The Old Dominion Surveyor

A Publication of The Virginia Association of Surveyors, Inc.

“Every man is a debtor to his profession.”

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George Washington Equestrian Monument, Capitol Square
Richmond, Virginia
Photo: Mario Barkley

Vol. 49, No. 1  April 2012
Nicaragua – Way Down South!
David Holland

So we were taking a break at the Virginia Association of Surveyors board meeting during this year’s convention in Williamsburg and I said, “Who wants to fly down to Central America with me? It’s a tour of the cigar manufacturing facilities in Esteli, Nicaragua, hosted by Don Pepin Garcia, owner of My Father’s Cigars! A small group is being put together by George “Shorty” Koebel and Jason Cannata of the Havana Connections cigar stores in Richmond.” Well, Stephen Letchford, Chuck Dunlap, and Bill Moore were all just crazy enough to take me up on it. So, at 7:00 AM Sunday, February 26th we roared down the Richmond airport runway and flew to Atlanta, where we changed planes and four hours later, flew over a mass of lush green mountains and extinct volcanoes, landing in Managua, Nicaragua (elevation 200 feet). After going through customs and retrieving our luggage, we came out of the airport terminal into the bright sunlight, surrounded by tropical plants and palm trees, and boarded our Toyota 20 passenger mini-bus for the two-hour, 90 mile ride up the Pan-American Highway to Esteli, Nicaragua. Our group of nine people had plenty of room to grab a window seat and see the sights. Esteli, at 13 degrees north longitude, sits in a valley approximately 3,000 feet in elevation surrounded by mountains; and like Cuba, it has the most fertile soil in the world along with the perfect climate for growing premium cigar tobacco. Fortunately, John Gonzales, our tour guide, had loaded up plenty of beer, Nicaraguan “Flor de Cana” rum, soda, and top-notch hand-rolled premium cigars for our riding and smoking pleasure. So it was not long before cigar smoke was billowing out the bus windows as we were tooling down the road. The first stop before leaving Managua was lunch at El Pollo de Tip-Top. Tip-Top is Nicaragua’s fast-food answer to Kentucky Fried Chicken. The Colonel could learn a few lessons from Tip-Top. The chicken was juicy and the price was right. Of course, we brought our cold Tona beers in with us to wash it all down (I do not recommend drinking the water in Central America unless it is bottled water). After lunch, it “was back on the bus” and we were on our way to Esteli. Now, some would call the ride exhilarating; others might call it harrowing, but nobody in his right mind would call it boring. Cars and trucks and motorcycles passed each other in a kamikaze race, avoiding stray livestock, chickens, horses, donkeys, and of course, oncoming traffic. At the same time, the bus ride to Esteli was very scenic. After leaving the traffic-congested capital of Nicaragua behind, we drove past Lake Managua with massive rice fields along the way, and then snaked upwards through mountainous terrain passing through small towns and observing roadside salesmen selling fruits, vegetables, fish, iguana meat, parrots, and god knows what else. However, against all odds we arrived safely and checked into the Hotel Los Arcos in the heart of Esteli. We settled in, had dinner (an impressive culinary experience), and socialized that evening on the hotel’s top deck overlooking the colonial city and enjoying the tropical weather, more cigars and rum, and prepared for the following two full days of touring tobacco fields, curing barns, cigar warehouses, the cigar factory headquarters and the cigar rolling factory, and finally the cigar box making plant. The hospitality was wonderful and everyone had a great time taking it all in.

The cigar-making process begins in the tobacco fields, and producing a hand-rolled cigar is a complex art. It is truly an eye-opening experience to see the amount of effort that goes into the manufacturing of a great cigar. So, on day one, after enjoying a fine breakfast in the hotel dining room, we drove out to My Father’s Cigar Factory headquarters (through the heavily guarded gates) where we met our host Don Pepin Garcia, who with his son Jaime has founded a world class cigar dynasty. We all gathered in the board room for the orientation meeting where we had an excellent cup of Nicaraguan coffee.
PRESIDENT’S FORESIGHT

I have chosen to call this column President’s Foresight not because I believe I have an unusual amount of this quality but because what I do have by virtue of being given the opportunity to visit with other state organizations and VAS chapters, I wish to pass along to all of you. To be trusted as the representative for VAS is something I will always be thankful for and I will try to keep the lines of communication open between VAS and our adjoining societies.

I am also thankful for all those who came together to make our 2012 Convention such a success. The meetings, social events and continuing education sessions were all well attended and I think everyone enjoyed being able to get together. I had such a good committee last year that my expectations were high and I was not disappointed. Our affiliates stepped up to support us greatly as always and the attendees came, got a room and took advantage of what was offered. All this added up to a profit and a stronger bottom line for the year and also a stronger sense of what our association is all about.

Thanks also to the Chapter leaders that are truly the core of VAS. It isn’t always convenient to take time to organize meetings, make reports to the board and travel to represent your chapter but this is exactly what it takes. The two way communication between chapter and state board is paramount. The VAS leadership needs to know what the membership is thinking and what is needed at the chapter level and likewise the membership needs to know what the Board is thinking and what initiatives are being contemplated. The key is for everyone to pitch in just a little so no one person has to shoulder to large a portion of the burden and gets burned out.

I would truly like your input on whatever topic is of importance to you whether it is about surveying in general or VAS in particular. Please use e-mail if you can but a phone call is welcome as well.

Will Nash, President
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COVER: George Washington Equestrian Monument was conceived to honor Washington and to glorify Virginia’s contributions to independence. Virginia’s role in the Revolution is depicted by six of her sons surrounding General Washington. Smaller allegorical figures below the six pedestrian statues are inscribed with themes reflecting each patriot’s contribution: Andrew Lewis, Colonial Times; Patrick Henry, Revolution; George Mason, Bill of Rights; Thomas Jefferson, Independence; Thomas Nelson, Finance; and John Marshall, Justice. American sculptor Thomas Crawford designed the monument. The cornerstone was laid in 1850 and the Washington statue was unveiled in 1858. Crawford died in 1857 after completing the statues of Washington, Jefferson, and Henry. His American colleague Randolph Rogers executed the statues of Mason, Marshall, Nelson, and Lewis, as well as the allegorical figures, the last of which was put into place in 1869.

Photo: Mario Barkley
2012 VAS Plat Contest Winners

Subdivision Plats
1. MSA - Jeff Vierrether
2. Land Design Consultants - Kevin Vaughn

ALTA/ACSM
1. MSA - Greg Zoby
2. Shadrach & Associates - Rodney Shadrach

Boundary/Cadastral
1. Richardson Surveying & Mapping - Chip Richardson
2. Thompson & Litton - Charles Forbes, IV

Topographic
1. MSA - Jeff Vierrether
2. Land Design Consultants - Daniel Andrews

Miscellaneous
1. Shadrach & Associates - Rodney Shadrach
2. Land Design Consultants - Kevin Vaughn

Congratulations to all of our winners!

In Memoriam

JOHN M. DUGGAN, JR.

Our condolences to the family of John M. Duggan, Jr. who passed away on July 28, 2011. John was a member of the VAS and the Southern Chapter. He will be missed by his family and friends. We apologize that this notice was not published in the 2011 issue.

STEWART WAYNE BELL

Stewart Bell passed away on January 20, 2012. He founded Bell Laser and Surveying Equipment Company with his wife, Jan, in 1983. He was an affiliate member of the VAS for many years. He will be missed by his family and many friends.
FEMA’s Unacceptable Flood Openings Pose a Huge Risk

Typical air vents will clog with debris during a flood event. A 3” opening must be maintained at all times in accordance with ASCE 24-05 for any flood opening to be accepted.

Structural damage is caused by the build up of hydrostatic pressure when a flood occurs. Standard air ventilation devices that have detachable solid covers are non-compliant because it is assumed the homeowner will cover the vent.

Air vents that can be closed manually are not compliant unless they are “permanently disabled in the open position,” according to FEMA’s TB1. Even if broken into the open position, these vents provide little to no area to allow for debris to pass through.

Find out about these unacceptable openings and more by reading page 19 of FEMA’s Technical Bulletin 1.

Call Virginia local David Sonner, Certified Floodplain Manager today to set up a presentation covering FEMA Regulations

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That’s the question I asked when I first joined VAS shortly after being licensed in 1978.

When I joined VAS, I was aware of NSPS/ACSM, as the company where I was employed at the time occasionally attended the big ACSM show that was held on a regular basis in the early 1970s at the Washington Hilton. I will admit that when I attended these functions, I was really “wowed” by all the big fancy computers and plotters (most of which took up a whole lot of room) and the new survey equipment that had come on the market (think optical plummets, distance measuring devices, etc.). Pretty cool stuff for a guy that was still using a 100-foot steel tape (don’t ask me to “throw it”…) and a 20-second instrument at the time.

However, nowhere in all of this did I ever find any big “push” for membership in our national organization. Likewise, I don’t recall any similar marketing effort by VAS advocating membership in the national organization. Even as the years went by, I still don’t recall much talk about being a member of NSPS/ACSM, except perhaps when a report was given by our NSPS Governor; but, even then, there was no mention of the value of being a member of NSPS/ACSM. Yes, I knew about the “ACSM/ALTA Survey” standards; but, how they came about was never part of the discussion. So, that was my first exposure to our national organization; and, I never really considered joining simply because I didn’t see the value.

Later, when I became more involved with VAS on the state level, I began to hear more and more about NSPS and the work they were doing. And, it became more clear to me that NSPS was, in fact, looking out for all of its members by working to represent the local practicing surveyor on the national level by tracking what was happening on Capitol Hill and other places and working to ensure that proposed legislation and/or government rules would not adversely affect what we do. So, I took the plunge and joined; and, I can say that I’m glad I did, given what has happened over the past couple of years.

Like most of you, I knew that ACSM had some financial issues in the past where NSPS had provided help; and, I was aware that the makeup of ACSM was a bit out of kilter with sort of a “one-third” vote while covering more than 90% of the operational expenses. I personally observed at the 2010 Spring meeting in Phoenix how the NSPS leadership made the tough decision to take the appropriate steps towards self governing; and, I came away believing that our national leadership was strong and had the best interests
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ORIES... Thanks to Attendees, Speakers, Exhibitors, and Sponsors!
The upcoming NSPS meeting in Charlotte, NC is shaping up to be the key definitive re-organization meeting in which we need to make some hard and far-reaching decisions. As you may remember, two years ago this April at the NSPS meeting in Phoenix, a motion was passed for NSPS to begin the withdrawal process from ACSM and go its own way. At that time, NSPS made up approximately 95% of ACSM’s membership. A previous agreement with ACSM required a two-year term of separation for any Member Organization (MO) which could be reversed at any point during that period. Since that point in time, ACSM disbanded (October 2011) and has turned all operational control, assets, and liabilities over to NSPS. GLIS has gone its own way and AAGS is undecided whether to join with NSPS. Thus, NSPS is essentially the sole national organization for land surveyors and associated geospatial professionals. So, the question is, “where do we go from here?”

Actually, the real question asks if the Professional Land Surveying and Geospatial community throughout the United States needs a national organization to support its interests at the national level. The benefits of membership in the NSPS are numerous and include:

- Website
- PBS Show – Spotlight On Surveying
- Weekly Radio Show – With Curt Sumner
- National legislation involvement – LightSquared has been the focus
- CST Program
- Trig-Star Program
- NCEES – Exam Prep
- A surveyor’s voice to national and international entities such as: NGS, USGS, FEMA, Department of the Interior, Bureau of Land Management, NOAA, FIG
- ALTA Standards
- Involvement in rules and regulations in the states
- Student competition program
- Personal Benefits: Insurance Programs (E & O Insurance Discounts), Scholarships, Certification Programs: Hydrographic, Flood Plain Surveyor, Construction Survey Technician
- National Surveyors Week
- Boy Scouts of America Surveying Merit Badge

These programs illustrate the value of membership in the national organization. Unfortunately, the vast majority of surveyors are not convinced that membership in NSPS is worth $225 a year. As a matter of fact, about 1% of the approximately 25,000 surveyors who are members of state survey societies throughout the United States are also members of NSPS. For example, of the 560 dues paying members of the Virginia Association of Surveyors, only 65 members are dues paying members of the NSPS. If this trend continues, we project that NSPS will follow the lead of ACSM and go bankrupt in three years. If that scenario plays out, the land surveying profession as we know it would be irreparably diminished.

However, there is a possible solution to this problem that will be the main topic of discussion at the NSPS meeting in Charlotte, NC scheduled for May 4-6, 2012. The solution is simple, increase the membership in NSPS to include all members of state survey society associations. However, motivating 20,000-25,000 surveyors to ante up an extra $225 per year in dues is not going to happen. Therefore, the only way to make this happen is for NSPS to lower its yearly dues to an acceptable and sustainable amount for both NSPS and VAS (and the other state societies). What if we drastically reduced the NSPS membership dues to $35-40, in return for 100% state society membership? With this idea in mind, we were successful in passing a motion at the Virginia Association of Surveyors convention this past January which reads: “Move that the VAS NSPS Governor be charged with entering into non-binding negotiations with NSPS, its’ successors or assignees, in order to establish a new NSPS/VAS dues structure.” So, let’s play a numbers game. Say we lowered the NSPS dues to $40 for any state society (VAS in this case) that joined NSPS with full state society NSPS membership. VAS currently has 560 regular paying members. So, 560 X $40 = $22,400 in yearly dues that would go to NSPS. As a comparison, we now have approximately 65 NSPS members in Virginia paying NSPS dues of $225 which amounts to NSPS receiving $14,625 yearly from Virginia. Thus, if all 50 state societies successfully enroll all their members in NSPS at membership dues of $40 we would have an average of 25,000 X $40 = $1,000,000 yearly NSPS dues income. That amount of income should be quite sustainable for NSPS, plus we would then have a national membership roll of 25,000 licensed surveyors (strength in numbers).
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VAS PAC
Chuck Dunlap, VAS Legislative Committee and PAC Chair

How many of you know that VAS has a Political Action Committee (PAC)? That’s what I thought... admittedly, I knew we had one, as I saw it listed in the committee reports; however, I never really knew what it did. Well, we do have a PAC; however, it’s been inactive for quite a while. And, it’s certainly no “Super PAC”!

Simply stated, VAS PAC was formed years ago to open a dialogue with our state legislators, as everyone knows from time to time legislation is introduced that could adversely affect our profession; and, if we “know the right people in the right places,” then it can be a bit easier getting our views heard and legislation changed. The previous leadership of VAS felt it important enough that engaging legislators, including providing political contributions, would be a good way of making sure that VAS’s voice was heard during the legislative process. While money was donated to VAS PAC in the past and money was disbursed, I note that it has been quite a while since anything, and I mean anything, was done. Yes, we had a lobbyist; but, during the tough times we’ve endured as of late, having a lobbyist was a luxury we couldn’t afford.

So give me another reason why this might be important? Well, think about this: when was the last time that the Governor selected the person(s) endorsed by VAS membership to serve on the APELSCIDLA Board? Get the point? I don’t advocate for a moment that those selected by the Governor to serve in this very important position aren’t qualified and/or haven’t done a good job; they all have. All I’m pointing out is that this is a good example of the results of our inactivity.

In 2010, I asked Russ Nixon if he would take over this dormant committee and bring it back to life; and, being the great person that he is, he accepted the challenge. Now, I am chairing this committee; and, I believe it important enough to make the general membership aware of the committee, what it does and its goals. In the coming months, VAS PAC will be mobilizing, looking at candidates for state legislative office—either sitting legislators or possibly someone new running for office—that is “friendly” to VAS and perhaps providing them some support. Won’t you give some consideration to supporting your PAC either through time, suggestions of legislators that you may be personally acquainted with and understand what we do, and/or financially? I hope that you would.

Why NSPS, continued from page 6

of the practicing surveyor at the forefront. I continue to hold this belief. Then there was “LightSquared.” Speaking for myself, I had not even heard of LightSquared until about a year ago; and, by the time I did hear of it, it certainly seemed to me as if this was a big train rolling down the tracks. If you valued your life, you better get out of the way because, like it or not, it was coming. When the alarm was raised about the potential GPS interference, I learned that NSPS was already in action, sending out regular email blasts providing updates and encouraging you and me to contact our Federal legislators and keeping the membership informed of what was happening on the testing level, the committee hearing level, and the lobbying level. I won’t state that NSPS personally derailed this train; however, I will say that I believe that they had a hand in derailing the train through their efforts and by working with GPS and other interest groups that would be adversely affected had this train continued down the tracks. I know that individuals could not have done this work; and, it took the efforts of a strong national organization to be heard.

So, I’m glad I’m a NSPS member. Won’t you consider joining?

NSPS Change, continued from page 10

The past two months this dues structure idea has been discussed via e-mail and conference calls among the NSPS governors, officers, and directors throughout the country as to the viability and ramifications of lowering the dues. However, the time to do this is now, while we are in the process of re-organizing NSPS, and I believe the ultimate success or failure of the future of NSPS depends on the outcome. Our own VAS past president and past NSPS Governor, Steve Douty, commented, “This is about bringing ALL of the VAS surveyors into the NSPS fold at a price that is reasonable and sustainable.” However, this idea ultimately requires a commitment from every member of VAS (along with the other state surveying societies). Are you willing to pay an extra $35-$40 in yearly dues to join the NSPS and support the national surveyor’s organization? I hope the answer is YES! As always, I welcome any ideas and comments. You can contact me at my e-mail: hol25@cohenrico.va.us.

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A surveyor is often involved in litigation in the capacity of an expert witness. In the capacity of an expert witness, the surveyor performs three functions. First, the surveyor identifies, introduces, and authenticates documents and other information relevant to the disputed boundary. Second, the surveyor explains the relevancy of certain information and how the information is used to fix the position of the boundary. Third, the surveyor gives a conclusion — an ultimate opinion on the location of boundaries and other related matters. If the surveyor performs the first two functions with competence, the surveyor will establish their credibility with the court. A surveyor that appears credible will have their opinion accepted and relied upon by the judge or jury without necessarily a clear understanding or comprehension of the underlying facts and basis for the surveyor’s opinion.

The client is well served by the attorney that spends some time evaluating the surveyor in their role as an expert. There are several facets of a surveyor and the services performed by the surveyor that the attorney should examine.

One facet to be examined is the surveyor’s ability to handle stress. Some surveyors do not make good experts because of their inability to handle stress. There are numerous surveyors who are competent and respected practitioners, yet do not portray confidence and sagacity in stressful situations. The terror of sitting in the witness chair coupled with the seemingly hostile attention of the attorney and judge often leave these surveyors struggling for simple thoughts, stumbling over words, grasping for answers, spitting out nonsensical responses, shaking uncontrollably, and sweating profusely. Many are the attorneys who left a courthouse convinced not only that the surveyor had botched the survey and testimony but must have committed all the unsolved crimes in the area given their demeanor on the stand. Given the technical nature of surveying and the difficulty in explaining technical testimony, a good demeanor is an important factor to cultivate. In complex and technical testimony such as required for boundary litigation, it is not uncommon for an incompetent surveyor to be judged a more credible witness because of their superior and calm demeanor rather than the the content of their testimony.

An evaluation of the scope and depth of the surveyor’s work should also be performed by the attorney. The root of many deficiencies in professional services can be traced to cost conscious clients coupled with surveyors willing to restrict their services based on a price the client is willing to pay. The purpose stated for the services also plays a role in the quality of the surveying services provided. The mortgage loan inspection used to obtain financing is a markedly different service than the boundary retracement survey used to prepare a description or erect improvements. In this regard surveyors are no different than attorneys. What attorney could honestly admit that they provide the same level of estate planning to the blue-collar worker with $5,000 life savings as compared to the billionaire? What attorney spends the same time on a deed for a $100,000 house as they spend on preparing a complaint starting a $1,000,000 lawsuit? The point is that a survey performed for a timber harvest may not be sufficient to base an opinion on regarding a $60,000 encroachment lawsuit that occurs many years later.

Also to be discovered by the attorney are surveyors who have arrived at an opinion without complete information or information that is not reliable, credible, or cannot be offered into evidence. An opinion formed without gathering or looking at all relevant information is usually determined to be untrustworthy and susceptible to impeachment. This situation is cause for the surprise of many experienced attorneys when they realize that the surveyor did not perform a complete search or limited the measurements to certain corner monuments that were convenient and failed to use others monuments more credible but less convenient.

For the surveyor to have had all the information but use it improperly is no less embarrassing for the attorney attempting to build a case on the testimony of the surveyor. There are numerous cases where the surveyor has testified at some length to the care and accuracy of their research and measurements only to admit they began their services at an unverified point indicated to the surveyor by the client. Equally problematic are the situations where the surveyor has relied entirely upon private records that clearly contradict the valid deeds recorded in the public records. In a few cases, surveyors have relied on procedures or priorities that do not conform to the rules of construction or priority of control established by the courts.

These problems oftentimes arise by oversight or mistake made by otherwise competent surveyors. In a few cases, the surveyor is simply not competent. Few attorneys are aware that licensing surveyors is a relatively recent event in many states and certainly was not foolproof in insuring competence of the individual before licensure. There are numerous surveyors practicing that have never had to take a test or prove their competency in order to obtain their surveyor’s license. When licensing of surveyors began, persons that applied and could show sufficient experience or education where given a license to survey without testing or further verification of qualifications.

Before continuing, it must be stressed that not all surveyors who were licensed without examination or other proof of competency are incompetent surveyors. On the contrary, some of the finest surveyors practicing were licensed in this manner.

There is also wide diversity in surveyor qualifications. These qualifications must also be examined and evaluated for the impact the qualifications may have upon the perceived credibility of the surveyor. While there are many examples to the contrary, the presumption will always be that the more education a person has, the more knowledgeable they will be. There are no mandated formal education standards for surveyors in many states. Experience prior to licensing also varies. Some surveyors have no college education while a few have a Ph.D. Between the two extremes are numerous surveyors with two, four-year, and various graduate degrees. Among surveyors with a college education there is a wide variety of degrees ranging from fine arts to engineering.

Compliance with mandatory standards should not be overlooked in analyzing the surveyor’s services. In many states, surveyors have had to perform according to mandated standards or expressly except all or parts of those standards by agreement with the client. Some surveyors have ignored the standards. Other surveyors have misinterpreted the standards. A few have not understood the standards. Several surveyors were unaware standards existed for many years. Some surveyors have ignored

see Expert Witness, page 14
or excepted certain parts of the standards that could prove critical in formulating a correct opinion or communicating a credible opinion.

In defense of the surveyors who have not studiously adhered to the standards or taken exception to certain parts, adherence to all parts of the standards is to substantially increase the cost of surveying services without necessarily affecting the accuracy of the surveyor’s opinion. For example, the preparation of a complete report alone will often add hundreds of dollars to a typical retracement survey yet may have no effect on the location of the boundaries that were re-established.

The attorney must not only check that the surveyor is competent but must sometimes check those persons that the surveyor relied upon are also competent. Few surveyors do all the work required for a boundary retracement, instead relying on employees to do some or most of the mundane technical aspects of the work. In this regard, surveyors and lawyers share a common weakness as more and more work is delegated to non-professional employees within a firm. Untrained or minimally trained personnel often overlook important information or fail to catch and correct omissions. Compounding the problem is the large number of personnel and projects supervised by some surveyors. As the work-load increases for the licensed individual, review and checks becomes cursory or omitted on many projects. Proper supervision declines. Important pieces of information are undiscovered or the significance overlooked. The result is that in some cases the surveyor whose seal and signature appear on the plan had little to do with the services that the plan represent. As a consequence, the surveyor cannot always say why information was omitted or mistakes not detected.

Finally, the mindset of the surveyor should be explored. The attitude or mindset of a surveyor often has a major impact on the quality of the surveying services and the credibility of the surveyor as an expert. The attitude or mindset refers to what the surveyor understands a surveyor’s responsibility to the client should be and the ethical limitations of professional practice. For example, there are a few surveyors who look upon themselves as technicians. (E.g., “You tell me where to put the corner and I’ll make the measurements between the corner locations you selected.”) At the other end are a few surveyors who believe they have the power and right to determine all matters pertaining to boundaries including title issues. These surveyors feel qualified and authorized to determine boundaries based on acquiescence, estoppel, adverse possession, and other equitable doctrines. (E.g., “The stone wall has been there for 20 years so your boundary is now the wall despite what your records say.”)

In discussing the surveyor and survey services, it would not be fair for the surveyor’s competency as an expert to ride entirely upon the surveyor’s ability, background, and care. More times than good conscience should allow, attorneys have encouraged litigation to begin or continue where the costs of litigation far exceed the value of the area disputed. Similarly, attorneys will attempt to build “castles on sand.” For example, it is not unusual for the extent of the dispute to exceed the ability of evidence to support the claim. Such would be the case where two neighbors are arguing over half a foot (the location of the old oak tree) when the nearest monuments that can be used are the center of a road and a four foot wide rock wall several hundred feet away. In other cases, the technical complexity or reliability of the evidence exceeds any reasonable ability for the typical jurist or jury to understand. The fact is that a vast majority of boundary disputes should and could be handled through mediation by a knowledgeable mediator or presented before a real estate attorney or surveyor acting in the capacity as an arbitrator.

In some boundary disputes that go to litigation, adequate preparation and investigation by the attorney is often lacking. Many surveyors share the experience where they receive a call from an attorney seeking services as an expert a short time before trial. There are also numerous times when the client’s attorney has never attempted to speak to the surveyor until shortly before trial or, in some cases, the day of trial. Also of some frequency are situations where a boundary dispute goes to trial where each side is equally burdened by incompetence be it the surveyor or attorney. Many decisions by courts are based on the lesser of two evils rather than a clear presentation and analysis of the evidence by the so-called experts and attorneys employed by each side.

A common problem that frequently arises for the surveyor who is sought as an expert is the attorney who seeks a “hired gun” or advocate for the client’s position. Ethically, a surveyor is obligated to perform an unbiased analysis to arrive at an opinion on the location of the boundary by a fair and reasonable interpretation of the operative conveyances guided if need be by a proper application of the rules of construction as established by appellate court decisions. Consequently, the surveyor’s responsibility in retracing a boundary should be independent of the client’s needs, wishes, or best interests. The attorney should not influence an expert witness in formulating an opinion (i.e., what to say). The attorney may and should, however, make a great effort to prepare an expert on how to communicate their opinion. This is an important distinction lost among some attorneys. If the surveyor has been allowed to arrive at an unbiased opinion on the location of a boundary, the surveyor is cautioned that a diligent effort is expected from the surveyor to defend that position — to become an advocate for their opinion.

In closing a discussion about employing surveyors in litigation, one option that is often ignored by attorneys is to seek the appointment of a surveyor through the court to locate disputed boundaries — a court appointed surveyor. This option will be discussed in a future article.

In closing, it is my experience that most surveyors would rather earn a fee in some other manner than as an expert witness. While successfully educating the judge or jury can be a rewarding experience, the process is often fraught with stress and difficulties. Explaining a complex and technical analysis within a limited time frame is difficult enough. However, within the confines of a courtroom, the explanation must be done with frequent interruptions brought about by objections, trick questions, poorly worded questions, and under the ministrations of at least one hostile attorney who is trying very hard to make the surveyor or the surveyor’s testimony appear faulty, biased, incomplete, and irrelevant.

Nevertheless, the role of a surveyor as an expert is an important one that must be approached with a motivation to educate, a willingness to communicate effectively, and an acceptance of the difficulty that attenuates the process of giving testimony in litigation.
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Tobacco is obtained from Ecuador. The leaves are sorted for quality, and then taken to the curing barns for natural drying.

Top leaves are picked and generally used for curing tobacco leaves. The resulting ammonia content, which is a natural product of tobacco leaves. The resulting humidity and pressure raise the temperature of the leaves up to 140 degrees or higher, which causes a chemical reaction that produces ammonia. This curing process of removing the ammonia from the tobacco leaves is required to turn tobacco into something people want to smoke.

Workers sorting tobacco

One teaspoon of seed (the size of sand grains) germinated will produce an acre of tobacco. After approximately 60 to 80 days of growth, the lower leaves (seco) will be picked (harvested) and used as filler. Then the middle leaves (viso) are picked and generally used as filler or binder (the binder leaves hold filler bunches together). Finally, the prime top leaves are picked and generally used for filler. The wrapper tobacco is obtained from Ecuador. The leaves are sorted for quality, and then taken to the curing barns for natural drying (about 30 days). There the leaves enter the fermentation stage created by moistening and stacking the leaves in huge bales to remove the ammonia content, which is a natural product of tobacco leaves. The resulting humidity and pressure raise the temperature of the leaves up to 140 degrees or higher, which causes a chemical reaction that produces ammonia. This curing process of removing the ammonia from the tobacco leaves is required to turn tobacco into something people want to smoke.

Finally, the leaves are baled and stored for aging to make ready for the hand rolled long leaf premium cigar making process. We drove to one particular farm that was still being prepared for tobacco production. Along the way, we had to cross a wide stream that required three attempts before we got enough traction on the streambed to make it across. This place was so far out in the boonies that Hernando Cortez probably got lost. Anyway, large rocks had to be removed by hand from the cleared field as a final step prior to planting and growing the tobacco. So, groups of laborers would carry the rocks to the edge of the field where other laborers would use them to build rock fences surrounding the property. I believe I’ll stick with land surveying.

Day two was all about touring the giant factory compound where all the field grown tobacco was eventually delivered for sorting, de-stemming, aging, baling, blending, rolling, and everything else that is required for producing the final product. The parking lot was filled with the workers bicycles and motorcycles (few can afford vehicles). A cigar blend is created by a master blender, and a particular blend is a highly kept secret. Even the individual rollers are allocated their tobacco by numbered lots. The worker takes the leaves and presses them together and places them into the bottom half of a wooden mold. The roller (usually a woman) removes the bunch and wraps it with the wrapper leaf, keeping constant pressure on the bunch and applying a bit of vegetable glue to bond the wrapper leaf together so the cigar won’t unravel. Then supervisors inspect each cigar by hand. The roller will generally roll 250-300 cigars a day. So a factory with 200-300 rollers will produce about 75,000 cigars per day. While we all were observing the rolling process, our host invited us to try our hand at rolling a cigar. We all took turns (with lots of help and instruction) rolling our own cigars. However, believe it or not, our hand-rolled cigars did not pass the quality test! Once the cigars are rolled, they then go to the quality control department where they are inspected and sorted. Finally, after more aging, the cigars are banded and packaged (boxed), and stored for shipping. A typical box of cigars will involve almost 300 individual people from the time the seeds are planted to the time the box is shipped. No wonder these premium cigars cost in the neighborhood of $8.00 to $20.00 a “stick”.

While we were in Esteli, the Nicaraguan retired military personnel were not paid by the government, much to their displeasure, so they shut down the Pan-American Highway outside Managua by torching truck tires and blocking the highway until reparations could be made. As a result, the last night of our trip was shaping up to be a re-routed five-hour journey around the other side of Lake Managua in order to make our 2:00 PM flight. We made plans to leave very early the next morning if the negotiations were unsuccessful. Fortunately, the negotiations were successful and the military was paid. Thus, we were able to return to Managua by way of the re-opened Pan-American Highway with no problems, and flew back to the U.S. after a memorable and fascinating experience.

Workers sorting tobacco

Have a cigar!

David Holland—Master Roller at work

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Calendar of Events for 2012

2012 VAS Board Meetings and Seminars

June 22 & 23 - Mt. Vernon Chapter Hosting, Woodbridge, VA
September 21 & 22 - Shenandoah Chapter Hosting

Exam Dates for Surveyors—
October 26, 2012 for LS and PS Exam; deadline for application and fee June 18, 2012; deadline for exam fee September 7, 2012.

Central Chapter: General Membership Meeting May 15, 2012. Contact Jamie Pruett at jpruett@baydesigngroup.com.

Monticello Chapter: General Membership meeting May 17, 2012 in Staunton; August 16, 2012 in Charlottesville; October 18, 2012, Annual Banquet, Charlottesville. Contact Jeff Dise at jeff@khals.net

Rappahannock Chapter: May 17, 2012 Board of Directors meeting.

Tidewater Chapter: May 17, 2012 General Membership meeting. Contact Eric Garner at eric@wpbsite.com.