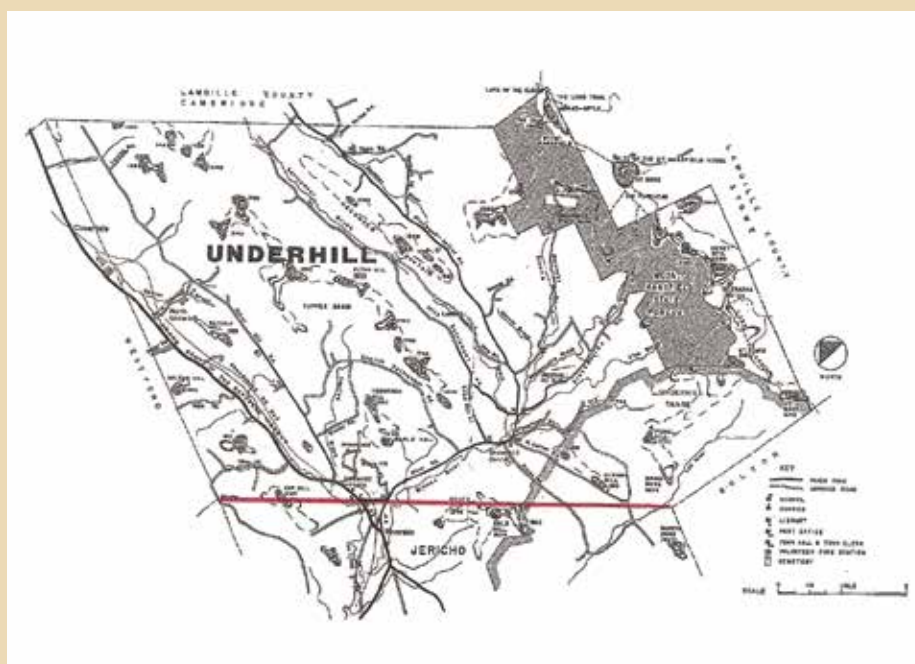
BY HARRIS G. ABBOTT, L.S.

The division line between the towns of Jericho and Underhill passes through abutting hamlets known as Riverside, in the Town of Jericho, and Underhill Flats, in the Town of Underhill. The hamlets are located on both sides of Route 15 (Main Street on map, pg. 14)¹, with a green that is located in both hamlets. Park Street (Center Street on map, pg. 14)² runs southeasterly from the green. The town line runs along the westerly side of Park Street, placing Park Street in the Town of Underhill. There are structures along both sides of Park Street. Residential buildings, vacant land and a cemetery all lie along the east side of the street, located in the Town of Underhill. On the west side of Park Street there is a mix of residential and commercial properties. A majority of the buildings are located in the Town of Jericho although a portion of these buildings are also located in the Town of Underhill. It was long believed that *all* sections of the buildings on the west side of Park Street were located in the Town of Jericho.



Citizens at the March 3, 1925 Underhill Town Meeting voted to “re-survey” the town line between Underhill and Jericho. On March 7, the Underhill board of selectmen sent a notice to the Town of Jericho stating:

“... acting on instructions voted at the March (1925) meeting the following notice was sent to the board of Selectmen of Jericho Vt. Underhill, Vt. March 7 1925. Agreeably (Agreeably) to a vote taken in March meeting held in Underhill, March 3, A D 1925, instructing us so to do, you are hereby



requested to meet us, the board of Selectmen of the town of Underhill, at the K of C Hall in said Underhill, on Wednesday April 15 A D at 1-30 O’Clock in the afternoon to take up the matter of locating the town line between said towns of Underhill and Jericho, as provided by Chapter 175 Vermont general Laws:

T J Maguire, A N Bartlett, W M Pettitt Selectmen of Underhill Vt.”

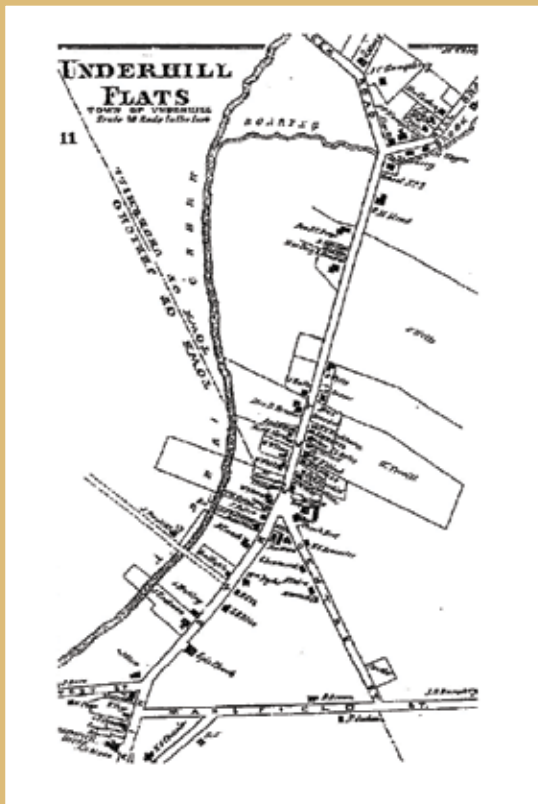
However I have not found any minutes as to what took place at the April 15 meeting.

I had suspected that the 1925

survey was done by Franklin H. Dewart, C.E. Dewart was interested in the history of surveying in Vermont and was involved with making accurate modern copies of 18th and 19th century manuscript surveys. He had acquired a statewide reputation as an expert land surveyor.

Dewart died on February 23, 1928. I was able to find where Dewart had been paid \$25 by the Town of Underhill in 1925³ by the town’s share of the surveying of the town line in 1925.





Underhill Flats map from the reprinted copy of the 1869 Atlas of Chittenden County, Vt., by Beers, Ellis and Soule.

MARCH 2, 1926 UNDERHILL TOWN MEETING

"The Selectmen reported that in the matter of the town line between Jericho and Underhill, that by agreement with the selectmen of Jericho, the line was run by a surveyor (Franklin H. Dewart, C.E.) agreed upon by both towns, last (M)ay (1925). (T)he results of the survey was unsatisfactory to the selectmen of Jericho and they refused to approve same, they wanted time to refer same to the town – an article has been placed in the Jericho warning to see if the town would approve the line as run, and the matter rests with their action taken."

Received and Recorded. E.W. Henry, (Underhill) Town Clerk

MARCH 2, 1926 JERICHO TOWN MEETING

Article 16 – "Voted to reject the proposed change of the Town Line, between Jericho and Underhill, and the following resolution adopted:

"Whereas the Selectmen of Underhill following instructions of the people of Underhill in Town meeting assembled, have surveyed or caused to be surveyed the town line between

Jericho and Underhill, where the same passes through the village of Underhill Flats, and whereas the alleged line does not follow the lines long held by the towns of Underhill and Jericho to be the true line between said the Towns. Therefore, be it resolved by the people of Jericho in the Town Meeting assembled, that the people of Jericho adhere to the lines so long recognized between said Towns, and that we instruct the Selectmen of Jericho to insist in every honorable way and by every honorable means to maintain peaceably the said present recognized line and failing this, that we instruct our Selectmen to accept no other, until the Supreme Court shall determine the true line (emphasis added)."

MARCH 1, 1927 UNDERHILL TOWN MEETING

Article 8 – "Voted to instruct the Selectmen to petition the Supreme Court to appoint Commissioners to establish the town line between Underhill and Jericho."

The Town of Underhill selectmen's report mentions May 1925 for the initial resurvey of the town line and that the Town of Jericho rejected it at the 1926 town meeting. H.M. McIntosh, a prominent civil engineering and surveying firm in the Burlington area, was not involved with the 1925 town line survey (McIntosh hereinafter). The dates of 1928–1929 are shown on the McIntosh survey notes for his preliminary survey of the Jericho – Underhill town line. By the time that McIntosh becomes involved in the resurvey of the town line, Franklin H. Dewart, C.E. had died. Examination of the McIntosh survey notes of 1928–1929⁴ indicates that on the back side of page 7329, McIntosh had found a point set by Franklin H. Dewart, C.E. on the town line approximately 1 mile southeast from the northwest corner of the Town of Underhill. McIntosh is not appointed by the Supreme Court of Vermont as one of the commissioners until July 5, 1928.

JANUARY 18, 1928 TOWN OF UNDERHILL V. TOWN OF JERICHO

101 Vt. 41; 140 A. 156, Supreme Court of Vermont, October Term, 1927. Opinion filed January 18 1928.

"Jericho and Underhill fought over the line separating them in the late 1920s, and that fight has left two reported decisions of the Supreme Court. Early on, Jericho questioned whether Underhill even had authority to bring a petition to the courts, pointing to a defect in the wording of the article in the Underhill town meeting warning supporting Underhill's involvement in the case. The voters had agreed to "resurvey" the line, while the statute says the process is to "locate" the line. The Court disagreed with Jericho, explaining that the "word 'resurvey' as used in the vote taken obviously means to locate the calls in whatever deeds, charters, grants, or surveys are material and relevant to the matter in dispute. Consequently, we have jurisdiction."⁵

JULY 5, 1928

The "... Supreme Court of Chittenden County (Vermont), appoints H. M. McIntosh and T.E. Hopkins of Burlington and G. N. Baldwin of Hinesburg as commissioners to locate the division line in dispute between the towns of Underhill and Jericho in accordance with the statutes."⁶

OCTOBER 31, 1928 - FEBRUARY 31, 1929

The majority of the survey field work for the town line resurvey and the plan was completed by February 1929. The final corners were set between August 10, 1928 and May 2, 1931 and the plan submitted for approval November 1931, after the second Supreme Court decision in 1930, 102 Vt. 367 (1930).

AUGUST 21, 1929

Itemized statement to Clerk of Supreme Court in the amount of \$1716.45.⁷

JANUARY 14, 1930

TOWN OF UNDERHILL V. TOWN OF JERICHO

102 Vt. 367; 148 A. 412; 1930 Vt. LEXIS 129, Supreme Court of Vermont, January Term 1930. Opinion filed January 14, 1930.

"By the time of the second decision, two years later, Jericho had lost the fight and was now fighting over having to pay the entire cost of the proceeding. Jericho believed it was being punished for losing. Jericho had remained adamant that the line it understood as the charter line should be recognized, and apparently given little in any effort to compromise. Underhill argued Jericho should pay for the costs of the commissioners' work, based on sound principles of equity and common practice awarding the substantially-prevailing party the advantage. The Court agreed, and gave the full bill to Jericho to pay.⁸ In explaining itself, the Court restated the holding of the Searsburg⁹ case discussed above, that "while the statute contemplates that the charter line is the one to be located and established, it is not necessarily absolutely and precisely according to the charter, which might in some cases be quite impracticable, and perhaps impossible, but as nearly according to the charter as it reasonably may be."¹⁰

MARCH 4, 1930

In the Town of Underhill annual meeting minutes, the voters approve Article 15, which stated:

"On a motion voted that all expenses incurred by the town in the case of the town line between Jericho and Underhill, be printed in next year's report as a separate item, also that the delinquent tax list of the several lands effected (sic) be also printed."

MARCH 8, 1930

From the Jericho 1930 Annual Report
- issued the following checks:

"Order #18. Issued check to S. (G.) M. Page (attorney for Underhill), cost Underhill – Jericho line \$1861.46"

"Order #19. Issued check to Allen Martin (attorney for Jericho), Attorney fees, Underhill – Jericho line \$29.00"

MARCH 11, 1930

A letter from Guy M. Page, Esq. Town of Underhill Attorney, outlining his services and cost for the case.¹¹

"... Underhill will not be required to pay any further expenses of this litigation except only one-half of the marker cost, exclusive of the artillery range. You will note that we succeeded in getting the entire cost of the survey and the court charges imposed upon Jericho."

"Cost for the town line resurvey:

Attorneys time (14.25 days at \$35/day)	\$498.75
Disbursements	\$24.50
Survey cost	\$1790.70
Less tax Cost from Town of Jericho	-\$1861.46 ¹²

In the Town of Underhill Annual Report for the year ending January 31, 1931, the report of "Expenses in The Underhill-Jericho Line Case" is published. For the first time, costs for the dispute are revealed along with the issues that sparked the dispute in the early 1920's. The dispute was about the taxing of land and buildings located along the westerly side of Park Street that were located in the Town of Underhill. The itemized report in part states:

"... Total expense \$629.59. This does not include the expense of setting the markers; the work has been done and no bill has been rendered. We are to pay one-half this expense. We have gained on our Grand List \$3630, on real estate and \$1740, in personal property or a total of \$5370."¹³

JUNE 16, 1931

(Town line) "Surveyed under order of the Supreme Court of Vermont, by and under the direction of the Commissioners: H.M. McIntosh, T.E. Hopkins and G.N. Baldwin." "The commissioners appointed by the Supreme Court certify that ... (the) plat (prepared by H. M. McIntosh) is a correct representation of the survey and marking of the line between the towns of Underhill and Jericho as located by us (the commissioners)."¹⁴



NOVEMBER 1931

Final Plan submitted and the “Report of Commissioners” appointed by the (Vermont) Supreme Court Docket No. 356A can be found in:

>The Underhill land records: the Book of the “Report of Commissioners” is filed and recorded November 11, 1931 in the Underhill Old Vault and a copy of the plan filed in hanging file 256A and 256B.

>The Jericho land records: the Book of the “Report of Commissioners” is filed and recorded March 4, 1931 in the vault along with a reference to Volume 25, Pages 414 to 416. I have examined the H.M. McIntosh records stored at the University of Vermont Bailey-Howe Library Special Collections and have extracted the cost for the resurvey of the Jericho–Underhill town line (see box at right).

MARCH 1929 - JULY 21, 1931

Setting final marks, survey description and plans.¹⁵

SEPTEMBER 1, 1931

^{1/2} the cost of setting final marks.¹⁶

Town of Underhill \$105.70 • Town of Jericho \$105.70

STATISTICS FROM THE MCINTOSH TIME LOGS

1. Field work and office time = 2211 Hrs. plus
2. H.M. McIntosh C.E. = \$1.50/hr.
3. Jane P. McIntosh, daughter as employee = \$0.60/hr.
4. Jane P. McIntosh daughter as C.E. = \$1.00/hr.
5. Party chief / instrument operator = \$0.60/hr.
6. Chainman = \$0.50/hr.
7. Rodman = \$0.40/hr.
8. Man and vehicle = \$8.00/day
9. Dinners = \$0.50 and \$0.75 per meal
 - a. + 220 dinners reimbursed
10. Cost for supplies = \$110 including:
 - a. Replacement of 3 ax handles in the months of January and February 1929.
 - b. Three (3) tape repairs.
 - c. Three (3) garnet markers at \$5.00 each.

NOVEMBER 16, 1931

^{1/2} the cost of setting markers and plat of town Line.

Town of Underhill \$117.00¹⁷ • Town of Jericho \$117.00¹⁸

BREAKDOWN OF THE COST OF THE SURVEY

EMPLOYEE	Hourly Rate	Reimburse	Total Hours Worked	Total Amount for Statement
H.M. McIntosh, CE	\$1.50		111.0	\$166.50
Commissioner (per day)		\$8.00	3.0	\$24.00
Commissioner (per mile)		\$0.15		
Jane P. McIntosh, daughter	\$0.60		13.0	\$7.80
Jane P. McIntosh, CE, daughter	\$1.00		39.0	\$39.00
D.B. Smith, party chief, Instrument operator, car & brush man	\$0.60		667.5	\$400.50
J.R. Allen	\$0.50		46.0	\$23.00
D.M. Johnson, rodman	\$0.50	\$7.95	11.0	\$13.45
J.A. Laware, chainman	\$0.50		81.0	\$40.50
H.E. Mayes, Rodman	\$0.50		233.0	\$89.20
I.E. Hazen, Instrument operator and rodman	\$0.40		579.6	\$231.84
M.A. Bundy, man and vehicle (per day)	\$0.39		10.0	\$3.89
FGS	\$1.00		63.0	\$63.00
Man and vehicle (per day)		\$8.00	58.0	\$464.00
Employ use of car reimbursement (per mile)		\$0.10	90	\$9.00
Dinners	53	\$0.50	53	\$26.50
Dinners	163	\$0.75	163	\$122.25
Supplies				\$107.87
TOTAL SURVEY COST		\$25.45	2211.1	\$1832.30

{footnotes}

- ¹ Underhill Flats map found on Page 11 in the reprinted copy of the 1869 Atlas of Chittenden County, VT by Beers, Ellis and Soule.
- ² Ibid.
- ³ Town of Underhill, 1926 Annual Report for the Year Ending January 31, 1926, Page 29, line 22 for the towns ½ of the cost for the 1925 survey.
- ⁴ Found in Box 5197, H to Z of the H.M. McIntosh files found at the University of Vermont Special Collections Dept.
- ⁵ VT History of Old Roads Seminar 2012 03 29 paper by Paul Gillies, Esq. from the seminar chapter on Town Boundaries, Page 111 Of 201 Pages. Town of Underhill v. Town of Jericho 101 Vt. 41 (1928).
- ⁶ Town Line Report of Commissioners. Docket No. 356A, Term, October 1928, filed 1931 11 07 in the old vault of Underhill land records. UVM Archives, Chittenden County Records, Box 57, Tab 1882, Folder 1929, Docket Entries.
- ⁷ McIntosh Carton 8, Volume 13 Ledger, 1927 to May 1929 – Page 109, Volume 14, Ledger 1929, Jan. - Dec., pages 50 to 56, 122-123.
- ⁸ McIntosh Carton 8, Volume 14, page 123.
- ⁹ Town of Searsburg v. Town of Woodford 76 Vt. 370 (1904).
- ¹⁰ VT History of Old Roads Seminar 2012 03 29 paper by Paul Gillies, Esq. from the seminar chapter on Town Boundaries, page 111 of 201 pages. Town of Underhill v. Town of Jericho 102 Vt. 367 (1930).
- ¹¹ Letter entered into the typed Underhill Town Meeting Records 1920 to 1945, on pages 98, 99 and 100.
- ¹² From the Jericho 1930 Annual Report – issued the following checks:
Order #18 – Issued Check to S(G) M. Page (Underhill attorney), cost Underhill-Jericho Town Line ...\$1861.46.
- ¹³ Town of Underhill, 1931 Annual Report for the Year Ending January 31, 1931, Pages 49 and 50.
- ¹⁴ The Underhill land records, the Book of the "Report of Commissioners" is filed and recorded 1931 11 07 in the Old Vault and a copy of the plan is filed in Hanging File 256A and 256B and in Jericho filed in the vault.
- ¹⁵ McIntosh Carton 8, Volume 14, Jan. - Dec. 1929, pages 54 to 56, 122-123; Volume 16, Ledger 1931 Jan. - Dec., pages 39 and 89; Carton 2, Folder 2, page 170.
- ¹⁶ McIntosh Carton 2, Folder 2, page 133.
- ¹⁷ McIntosh Carton 2, Folder 2, pages 170 – 171.
- ¹⁸ McIntosh Carton 2, Folder 2, pages 172 – 173.

>> LOOK FOR PART 2 OF THE UNDERHILL-JERICO DISPUTE IN THE FALL CORNERPOST!

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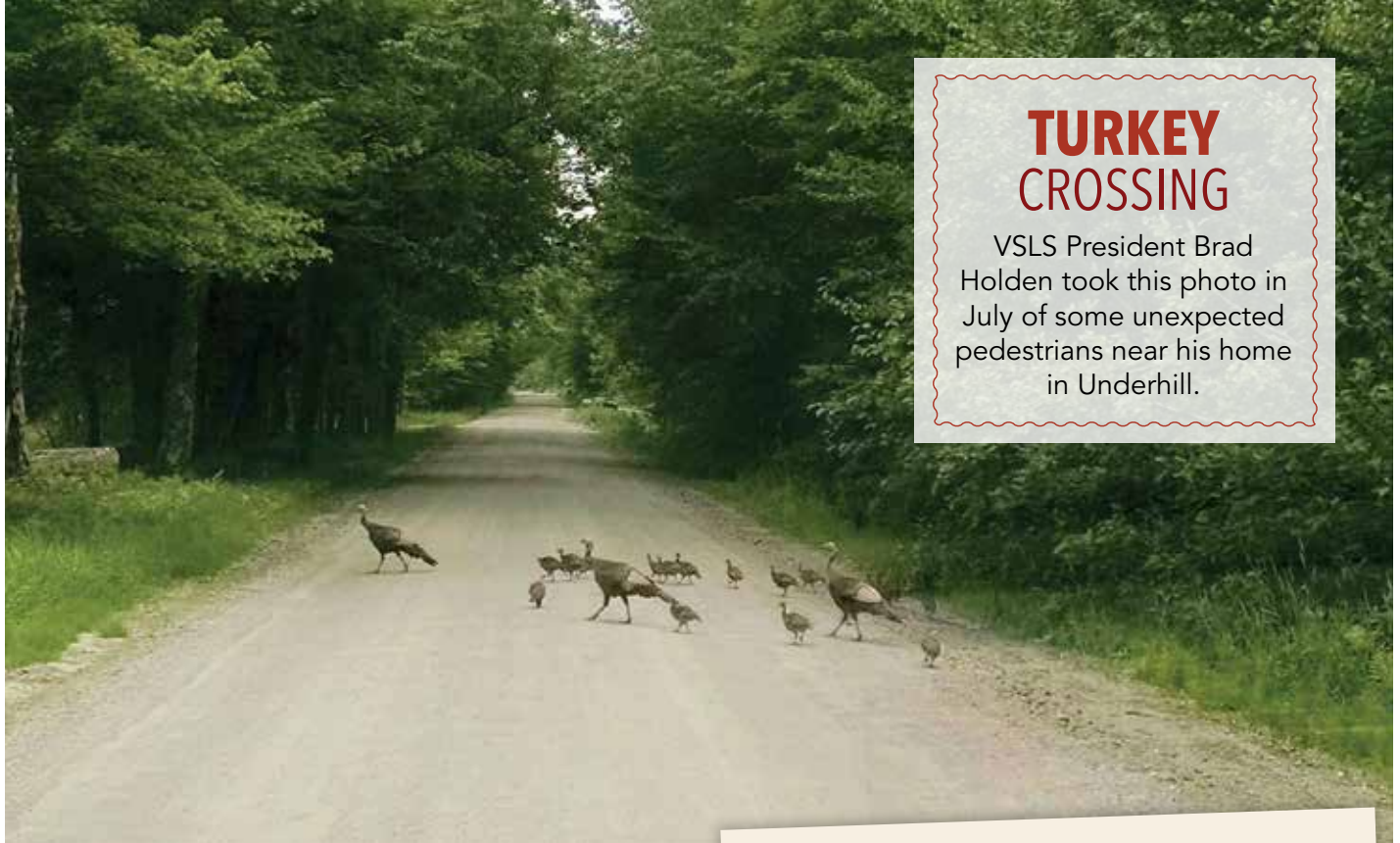
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VSLs



TURKEY CROSSING

VSLs President Brad Holden took this photo in July of some unexpected pedestrians near his home in Underhill.

FOR SALE

Turn-key surveying operation covering Northern New Hampshire and Vermont. Forty-three years of survey maps, research data and files. All equipment, computers, software, plotters, office furniture, field equipment and etc. Future references and project leads.

CONTACT Jennifer Stiles (North Carolina)

PHONE 1-336-442-2100

EMAIL jstiles@triad.rr.com



Rubbing Elbows

Andy Dussault sent in this 1994 photo, showing Norm Smith and Andy (right) posing with Colleen Brink, Miss Maine of 1994, at a lobsterfest. "Norm and I still look the same," Andy says, "but I'll bet that after 21 years, Miss Maine looks older."



Norman E. Greene

January 28, 1927 – March 29, 2015

Norman Elliott Greene, of Montpelier, Vt., peacefully passed away at age 88 on March 29, 2015, in the arms of his loving family. He was born to Cyril F. and Josie (MacDonald) Greene, and was a first-generation American with parents from England and Nova Scotia, Canada. Norman married Bonnie Greenwood, the love of his life, after meeting her in Montpelier. Together they had two children, Brian and Patricia; three grandchildren, Nathan, Eric and Cyril; and a great-grandson, Oliver. Norman enjoyed spending many hours with his wife and family, especially outdoors, traveling, hiking, skiing, snowshoeing, fishing, teaching and exploring.

Norman served in the U.S. Army, graduated Vermont Junior College, and was employed by the Vermont Department of Forests and Parks as a licensed land surveyor and forestry technician, where he was pleased to serve the state of Vermont for over 30 years. He was also a member of the Vermont Society of Land Surveyors.

Norman was interested in airplanes, and during his senior year in high school he began flying lessons and made his first solo flight at the Berlin airport, thereafter obtaining his pilot license. He had a talent for singing and sang with the Montpelier chapter of Barber Shoppers and was a

gifted artist whose drawings are still enjoyed in locations around the state. Norman always gravitated toward spending time outside, especially in the forest.

Together with three of his friends he purchased an old weigh station property and turned it into a hunting camp in Harwood Flats, Vermont, where he was in his element hunting, wildlife watching, fishing, doing camp chores and spending time with his friends and family. Norman is survived by his son, Brian Greene; daughter Patricia Greene-Swift and her husband, Rob; grandchildren Nathan Greene Sparrow and wife Tarran and son Oliver, Eric Elliott Greene, Cyril Greene-Swift; Norman's sister, Sally Hassan, and husband Ihab; and niece and nephews Janet, Tom, Lincoln and Andrew. He was predeceased by his wife, Bonnie, and two brothers.

In lieu of flowers, the family would appreciate donations in Norman's name to the Vermont Nongame Wildlife Fund at the following address: Nongame Wildlife Fund, Vermont Fish & Wildlife Department, 1 National Life Drive, Davis 2, Montpelier, VT 05620-3702, or for online donations use: vtfishandwildlife.com/support_nongame.cfm.

Reprinted from The Times Argus, April 10, 2015

Vermont L.S. 88

George E. Bradley, Sr.

April 26, 1939 – July 14, 2015

George E. Bradley, Sr., of Mendon, passed away July 14, 2015 at age 76, after a long illness at his home. George was born April 26, 1939 at his parents' house in Rutland Town, Vt., the son of Erwin and Dorothy Bradley.

George was a member of the Rutland High School Class of 1957, attended the University of Vermont and graduated from Vermont Technical College with a degree in Civil Engineering. Upon graduation, he began work with the State of Connecticut Highway Department as a project supervisor working on the U.S. Interstate system. He then put his project management skills to work in the early days of the development of Killington Resort, and retired after 36 years of service in 2004.

He was a licensed land surveyor and avid student of history and genealogy. He was a member of the Vermont Society of Land Surveyors and the Rutland Historical Society. He will be greatly missed by the community, as he was loved and respected by all who met him.

George married Eileen A. Martell on August 13, 1960.

He is survived by their four children, George, Jr. and his wife Kathleen Linda of Rutland, Jeffrey and his wife Jeanne Theresa of Mendon, Scott and his wife Jeanne Marie of Mendon and their daughter Teri Elizabeth also of Mendon. George is also survived by 12 grandchildren.

He was predeceased by his wife, Eileen, in 2001. He is survived by his wife, Rosemary Vandenburg, whom he married October 17, 2010 and her four children, Sue LaPlante and her husband Mark of North Clarendon, Lois Baldwin of Killington, Teresa Barrows and her husband Bruce of Stowe and Louis Vandenburg Jr. and his wife Veronica of Fair Haven.

He is also survived by his brothers David of Forestdale and William (Bud) of West Springfield, Massachusetts.

Memorial contributions may be made the Class of 1957 Scholarship Fund, c/o Peter Chase, 1020 Quarterline Road, Center Rutland, VT 05736, or to the American Cancer Society.

Reprinted from The Rutland Herald, July 16, 2015

Vermont L.S. 250

**VSLs Executive Committee Meeting • March 19, 2015 • Conference Call**

Present: Brad Holden, Gayle Burchard, Kelly Collar, Mark Day, Lisa Ginett, Ian Jewkes, and Keith Van Iderstine. Absent: Ryan Cloutier. The meeting was called to order at 6:05 p.m.

SECRETARY'S MINUTES

The minutes of the Feb. 19, 2015 Executive Committee meeting were unavailable, so the group postponed approving them.

TREASURER'S REPORT

The committee accepted the treasurer's report prepared for the date ending March 17, 2015. Gross Net Worth equals \$65,394.04, and Net Income equals \$1,330.13 with over 81% of membership income paid to date.

ADMINISTRATOR'S REPORT

Exam Writing Workshop
Kelly gave a recap of the exam-writing workshop held on Feb. 27 at Vermont Tech's Red Schoolhouse. Joe Flynn and Bob Krebs gave presentations and guided the group in developing test questions. Fifteen members attended, and the consensus

was that the smaller size was a refreshing change and made for a more meaningful event. Attendees discussed possible small-group field trips, including a trip to the Montpelier Archives. The Executive Committee also suggested fieldtrips to the UVM and Montpelier libraries.

Upcoming Events

The Spring Meeting will be held April 24 at the Three Stallion Inn in Randolph, with possibilities for golf, hiking/biking, and a brewery visit afterward. Tim Rockwood expects up to 20 attendees for this event. The Fall Conference is scheduled for September 18, with half-day presentations by Dan Martin and Liam Murphy.

PLAT LAW

Brad spoke with Bob Krebs about the Plaw Law discussion; Bob said that the legislature has been involved in financial debates up to this time and will get back to regular business later in the session.

OTHER BUSINESS

The group discussed the timing for closing

the office at the Capitol Plaza. Gayle mentioned that Tricia Kules is selling her home and needs to have several VSLs boxes removed. Brad agreed to store the boxes temporarily. The committee decided to rent the 13 x 9 ft. storage space at Pioneer Public Storage in Montpelier beginning May 1st. We will need to schedule a time to retrieve VSLs boxes from Meg's house in mid-May. Kelly will contact Goodwill about donating the furniture in the office.

There was brief discussion about National Surveyors Week, which is March 15-21, 2015. Next year, the group will plan ahead and distribute a press release or do some type of activity to recognize the event.

NEXT MEETING

The next meeting will be held at AIV on Thursday, May 21 at 6 p.m.

There being no further business, the meeting was adjourned at 6:40 p.m.

Respectfully submitted,
Kelly Collar, Secretary pro tem

Spring Business Meeting • April 24, 2015 • Three Stallion Inn, Randolph, Vermont

The meeting came to order at 11:06 a.m.

MINUTES

The group reviewed minutes from the 2014 Business Meeting at the December Round Tables. Upon motion duly made and seconded, it was unanimously **RESOLVED**: to approve as written the minutes of the December 2014 Business Meeting.

NSPS DIRECTOR

Tricia Kules reported on the geo-spatial summit she attended in Washington, D.C. She went to Capitol Hill as part of NSPS's effort to encourage the federal government to become better aware of what land they have and to record it and map it into one system. She mentioned that young surveyors (up to age 35) come to the meeting and suggested we send a Vermonter to be represented in the group. Tim Cowan asked if NSPS dues were still being paid through states and asked if we are going to change our own payment structure to increase dues to offset the NSPS fee. He also stressed that the NSPS emails need to be going to all NSPS mem-

bers. Kelly Collar will update the list.

FINANCIAL REPORT

Kelly provided the numbers from the financial report dated March 17, 2015. Net income year to date equals \$1,330.13. Total net worth equals \$65,394.04.

GEODETTIC ADVISORY PROGRAM

Dan Martin said it was a cost-saving measure to eliminate the National Geodetic Advisory Program. He predicted that responses to questions through VTrans will be slower than they have in the past, and he suggested that people document any slow responses to show effect of program's elimination. Brad Holden suggested send a letter to Sue Mitner, expressing VSLs's disappointment.

CAPITOL PLAZA OFFICE SPACE

Brad spoke about the decision to close the VSLs office, explaining that the main reasons were the cost and lack of member use. The biggest issue, related to cost, is that more life members are receiving reduced dues, so our income has declined.

MEMBERSHIP DISCUSSION

The group discussed expanding the membership and voting rights to attract more members. Dan Martin suggested broadening membership to include all types of surveyors. Ken Weston suggested those in the GIS field. Tricia Kules suggested "associating" with the GIS organization. The group then discussed generating more interest in profession by participating in college and job fairs. We could also widen the offerings from the program committee.

OTHER BUSINESS

Ken Weston made a motion to draft a resolution expressing appreciation for the planning group for the 50th anniversary conference. Upon motion duly made and seconded, it was unanimously **RESOLVED**: to express formal appreciation for the 50th anniversary conference planning group.

There being no further business, the meeting was adjourned at 12:30 p.m.

Respectfully submitted,
Kelly Collar, Secretary pro tem

Executive Committee Meeting • May 21, 2015 • 6 p.m. • AIV Building, Montpelier

Present: Brad Holden, Gayle Burchard, Kelly Collar, Lisa Ginett, Ian Jewkes, and Keith Van Iderstine. Absent: Ryan Cloutier, Mark Day. The meeting was called to order at 6:05 p.m.

SECRETARY'S MINUTES

The minutes of the Feb. 19 meeting were unavailable. The group reviewed minutes of the March 19 Executive Committee meeting. Upon motion duly made and seconded, it was unanimously RESOLVED: to approve as written the minutes of the March 19, 2015 Executive Committee meeting.

TREASURER'S REPORT

The committee accepted the treasurer's report prepared for the date ending May 15, 2015. Gross Net Worth equals \$59,771.68, and Net Income equals \$-4,201.00 with 94% of membership income paid to date.

ADMINISTRATOR'S REPORT

Fall Conference: Sept. 18, Killington Grand
Kelly gave a recap of the program committee meeting on May 18. The fall conference at Killington will feature speakers Dan Martin, of National Geodetic Survey, and Liam Murphy, of Murphy, Sullivan and Kronk. We will not have vendors at the conference this year. The Executive Committee agreed to coordinate a simple silent auction.

December Round Tables:

Dec. 18, Capitol Plaza Hotel

Our speaker for the afternoon session will be Jarlath O'Neil Dunne, Director of the Spatial Analysis Lab at UVM, who will speak about the use of drones in surveying. Round table topics will include: new state regulations for shoreline protection; railroad issues, road rights of way issues, ethics, research strategies and changes, marketing your business, historical Vermont surveys, and the use of Lidar. Single-session topics will include NSPS, sole proprietorships, and the program committee.

2016 Programs

The program committee discussed having the spring event at the Three Stallion Inn; it would start with a longer business meeting with a couple substantive topics (and continuing education credits), followed by lunch and an afternoon seminar. For fall 2016, we may convene at Lake Morey and invite exhibitors to do "lightning talks" as part of the program. For the December Round Tables, we may consider the Davis Center at UVM.

WEBSITE

Kelly reported a little bit of progress in re-doing the website and asked the committee to send her photos to include. The group also discussed having a "find a surveyor" map that would allow users to

choose a location and find surveyors in the area. Brad will talk with Leslie Pelch about this.

CLOSING CAPITOL PLAZA OFFICE

The committee talked about the process for closing the office. We already have a storage unit at Pioneer Public Storage in Montpelier. Brad will purchase a heavy-duty shelving unit for one wall and some file boxes to store our files and other gear. A few committee members will meet the first week of June to go to Meg Shields' house and sort through the VSLS items stored in her barn. We have until the end of June to move the rest of the furniture and belongings out of the office.

OTHER BUSINESS

The group discussed the possibility of opening up membership to more groups to diversify our membership and boost our dues income.

NEXT MEETING

The next meeting will be held on Thursday, June 25 at 6 p.m. over Uberconference. Kelly will send out a call-in number.

There being no further business, the meeting was adjourned at 6:40 p.m.

Respectfully submitted,
Kelly Collar, Secretary pro tem

Update Your Info

⇒ Have you changed jobs recently?

⇒ Moved to a new town?

⇒ Changed your e-mail address?

Please send a note to Kelly Collar at kelly@vsls.org, so she can update your records and our online "Find A Surveyor" directory!

JOHNSON'S JOTTINGS

A **S A TRIBUTE** to the history of surveying in Vermont, over the next few issues we will share some of the writings of John Johnson, Vermont's third Surveyor General.

Paul Hannan, L.S., has gathered a number of documents through the Bailey-Howe Library's Special Collections at UVM. In this issue, Paul transcribed a draft of an article that Johnson wrote in 1834.

"What I liked about this one is the list of instruments he feels are needed for a surveyor, and their costs in 1834," Paul says. "I'm amazed at how relevant and unchanged some of Johnson's concerns still are today."

REMARKS ON SURVEYING

by John Johnson, Vermont's 3rd Surveyor General

"In the State of Vermont, as in other States, the magnetic needle has been used as a guide on Surveying lands. In many, and I may say most, instances, the instruments used have been very imperfect, and those who used them have been equally defective in theory and practical knowledge. The effect of this will be seen by lines which were run near the same time in the same vicinity purporting to be parallel and varying from each other four or five degrees. The difference of variation of the magnetic needle is such that town lines north of Onion River which were run soon after the revolutionary war at N 36°E, were in 1804, N 35° E and the same lines now are N 37° 45' E. This variation of the magnetic needle is not uniform, but varies irregularly both as to time and place.

The present variation of the magnetic needle at the south part of the state is probably about 6 degrees to the west of north, and at the north line of the state the variation is over ten degrees. And at the college in Burlington is 8° 30' – in 1834 it is 8° 50'.

These considerations cause everything relating to this business to be involved in uncertainty, and the fruits of this uncertainty are a continued series of litigation in our courts of Law, and no other suits are so much calculated to produce ill will in society as those respecting the boundary of real estate, nor is there any other property for which people will so soon and so strenuously contend.



To propose a remedy for these evils as fast as the nature of the case will admit is the object of this communication. It will require no argument to prove that without men well skilled in theory and practice, and those furnished with correct instruments, the business cannot be correctly performed.

In the present mode of appointing Surveyors by the County courts there is no test by which their own capability or the fitness of their instruments is to be known, and the little authority which their appointment confers, adds so much to the imposition.

To remedy this evil a board of examination should be appointed and a proper knowledge of theory and practice and correct instruments should be prerequisites to the appointment. If then the doings of those only, who should be prepared and provided with instruments should be permitted to be used in evidence after a proper organization shall have been made, it would aforesaid (sic) a sufficient inducement to an adequate number of young men to prepare themselves for the business.

It may further be considered that the kind of information to which this would be a stimulus, is of great and salutary consequence in the development of the resources and in the internal improvements of our country, and would materially aid in the mechanic arts.

A Meridian is a due north and south line made by celestial observations, totally independent of the magnetic needle. It should be extended ten or twelve chains, at the extremities of which should be fixed durable and immovable monuments.

By setting a compass on this meridian the variation of the needle is readily seen and the difference of variation from year to year detected with no other expense than merely setting a compass on that meridian. After a meridian shall have been made, all lines and surveys made in the vicinity of such meridian should be made with reference thereto, and the compass should be so regulated by the index as to sit the sight vanes on the true meridian when the needle stands at zero, and the same noted in the survey. Or if the compass cannot be so rectified then the difference between the true and magnetic

meridian should be noted in the survey. This with good instruments will produce a uniformity and certainty which can be obtained by no other practical method, and will by degrees lessen the numbers of vexing suits which are constantly growing out of the uncertainty of our present system, or I might rather say, want of system in surveying.


The next subject is that of calculating the quantities and divisions of land. This I am sorry to say is in most instances performed by the assistance of a miniature plan, made perhaps with defective instruments, and for the purpose of calculation the distances are taken from this plan by a scale. In tracts of land bounded on waters, and generally those denominated irregular polygons, this method could scarcely help a guess. The value of our lands is frequently from ten to 100 dollars per acre, and the variation of an acre at the minimum valuation would generally much more than pay for a correct survey.

To correct this evil every surveyor should possess a competent knowledge of geometry, trigonometry and all the general principles of mensuration, including what is termed rectangular surveying and also suitable and correct instruments.

Many instances have come within my knowledge where those who undertook to survey varied from the true quantity from ten to fifteen and sometimes twenty percent, and it has not infrequently happened that the loss to one side or the other occasioned by such error would more than pay for a good set of instruments. To this may be added the frequency of Law suits which grow out of such defective measurement and calculation.

Price of good instruments

Theodolite	400
Leveling instrument.....	100 to 120
Compass	60
Case of Instruments	30 to 50
Chain & other articles	10
	\$600

The expense of forming meridians may be calculated at about one week to each county, including travel, and will require one principal and two assistants." 



Annual Fall Conference

Friday, September 18, 2015 • Killington Grand Conference Center • Killington, Vermont

The Vermont Society of Land Surveyors' 51st Annual Conference at the Killington Grand Hotel will be an abbreviated version of our traditional fall conference. This is a one-day event without exhibits or an evening banquet.

CONFERENCE SCHEDULE

7:00 AM	Registration & Continental Breakfast, Pacing Competition Opens
8:00 AM	Dan Martin, Morning Seminar
12:00 PM	Luncheon & VSLs Business Meeting
1:00 PM	Liam Murphy, Afternoon Seminar
3:00 PM	Pacing Competition Closes
5:00 PM	Conclusion & Announcements

FEE FOR REGISTRATION

Through Sept. 8 After Sept. 8

Members in Good Standing of VSLs or Kindred Associations	\$175.00	\$225.00
Life Member	\$131.25	\$181.25
Non-member	\$225.00	\$275.00
Non-member Technical Staff Attending w/Member	\$131.25	\$181.25



This event has been approved for 8.0 PDH credits by the Vermont Board of Land Surveyors.

Payment will be refunded in full if cancellation is received at least 72 hours prior to the event. Substitutions are allowed. A limited number of hotel rooms is available at a discounted rate until August 18. Call 1-800-282-9955 and mention the VSLs Conference.



Journey to the Moving Center of the Earth: The Evolution of the National Spatial Reference System, 4.0 PDH

Presenter: Dan Martin, Northeast Regional Geodetic Advisor

In 2022, NGS will be replacing the U.S. horizontal and vertical datums (NAD 83 and NAVD 88). This workshop is designed to discuss the need and process for these changes, as well as how that affects surveyors and their access to these datums. Our journey will begin with a discussion of the history of the North American Datum of 1983 and the North American Vertical Datum of 1988, their relationships to other reference frames, and the reasons for their ongoing evolution.

Water Boundaries on Lakes, Ponds and Rivers: Littoral and Riparian Rights and the Public Trust Doctrine, 4.0 PDH

Presenter: Liam Murphy, Partner, Murphy, Sullivan & Kronk

The course will address a number of topics related to water boundaries as they relate to surveyors and their work. We will look at how we define "navigable waters," non-navigable waters, and artificial water bodies (and the boundaries of such waters), including potential changes of the boundaries on Lake Champlain. We'll also review the language that may be contained in deeds and presumptions made based on this language.

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

Name _____

Business _____

Address _____

Email _____

Phone _____

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

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

Card Number _____

Exp. Date _____ Security Code _____

Signature _____

Please return form with payment to: VSLs, Box 248, Montpelier, VT 05601-0248. Questions? kelly@vsls.org



The Cornerpost

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



Sustaining Members

The following is a list of our Sustaining Members. Please be reminded, when you are considering the purchase of services and equipment, that these companies are VSLs members and support the aims and objectives of our Society.

BERNTSEN

PO Box 8670
Madison, WI 53708-8670
800.356.7388
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EASTERN TOPOGRAPHICS

PO Box 947
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www.e-topo.com

INSURE CARE BROKERS

9 Greenhaven Way
Centerport, NY 11721
631.757.7515
www.insurecarebrokers.com

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800.833.9250
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