HOOSIER SURVEYOR



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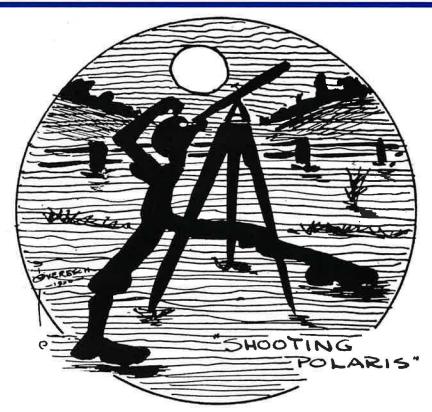
FALL

2003



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"SHOOTING POLARIS' AT GLEN LAKE, MICHIGAN - 1920

Fritz Overesch, student cartoonist, was one of 79 sophomore students who attended Purdue's 1920 Civil Engineering Camp (for seven weeks) which was held at Cedar Springs Lodge on the north side of Glen Lake, Michigan, near Sleeping Bear Dunes. Purdue's summer surveying camps were inaugurated at the Clark County Forest Preserve, IN in 1914 later moving to Glen Lake and Pentwater, MI before using McCormick Creek State Park from 1924-28 and then the permanent Ross Camp near West Lafayette until 1960.

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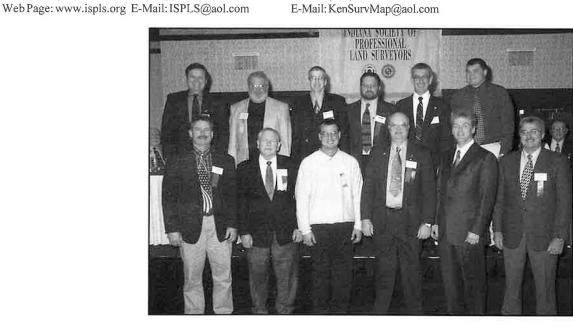
The Hoosier Surveyor is published quarterly by the Indiana Society of Professional Land Surveyors, to inform land surveyors and related professions. government officials, educational institutions, libraries, contractors, suppliers and associated businesses and industries about land surveying affairs.

Articles and columns appearing in this publication do not necessarily reflect the viewpoints of ISPLS or the Hoosier Surveyor staff, but are published as a service to its members, the general public and for the betterment of the surveying profession. No responsibility is assumed for errors, misquotes or deletions as to its contents.

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Masthead/ISPLS Board of Directors 2003 ...

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ISPLS BOARD OF DIRECTORS (2003)

r, first row, Rich Hudson, Valparaiso; Don Bengel, Valparaiso; Bradley Ott, Franklin; Ron Wharry, Frankfort; Frank Ballintyn, New Albany; John Updike, Fort Wayne; second row: Perry Cloyd, Edinburgh; William Clark, Vincennes; Greg Garrison, Boggstown; Anthony Gregory, Hobart; John Stephens, Wabash; Ed Sweetland, Indianapolis.

PRESIDENT'S THOUGHTS

by Greg Garrison, PLS, Boggstown, Indiana



As I write this article the dedication of the Lewis and Clark monument at Clarksville has just concluded. It was a great event, and everyone who attended seemed to really enjoy the event. I would like to thank the Initial Point Chapter for all of their hard work in coordinating the event and presenting such a professional image of surveyors to the general public. The Initial Point Chapter also presented the Long Knife to the Corps of Discovery,

commanded by Captains Lewis and Clark, and they generously allowed me to make the presentation. Mr. Don McDonough of the Clarksville Historical Society accepted the award for the Corps of Discovery.

Also, as a part of the ceremony, Mr. Ross McKay of the National Geodetic Society, NOAA, presented a Jefferson Cup and a Partnership Medal to ISPLS for their thanks for our cooperation and assistance. I was honored to accept on behalf of the society. The cup and medal will be kept in the headquarters office, and will be on display at the booth at the convention. Thank you to all who helped in any way in the event.

As many of you are aware, the Board of Registration is considering several changes to the Indiana Administrative Code. On October 10 a public hearing was held to get comments on the proposed changes. I was encouraged to see the number of people in attendance; the room was standing room only. The board listened to the comments made, and took under advisement what they heard. Several of the comments related to further clarifying the codes. All in all it was a good experience. I would like to thank the Board of Registration for all of the hard work and dedication, and the time they sacrifice to make our profession the best that it can be. I feel that we are fortunate to have such dedicated people willing to serve.

As you read this there are several continuing education opportunities that are forthcoming. Please plan to attend any that you can. A listing of the upcoming seminars is located in this issue.

Also, the convention is just around the corner. The Southwest Chapter has been hard at work and has a wonderful program planned. When the information is delivered to your home, make your plans and reservations as soon as you can. If this year is like the past several, space will be at a premium. You will want to insure that you get to attend the seminars that you want. The convention will prove to be not only an excellent opportunity to renew acquaintances and discuss surveying theories and problems with surveyors, many of which we seldom get the opportunity to see, but also will give us a forum wherein we can get the necessary continuing education credits that we need for renewal of our licenses.

I would also like to ask that you consider contacting your local high schools and present the Trig Star program. We have had considerable success in several areas of the state, and the number of students taking the test has increased in recent years. This competition promotes surveying and maybe creates interest in the

surveying profession in high school students who are deciding we career to pursue. In order to attract the best and the brightest, we need to expose them to our profession early in their decision making process. Please contact the office for information or packets for your area high schools.

I look forward to seeing you all at the convention in January. If you have any comments or concerns concerning ISPLS, please contact me through the office, or feel free to call me at any time.

Lincoln Surveyor Statue Unveiling

A new statue depicting Abraham Lincoln as a surveyor was unveiled in central Illinois on October fourth.

The bronze statue, titled "Abraham Lincoln Deputy County Surveyor," was commissioned by the Illinois Professional Land Surveyors Association (IPLSA) to honor Lincoln's work as a surveyor while living in New Salem, Illinois a small village about 20 miles north of Springfield, Illinois.

Lincoln arrived at New Salem at the age of 22, and while in New Salem the untrained Lincoln tried many jobs, including surveying.

Upon learning of this newcomer's honesty and intelligence, the county surveyor, a Democrat, asked him to become the deputy county surveyor. Lincoln, a member of the Whig Party, took the position on the condition that his political views and activit would not be hindered in any way. He performed about 30 surveys and laid out five towns while holding the position from 1833 to 1837. After leaving New Salem and becoming an attorney in Springfield, Lincoln argued cases before the court that set case law

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Lincoln, Deputy Surveyor Sangamon County, Illinois Dedicated October 4, 2003 Lincoln's New Salem State Historic Site, Petersburg, Illinois

ISPLS BOARD OF DIRECTORS MEETING HIGHLIGHTS

by Dianne Bennett, Executive Director

June 7, 2003

The ISPLS Board of Directors held a meeting on Saturday, June 7, 2003 at headquarters. President Garrison called the meeting to order at 10:00 a.m.. The minutes and treasurers reports were reviewed and approved with revisions.

Staff Activity Report - A written report was submitted for board review. The report is stated under individual topics listed below.

Communication - Membership - The following membership applications were reviewed and approved: Associate - C. Brian Lounsbury; Affiliate - Jimmie Allen.

Membership renewals will go out next week. ISPLS gave out 38 Professional Memberships to newly licensed surveyors this fiscal year.

Intersociety Relations - Perry Cloyd is asking the board for feedback on his ideas that he submitted at the last board meeting.

The Standards committee will be working on proposed legislation to empower the Board of Registration over unlicensed individuals and Firm Certification of Registered Individuals. We will need a good relationship with the architects and engineers for their support. We need a list of societies that we will need regular contact with. We need to start making contact this month or next on the proposed legislation.

Hoosier Surveyor - Any articles for the next issue need to be submitted by July 15th.

Public Information & Marketing - There was discussion regarding purchasing a laptop and projector. The budget commitis working on this.

There was discussion about continuing to get involved in our local schools.

Professional Development - Education - The income/expense from the March, April and May seminars were reviewed. The fall seminar schedule was presented. They are: August 15th - NW Chapter; September 12th - Brown County State Park; October 10th - Plymouth; October 17th - Indianapolis; and November 15th - Vincennes University.

The committee is planning a June 13th meeting. The Northeast Chapter is planning a Gary Kent - Theory of Location seminar scheduled for Saturday, October 18th at IPFW. Perry Cloyd reported on the Hoosier Hill's seminar on Rule 5 Erosion Control.

Scholarships - The committee met on April 11th and conducted the Vincennes University interviews. The scholarship was awarded to two students. Andrew Murray will receive \$2000 and Jason Page will receive \$1000.

Trig-Star - The program for this year is done. They had 33 schools in the state, 22 of which were by Dick Ward. The state winner came from Hobart High School. This is the third year in a row that the state winner came from that school. We need individuals from each chapter (Chapter Trig Star Coordinator) to jump out and take charge of this locally. We would like to set a goal to double the number of schools.

Licensing Review Exam - The next review will be sometime in September.

Government Affairs - Board of Registration - Gary Kent has submitted his name to the governor as a replacement for Ken Curtis on the land surveyors licensing board.

The board of registration is looking at a half dozen minor changes to the rule. One is a clearer definition of theory of location. BOR is attempting to amend the administrative rule to deal with full-time surveyors supervision of the employees. Also, trying to strengthen the authority to practice definition in the administrative code. This speaks to recent issues of non-licensed individuals practice of land surveying. The Standards committee is working on a proposed statute to empower the BOR over non-licensed individuals practice of land surveying. Many other states already have that authority. We will be working with the Architects and Engineers as well on this issue. It was asked if the BOR has been looking at the NCEES proposed Model Law. It was reported that it is preliminarily scheduled for a month or two from now. They are studying it individually until then. Also asked was the BOR discussing carry over hours for continuing education. It was reported that they have discussed it briefly, no action has been taken, however it is planned to be addressed in the future.

NSPS Governor/Great Lakes Council - Don Bengel reported that ballots are out for the "New ACSM". He noted that all MO's are behind this change. The next meeting is in September to try for some national lobbing.

Standards - There was much discussion on the Rule 12 subdivision monumentation issue. A motion was made and passed to write a letter to the BOR indicating that our membership has requested that we look at the issue of subdivision monumentation. We could reach no consensus of what the rule says, we request clarified wording and intent.

Internal Affairs - Budget & Finance - Doug Herendeen passed out the budget for the 2004 convention hosted by the SW Chapter in the amount of \$164,325. Noted was the large increase in the food line item. After discussion a motion was made and passed to approve the convention budget.

Doug noted that \$6000 from last year's budget was for computer and projector. Proposed was a new computer for Dianne from this as well as a projector and screen. The laptop will be in next years budget. After discussion a motion was made and passed to approve the computer, projector and laptop purchase now.

A detailed review of the 2003/2004 budget was presented. A motion was made and passed to approve the operating budget for 2003/2004 as revised.

Wallington Asset Management Portfolio appraisal was presented and reviewed.

Chapters

Northeast Chapter - John Updike reported that Attorney Pat Hass was a guest speaker at the April 29th meeting. The chapter is sponsoring a continuing education seminar on Oct. 18 with Gary Kent on Theory of Location.

Northwest Chapter - The chapter had the highway cleanup in April. A meeting was planned this Thursday with proposed bylaw changes to be consistent with ISPLS Model Chapter By Laws. Also, reported that chapter scholarship interviews are being held today.

...continued page 5

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Minutes

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Southwest Chapter - They met May 13th. Their attendance for this year continues to increase. The chapter moved to approve the

0 scholarship winner for Trig Star. This years recipient was Ms. Amy Eger from Tell City, Indiana. Participants within the chapter will receive certificates and the winner from each school will receive a plaque. The scholarship committee will be reviewing applications for this years scholarship. Two (2) \$750 scholars will be available for 2003/2004 school year. There was discussion on the 2004 ISPLS Convention. A list of questions regarding the 2004 convention is being forwarded to Doug Herendeen. Bill Clark was presented a plaque recognizing his outstanding service as the 2002 ISPLS President. Their next meeting will be September 9th.

Old Business - CICF - The Central Indiana Community Foundation has a new policy that will go into effect by the end of this year. We deposited \$6000 on December 17, 2002. We currently have \$5599 in the fund (market value). By the end of this year we must make a decision on what we want to do with this fund. Three options were presented. After long and detailed discussion a motion was made and passed to spend the fund out by the end of the year.

New Business - Input was asked from ISPLS about a proposed Bachelor's Degree in Land Surveying at Cincinnati State. After discussion it was decided that Bill Clark would contact the school to discuss the request.

Copies of the NCEES questionnaire were made available to the board.

August 23, 2003

The ISPLS Board of Directors held a meeting on Saturday, gust 23, 2003 at headquarters. President Garrison called the eting to order at 10:14 a.m.. The minutes and treasurers reports were reviewed and approved with revisions.

Staff Activity Report - A written report was submitted for board review. The report is stated under individual topics listed below.

Officers Activity Report - Frank Ballintyn shared photos from a Lewis & Clark event. The Initial Point Chapter set a 12" Lewis & Clark commemorative monument donated by NGS at the Falls of Ohio Interpretive Center in Clarksville. They are retracing the 1,000 acre original survey of the Town of Clarksville. NGS is coming in October 14-26th to commemorate the Bicentennial of Lewis & Clark's meeting and beginning of the "Corps of Discovery" of the Northwest USA for President Thomas Jefferson.

Communication - Membership - The following membership applications were reviewed and approved: Professional Member - Jorge Camacho, Mark McMahan, James Mulryan: Associate - Anthony Carson, Tyler Copeland, William Hogstrum, Thomas Lingle, George Lukas, Edward Northrop, Thomas Nugent, Zac Partlow, Kevin Santelik, Jeffrey Woodall; Affiliate - John Miller; Student - Richard Brown, II; Life - Edward Hutson; Affiliate to Associate - John Susong; Student to Associate - Tim Allen, Zachariah Beasley, Adam Beery, Jason Clearwaters, Bradley Eckerle, Hesham Khalil, Brad Kleaving, Jeremy Mehringer, Brandon Parker; Affiliate to Professional Member - Robert Colvin; Professional to Affiliate - Larry Vanosdol.

Final membership renewals went out the first of August and nquent members will be removed from the list the first part of September.

Intersociety Relations - Still asking for feedback from the board

Hoosier Surveyor - Summer issue went out August 14th.

Web Page - The Northwest Chapter is discussing possible links with Thomas Burke for rainfall tables, etc.

Public Information and Marketing - We need to seek out job fairs to promote surveying. Perry Cloyd attended the state GIS conference and thinks we need to have an active GIS presence.

Greg Garrison brought in a sample of an ISPLS cap. A motion was made and passed for Greg to order the caps as presented.

Professional Development - Education - We have the following seminars scheduled: October 10th - Plymouth- Legal Descriptions; October 17th - Indianapolis - Original Government Field Notes; November 7th - Indianapolis, Safety Technician Seminar; November 15th - TR-55, Vincennes University. A motion was made and passed to approve the October 10th and November 7th seminars since they had not been approved by the board yet.

The LS/SIT review will be September 26th & 27th at IUPUI, Indianapolis. A flyer will go out next week. A motion was made and passed to offer the Manual #3 for \$60 with full registration; a "seminar special" for attendees only.

Scholarships - A thank you letter was received from Jason Page, the co-recipient of the Peggy Archer Memorial Scholarship.

Trig-Star - Tony Gregory reported that 565 students took the exam this year in Indiana. Chapters gave \$2,700 savings bond + \$500 cash + \$1000 ISPLS bond. The goal is to get every chapter involved.

Government Affairs - Board of Registration - The proposed rule changes to Rule 12 were passed out. October 10th is the public hearing.

HARN/GIS Monumentation - It was reported that the update to the HARN is happening. INGISI (Indiana GIS Initiative) is trying to get together a statewide GIS. The goal is for every section corner in the state to have an identifier with reference tie info, etc.

County Surveyors - Discussed was a website competition funded by our grant money for high school students to build websites to support the GIS activities. Lorainne Wright with IDEM has been pushing these issues quickly with the GIS committee. Homeland Security is paying for 1 meter color leaf-on ortho-photos for the State of Indiana.

NSPS Governor/Great Lakes Council - The next meeting is the first weekend in October. They are to have a lobby training session.

Standards - Dan Kovert, chair, was complemented on the work he had done on the Rule 12 issues. The board was asked to be prepared to discuss the proposed Rule 12 changes at the September board meeting.

Internal Affairs - Budget & Finance - The Wallington Asset Management Portfolio Appraisal was reviewed.

Nominations - The committee submitted Frank Ballintyn and Ronald Wharry as the nominees for 2004 President Elect.

Chapters - Northwest Chapter - Alex Fabian, President, reported that they will meet September 11th. They just had a US 30 highway cleanup. It was noted that they had a first reading of some substantial changes to the bylaws to be voted on in September.

Northeast Chapter - John Updike reported that the golf outing and picnic was successful. Also, October 18th, is the Gary Kent seminar. They are planning on having a meeting to get their member input regarding proposed Rule 12 changes.

... continued page 7



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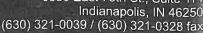
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CST EXAM GOES ONLINE

Certified Survey Technician NSPS-ACSM

You can not take the NSPS/ACSM CST exam through webbased testing administered by Vincennes University (VU) in Vincennes, Indiana. Did you know that the very first online CST exam was conducted at Seminole Community College near Orlando, Florida? The first exam was given to Level 1 examinees in February of 2003. Six brave exam takers rode the shake-down cruise and helped identify problems with the new system. The second online CST exam was given to twenty-four freshman survey students at Vincennes which ran flawlessly. The VU students commented that one of the best features was that they could log out after the first hour and take a break or log back into the exam to continue with the next hour-long session.

The test is administered electronically by VU who provides Internet-based testing for many other programs. They have multiple web servers dedicated to online testing and instruction backed by a center staffed with experienced personnel. VU already uses over 700 online course sites and has a database of 24,000 users for online course access. CST exams are larger and more complex than the typical online exam due to graphics and more questions. VU has done a terrific job of programming and capturing the diagrams built into the exam.

Online tests will be pre-arranged by CST staff for individuals or groups desiring to take an exam. The exam can be taken at any supervised workstation with high speed Internet access and meeting minimum hardware requirements. This technology makes it ssible to give the test to one person at a time from a remote

ation. The greatest benefit to exam takers is the extended availability of the CST Program to locations in their community, including survey offices (other than your own). Other benefits are: immediate exam results at the end of your test, and ease of use.

The Survey Technician Certification Board (STCB) sees the need to move to online testing as costs rise and examinees request test locations closer to their homes. Another responsibility of the STCB is to make the test easy to understand and current with technology. With the VU online system, the STCB will have greater ability to make changes and add new questions.

Currently, paper exams are still administered and conducted through NICET. We will continue our arrangement with NICET as we all online testing centers and "specials". A "special" is a prearranged location having workstations sufficient to deliver the exam, in an environment suitable for testing and a proctor to supervise the testing. In order for the CST program to expand in this direction, we need the help of proctors and companies or community colleges to serve as testing centers. To offer the widest available CST testing, we are looking for help from technicians and professionals. We need to develop a network of coordinators, proctors and testing centers with computer labs at high schools, colleges and local business offices.

Having a proctor and location will help speed up the application process. A proctor is required by NSPS/ACSM to oversee the delivery of the exam and protect its integrity. Any college

ructor, professional engineer, or registered land surveyor can be a proctor for a CST exam. Applicants requesting a paper exam can still take their exam at an existing NICET testing center on the regular schedule. However, if an applicant can suggest a testing center and knows an RLS or PE willing to proctor the exam, an online exam can be administered at a proposed location at a time chosen by the applicant and his/her proctor.

This is significant to the surveying industry. Here's why. Managers can use this program to help survey technicians with their career development. People familiar with the CST Program know that it becomes more than a test by training and development conducted by organizations in preparation for the exam. In studying for the exam, surveying technicians become familiar with the academic knowledge behind the field procedures they follow everyday. By using the stair-step CST Program, the technician moves progressively into more responsible positions. Some hit the books even harder and go after the Fundamentals of Land Surveying Exam. This grass roots movement can be a way to help technicians become professionals.

Now we need help from the surveying profession. Your help will benefit your business and our profession, be it private or government. To help, offer to be a proctor or arrange for your office to serve as a testing center for others. Volunteer to coordinate testing or help with a training program.

Ouestions can be directed to ACSM staff Trish Milburn or Susan Frank at (240) 632-9716 or you may call the CST coordinator in your state or your NSPS Governor.

MINUTES

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Tecumseh Chapter - The chapter met July 17th. Pat Cunningham is President; Roger Fine, Vice President; Tim Beyer is Secretary/ Treasurer. There was 27 members present. Their next meeting is Wednesday next week.

Central Indiana Chapter - Their golf outing is September 26th. They are also having a Safety Technician seminar on November 7th.

Hoosier Hills Chapter - Their next meeting is September 11th. They will also be asking for member feedback regarding the proposed Rule 12 changes.

Initial Point Chapter - Their next meeting is next Wednesday night. They are working on the Lewis & Clark event.

Purdue University Student Chapter - They will meet the first Tuesday on September 2nd.

Old Business - Cincinnati State Articulation - Greg Garrison will contact Art Haase regarding the degree.

The Vincennes University review will be at the board meeting on November 22nd.

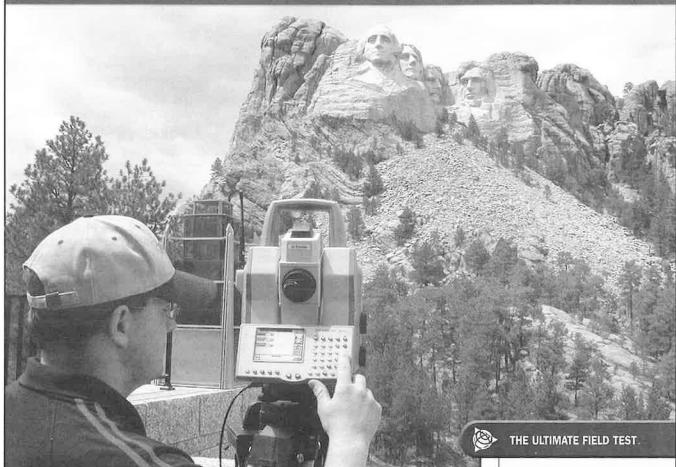
Center of Population - Ron Wharry will get information on the center of population monumentation project for a P/R project.

New Business - Frank Ballintyn wants help from the surveyors to man the surveyors booth at the Lewis & Clark Gala in October 20th - 26th.

Goal Setting - The goal setting will be September 19th at the Holiday Inn Southeast, Indianapolis. The board meeting will follow.

Page 7





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Location: Mount Rushmore National

Memorial in Keystone, South Dakota

Range: 985.036 feet (to George

Measurement time: 7 seconds

Spread of measurements: 0.003 feet

Date: May 23, 2003

Washington's lapel)

Blaming Others

by Deborah Long

It is easy to blame moral poverty on other people. Today's headlines give us plenty of moral failures, from government officials to celebrated athletes to famous entertainers. By blaming others, we feel less responsible and less likely to act ethically ourselves. I call this tendency the "Doctrine of Relative Filth". In other words, "I'm not so bad; there are other people out there that are worse." In my profession-real estate-we always point to used car salespeople as ethical illiterates. Attorneys point to real estate agents. Doctors point to attorneys. And so on.

It's easy to point the fingers of blame at others. What is more difficult is accepting responsibility for some of our profession's ills and taking action to remedy those problems.

It's easy to point the fingers of blame at others.

What can licensees do to take responsibility and create a more ethical workplace and profession? Here are some suggestions:

- 1) Support tougher standards for obtaining professional licenses and for keeping them. Research on moral reasoning skills indicate that ethical judgment is related to education: that is, individuals who have more years of secondary education perform better on tests of ethical judgment. Interestingly, education is much more strongly associated with mature ethical judgment than with chronological age. Getting older does not necessarily mean getting more ethical. Thus efforts to "raise the bar" by requiring more classroom hours in pre- and post-licensing courses may promote more ethical judgment among licensees.
- 2) Promote the discussion of ethics in professional meetings. Discuss and analyze transactions/events where licensees had problems solving ethical problems. Give this discussion special priority in these meetings by providing them early in the agenda. It's also important to make ethics a topic of conversation at the dinner table at home.
- 3) Give recognition for civic contributions and de-emphasize promotions and publicity for financial achievement. Discourage the promotion of "top producer" and "million dollar sales clubs" and similar advertisements which emphasize financial success rather than other important individual or team contributions. Too many licensees are encouraged to be successful only in financial terms. This is particularly true in industries where licensees are compensated on a commission basis. The public is often confused about the meaning of terms such a "million dollar clubs" and become cynical about an industry's perceived obsession with income. Insurance

- companies have done much to restore the public's perception of them by promoting their contributions to charities such as the United Way instead of the number of policies insurance salespeople and their firms sold.
- 4) Support the implementation of a regional or national ethics helpline and ombudsperson for your industry. Early attempts to implement ethics offices resulted in ethics "hotlines" where callers have felt that they were turning in colleagues to regulatory agencies. A "Helpline" provides callers opportunities to talk to neutral but expert individuals who assist callers in sorting through ethical aspects of their problems and refer them to appropriate resources for additional information. The experts would have no vested interest in the outcome of the problems except to help the individual make a mature ethical decision.
- 5) Become an ethical mentor and role model. Of all the suggestions here, this one is the toughest. First, it requires an acknowledgment that we all have the power to influence others and, equally important, our colleagues, our friends, and our children are all learning from our conduct.

Second, the notion of being a role model forces us to be agents of change. As ethicist Thomas Lickona points out, having ethical will is a critical element in ethical conduct. Individuals who have this attitude believe that they can make a difference in the world around them. Sadly, many of us believe that what we do and what we say makes no difference at all.

The authors of Chicken Soup for the Soul advise us otherwise. They tell the story of a tourist walking along a starlit beach. The tide is out, and many starfish at the beach's edge are exposed and dying. Coming from the opposite direction, another tourist is walking along the shore's edge, periodically stooping over, picking up a starfish and flinging it back into the sea. As the two tourists approach each other, the first says, "What are you doing? There must be a million starfish here. You can't throw them all back into the sea. You can't save them all. You can't possible make a difference." The second tourist stops, bends over, picks up yet another starfish and throws it into the ocean and says. "Made a difference to that one."

Our ethical conduct may not save the world, nor may it even save a small nation, but our ethical conduct and our willingness to be an example of moral courage and ethical will to others. may make a profound difference in the people with whom we work. After all, we do not learn our ethics from ethics teachers. We learn our ethics from people who have influence over us.

Reprinted from the March 2002 issue of The Empire State Surveyor and The Kansas Surveyor, November 2002

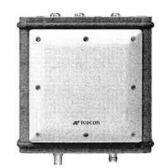
Hoosier Surveyor 30-2 Page 9





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ARBITRATING A BOUNDARY

by Knud Hermansen, PLS, PE, Ph.D., Esq.

while written as a single arbitration events, the events described actually a compendium of experiences from several arbitrations engaged in by the author.)

The sun was just barely above the eastern horizon as I drove up to the two surveyors parked along the road. They were leaning against their vehicles and talking to each other. They were waiting for me. Today I am an arbitrator or arbiter. I am a judge appointed not by election or governor but by the parties themselves. My powers are derived from the agreement between the parties supplemented by statute and common sense. I embarked upon this arbitration approximately three weeks ago when I received a call from one of the attorneys. The attorneys were inexperienced with arbitration but willing to let their clients give arbitration a try. I sent the attorneys a sample arbitration agreement with an explanation on what to consider. The most important task for an attorney willing to involve their client in arbitration is to craft a solid arbitration agreement. Writing an arbitration agreement is a story by itself.

I greeted the surveyors warmly. I counted both of them as old acquaintances and friends. Both surveyors had a reputation for quality work. We were meeting at this early hour to perform the view required by the arbitration agreement. In this case, the landowners had been locked in heated litigation with all the power of a law firm to fight for them. I felt I was safe at this twilight hour. Given the poor light available at dawn, the chance of a landowner mistakenly shooting their own surveyor was too great for them to take a chance shooting at a stranger walking with their surveyor.

Prior to this day, the attorneys had decided that the early morning who should be left to the surveyors and arbiter alone. I must admit that I had eagerly anticipated watching attorneys dressed in their dresses or suits scrambling through the mud and pucker brush to look at pins, pipe, fences, walls, trees, etc. I was disappointed - there would be no wrecks at the races today. As I applied a liberal dose of bug repellant to hold off the mosquitoes and black flies that were expected to stir soon, I couldn't imagine why the attorneys would willingly forego the experience of watching the sun rise over the fields, especially if they could get paid to do so.

My combination as both a lawyer and surveyor has placed me in much demand for performing this type of service. (Though, in truth, any competent surveyor could easily fulfill the role as arbiter in boundary disputes and often do.) This case, like so many I had been involved with, had been waiting for trial for over four years. Continuances and a long court docket had caused an untold number of delays. Lengthy delays are common in civil litigation. In this case, the parties, out of patience and money, were finally willing to try some alternative to litigation. The path from death threats, to litigation, to settlement or arbitration is often simply a question of how long the clients can withstand being beaten on their heads with their own wallets. (I have never been able to determine if it is the abuse of the landowner by the process itself or the fast and steady weight loss of the wallet that is most compelling.)

On this day I believe the three of us were, for the most part, content to be doing this part of the arbitration by ourselves without lowners or attorneys present. We can speak in "surveyeze" without the blank looks from laypersons or questions from counsel. We can freely use technical language that intermingles terms like

"traverse," "rods", "scribings," "N30°W", etc. without causing confusion. A corner stone that resides some five feet from the spot where meticulous protraction of the record measurement would otherwise place the corner is easily put aside with the mention of the original surveyor's name. Experience has taught us what measurement precision can be expected from the ancient surveyor who placed the stone and whose reputation is familiar to all surveyors.

I walked around the property, sometimes joking, but more often in serious contemplation as each surveyor pointed out and described the evidence they found and what weight it should be given. Finally, with the time of the hearing fast approaching, the view and casual conversations were ended and we drove our vehicles to the lawyer's office where the hearing would be held.

Waiting for us outside the attorney's office was one of the lawyers with their client, along with a couple of witnesses. I could tell how they greeted the one surveyor and glared a the other surveyor which one of the two litigants I was seeing for the first time. Inside was the other landowner with his lawyer and witnesses. Needless to say, there wasn't a lot of hugging and kissing between the two groups.

When there is a crowd like the one present at this arbitration hearing, I start by getting the surveyors and lawyers off by ourselves and going through the rules that aren't in the arbitration agreement. I tell them that the first witnesses I like to hear from are the surveyors. There are several reasons for this. First, the surveyors introduce the plats and other documents that the other witnesses will often use. Second, they usually provide the most compelling evidence in the most logical format. Third, they are getting paid by the hour. I can save the landowners money by getting the surveyors out of the hearing and back to other business as soon as possible. Most lawyers and surveyors aren't familiar with arbitration so I take this opportunity to point out that the rules of civil procedure and evidence don't apply. The lawyers can make all the objections they want but I'll usually let the story go on especially, as in this case, it is rumored one litigantlandowner attempted to murder the other. I know that such testimony is totally irrelevant in locating the boundary but this testimony is what the other witnesses appreciate the most. I also tell the attorneys that they are free to consult with their client's surveyor during the questioning of the other surveyor. The attorney can even let one surveyor question the other. If one surveyor questions the other, I don't get a numb question like: "Could you please explain to the arbiter why you feel the orange post marked 'W.B. 1951,' is a corner monument set by William Bigelow in 1951?"

After the meeting with the attorneys and surveyors, we all file back to the reception area to pick up the litigant-landowners and witnesses before heading to the conference room where the hearing will take place. The look of relief on the receptionist as the people file out of the reception area tells me the two litigant-landowners weren't attempting to kiss and make up while we were gone. There is a heavy run on the coffee pot at this time.

We enter the conference room. The conference room is big. Clearly this was meant to stand as a status symbol for the law firm. People living in a mobile home don't have this much room. Naturally, each side of the litigation occupies their own side of the conference room. The conference room contains more area than the litigant-

... continued Page 17

PROGRAM SCHEDULE 2004 ISPLS CONVENTION

Marriott Downtown Hotel, Indianapolis (January 15-17, 2004)

Thursday, January 15, 2004

ALTA SURVEYS

by Gary Kent, PLS

(3 CEH - Elective Credit)

This workshop has the overall objective of helping persons within the surveying profession and the title, legal and real estate communities more fully understand and, therefore, better deal with ALTA/ACSM Land Title Surveys.

RULE 10 - RULES OF PROFESSIONAL CONDUCT

by Ross Holloway, PE-PLS (3 CEH -Mandatory Credit) Pending

THE ESTABLISHMENT OF THE INITIAL POINT IN INDIANA

by Kenneth Anderson, PLS

(3 CEH Elective Credit)

The objective of the seminar is to gain an understanding of the Original Government survey by Ebenezer Buckingham, Jr. in September 1805 when he established the Initial Point for the 2nd Principal Meridian. This will include a review of the field notes and plats of survey for the area around the Initial Point. Also, to show the relationship of the original survey to the current surveying situation.

ROAD LAYOUT & CONSTRUCTION STAKEOUT

by Scott Fisher

(3 CEH Elective Credit) Pending

Page 12

This workshop is designed to help the user of TDS Windows CE data collectors become familiar with the more advanced data collector operations. The course is a classroom setting, using data collector emulation to teach field functions. End users are encouraged to bring their data collectors for hands on experience. The intended audience is beginning to basic TDS data collector users or prospective TDS data collector users.

LAS VEGAS STYLE CASINO PARTY

The Las Vegas Style Casino Party will be held from 7:00 p.m. until 10:00 p.m. At the conclusion of the Party an auction will be held with your winnings to bid on door prizes.

Friday, January 16, 2004

THEORY OF LOCATION IN INDIANA CASE LAW-PART II

by Gary Kent, PLS

(6 CEH Mandatory Credit)

After completing this session, attendees will be versed on the basics of interpreting deeds and performing surveys based on those interpretations as outlined in Indiana Case Law. Attendees will be introduced to statute law and Indiana common law rules that outline the principles of boundary location and will learn how to apply those rules in preparing a defensible survey.

BASIC HYDROLOGY

by Jeff Healy

(6 CEH Elective Credit)

The student will learn to evaluate/determine an adequate drainage outlet for a site/project development. To delineate contributing drainage areas. To apply appropriate procedures to determine runoff and peak discharge for both pre-development and proposed development conditions. To calculate required stormwater det tion requirements for a proposed development. An introduction to stomwater quality and phase II considerations.

STATE PLANE COORDINATES & DATUM TRANSFORMATION

by David Doyle

(6 CEH Elective Credit) Pending

YOUR SURVEYING BUSINESS: WAYS TO MAKE IT BETTER

Richard Elgin, PhD, PLS, PE

(4 CEH Elective Credit)

A practical seminar on improving the surveyor's office and business practices. Pitfalls, traps, good and bad practices and recommendations for the following (and more) will be presented: Firm's public relations activities, progressing the survey through the office efficiently, marketing, setting business goals, collections, surveying standards, appropriate survey research, limiting liability, the ALTA/ACSM survey, surveyor's certification, notes for the plat of survey, implied warranties, making the survey defendable, the surveying business of the future, the Top Twenty keys to a successful surveying business. The seminar is supplemented with handout material such as example surveyor's notes for plats and example letters. This seminar is taught by a surveying practitioner with experience defending claims against surveyors.

GETTING INTO GIS WITHOUT GOING BROKE

by Rebecca Somers

(4 CEH Elective Credit)

Participants will understand GIS technology and its impacts and opportunities for surveying and professional services firms. They will also learn how to implement the technology and perform GIS jobs successfully.

TEGISTRATION ACT

oy E.R. Gray, III, PLS

(3 CEH Mandatory Credit)

The objective of the seminar is to provide a review of and a forum for the analysis of Indiana Law requirements of registration, authority, and possible disciplinary action as it relates to Land Surveyors in the State of Indiana.

NATIONAL TRENDS IN SURVEYING (PANEL DISCUSSION)

Panel: Tony Gregory, Rebecca Somers, Richard Elgin, David Doyle, Gary Kent and Stephen Johnson

(2 CEH Elective Credit)

The objective is to provide an open forum to discuss some of the major issues surveyors are facing with a panel of nationally known leaders in these areas: GIS; Business; ALTA/ACSM; and Education.

Saturday, January 17, 2004

RULE 12

by Mike Falk, PE, PLS (6 CEH Mandatory Credit)

The objective of the workshop is to review long standing objectives of Indiana's Rule 12 and to update all participants on recent isions to Rule 12. This seminar is intended to serve as an overview of the rules pertaining to the Competent Practice of Land Surveying, as defined in 865 IAC 1-12-1 thru 865 IAC 1-12-29.

BASIC HYDRAULICS

by Jeff Healy

(6 CEH Elective Credit)

The student will learn to apply appropriate formulae and procedures to determine flow depths and velocities for sheet flow; gutter flow; orifice and weir flow; pipe flow (both free flow and surcharged (intro.); channel flow - normal, steady state; to proportion restricted detention basin outlets to meet ordinance requirements.

NGS AND THE COUNTY SURVEYOR

by David Doyle

(2 CEH Elective Credit) Pending

THE PROFESSIONAL RELATIONSHIP

by John Chappell,

(2 CEH Elective Credit)

The seminar objective is to explore the professional relationship between attorney and surveyors including services which surveyors can perform without engaging in the unauthorized practice of law. In addition, discuss surveyors serving as witnesses at trials.

ESTABLISHING AND USING A CORS

by Mark Eckl

(4 CEH Elective Credit)

Introduce using CORS for persons using Global Positioning Systems (GPS) data for post processing applications.

SURVEYORS ROLE IN LOCAL GOVERNMENT & MULTIPURPOSE GIS

by Rebecca Somers

(4 CEH Elective Credit)

The participants will understand how local government and multipurpose GIS's are implemented and how surveyors can contribute to such efforts.

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E & O WITH LIABILITY ISSUES

by Agency Associates

(2 CEH Elective Credit) Pending

ISPLS ANNUAL BUSINESS MEETING

SPOUSE PROGRAM

Program packet will be mailed separately.

Hoosier Surveyor 30-2

Hoosier Surveyor 30-2

INDIANA'S INITIAL POINT - PART IV

by Kenneth W. Anderson, PLS, Bedford, Indiana

The Initial Point for Indiana is a few miles south of Paoli, Indiana, where a corner stone marks the intersection of the Base Line and the 2nd Principal Meridian of the government land surveys. For nearly two hundred years much of the land in the entire state of Indiana has been described by either a direct or indirect reference to this beginning point. During this time period it has served its purpose and hardly any changes have been made to the overall surveying system laid out by the government surveyors in the early 1800's.

So, now that the two hundred year anniversary is quickly approaching, September 1, 2005, what should we look forward to that will relate to the Initial Point? The point has been taken care of and preserved in the past and the need for that will likely continue. What should the surveying community, as a group or individuals, do at or for the point in the future? Might there be a change in the status of the land, which now is owned by the United States of America on all sides? Some say that with our current capability to determine a finite point on the ground surface, there is no need to be concerned about the point's physical location. Others, however, will say that they want to see it "with their own two eyes". Does the initial point have any attraction for the public at large so it can be considered a tourist attraction? If the State of Indiana or Orange County express interest in being connected with the point, what might their role be?

Perhaps the answer to such questions can be best understood by first giving a brief synopsis of what the current situation is at the point. As I noted at the end of the last article there has been little change at the point for about twenty years. The picture is something like this: A stone with S-31 marked on top and flush with the ground surface sits at the point. A three and one-half foot tall wood log triangular structure encloses the actual point and offers some protection to the stone. The ground is fairly level by the point and the site is about twenty-five feet north and east of the creek which drains from the northwest to the southeast. It is in a wooded drainage of hardwood timber with the tree sizes ranging from young saplings to older mature trees. Within one hundred feet of the point, the ground level starts to rise to the ridges which lay northeasterly and southwesterly of the existing creek. From the log structure a small trail leads northerly up the slope three hundred feet or so to the parking lot or loop. The trails base is gravel/stone, and wood frame steps were built in many years ago. They deteriorated over the years and were recently removed. In addition there has been erosion of the stone base, and it needs some new material to keep the trail in a usable state. The parking area is on a level area at the head of the trail and is a loop with a central grassy area. From the parking area the access road runs easterly about one-third mile to Indiana State Highway #37. A historical marker with information about the point is at the junction of the highway and access road. The large limestone memorial monument, that was desecrated and sat at the west end of the parking loop, has been removed. There are no informational signs by the stone and wood triangular fence. All of this is on publicly owned land. It does not say, Initial Point, on the Indiana State Highway map, but it is shown on the topographical maps, the Hoosier National Forest map, and some of the Orange County maps.

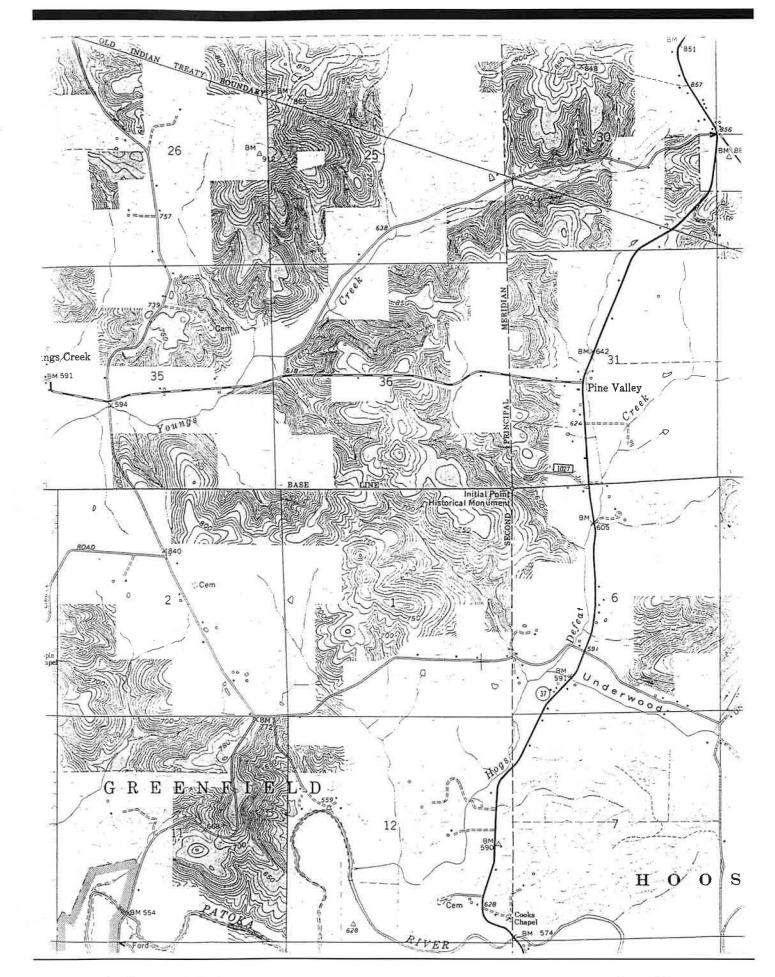
Please note that it was only during the last forty years the the Initial Point stone and site around it has had the protection a care of the surveying organizations and government agencies. Prior to that it was cared for by the private land owners and perhaps an occasional county surveyor that took interest in it. As I mentioned in one of the earlier articles, we are indebted to the Tarr family as they were the landowners for a hundred years or so. It has been a long term community effort.

With the two hundred year anniversary only a couple years away, it is time to start thinking about what should be done in September of 2005. So far there have been only a few comments about a acknowledgment or celebration of some sort. The surveying organizations in the state and chapter levels need to express their feelings on the subject. The basic question is: should some events be planned for the period or should we allow it to quietly pass by without notice? Since Indiana was done early in the government land surveys and since our Initial Point's date is relatively early, perhaps the states north and west of Indiana will take note of what we do for our two hundred year anniversary. We could set a precedent with what ever action or non-action that we choose. The Indiana Historical Landmarks, Inc. will discuss this at the next meeting.

The survival of the point at its physical location is contingent on two things. One is the ownership of the land and the other is Mother Nature, mainly flood waters. The land is presently owned by the United States of America and is within the boundaries of the Hoosier National Forest. This would indicate that the land own ship will stay the way it is a couple generations or more. However, keep in mind that government land is occasionally sold or traded away. Also, this point is more of a historical landmark or monument, and that is not really the mission of the National Forest system. Only in the future will people know what changes have occurred. It does not seem likely that the land would go back into private ownership in the future even if other changes do occur. Mother Nature, however, could be more unpredictable. A creek flows just a few feet from the stone, and a 100-year flood or a 500year flood may happen. If so, who can say if the erosion would wash away the stone's resting place or cut a new channel in some other part of the drainage. Neither the possibility of land ownership change or a major flood appear to be eminent at this time, but they are possible actions.

With the surveying profession's current ability to determine a location on the ground and come back two or three years later and find the same point, with or without a existing monument, why should we be concerned with the Initial Point? Is there a need to have a physical monument at the point or is it good enough to have that location on paper and recited as a coordinate value? The value of the Initial Point, as I see it, is that it is part of our heritage. Some of us go to see the point or read about it because of the past actions there and to a lesser degree to see what it looks like. Many surveyors have a interest in history, both in surveying and other things, but some of our profession wish to look only to the future. The India: Historical Landmarks, Inc. committee has been involved with point for nearly forty years and it is time to review what the goals

... continued page 17



Page 14 Hoosier Surveyor 30-2 Hoosier Surveyor 30-2 Page 15



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Initial Point ... continued from Page 14

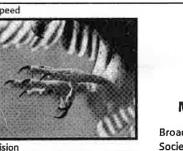
for the future should be. Their charter dictates that they look both in the past and to the future.

In the past there has been only limited involvement of the state or county in this area. Over the years some individuals in Orange County have helped preserve the point and some of the local histories of the county mention it. References in survey books mention the point, too, as well as some books that deal with county or state history. Other than that I am not aware of any written text that delves into either the location or what the Initial Point really is.

IN SUMMARY: In these four articles I have pointed out some of the events that happened at or near the Initial Point. The intent of this information was to put in one place the series of events that took place and to chronologically list the actions over the last two hundred years. In all probability, there are things that I am unaware of and would have added to the story if included. In the Land Surveying community this is one of our points of interest. I believe that we need to look to the history of our profession as well as the future. Both as individuals and as a profession, we need to decide what our role will be in future times for the Initial Point.

NOTE: During the year (2003) that these articles were being written, the oldest member of the Indiana Historical Landmarks, Inc. committee, Nelson Prall, passed on at age 97. He had been a member of the committee from the time it was formed in 1965. I asked him once when he first went to the Initial Point and he could not recall directly, but he thought it was some time in the 1930's. His contribution to the committee and to the Initial Point is duly noted.

OUESTIONS & COMMENTS: If someone has questions or comments about the Initial Point, they are welcome. KWA.











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Arbitrating ... continued from Page 11

landowner are fighting over. After listening to University faculty describe their "love and peace" vision of life for 15 years, I'm half tempted to ask for a big group hug to settle the whole affair. According to faculty, people can be persuaded to put aside their differences and to love one another. I worked for a living before teaching so I know better than to believe it. Four years in the Marines has taught me that ill-will toward another can only be settled by combat. The only difference between military training and legal training is the former emphasizes that victory is measured by the amount of blood from the opponent while the later determines the victor by the amount of money squeezed from the opponent. The strategies taught by the Marines and law school were pretty much the same. (Ambush the other side. Gain fire superiority, cut off supplies, etc.) Legal and military training did not include group hugs or sessions on how to understand the other person's feelings while denying your own.

I start the arbitration hearing by introducing myself. I can tell that some of the people present expected someone in a robe or at least a suit and tie. Of course, I'm wearing a polo shirt with a tint of mud on the front resulting from climbing under a barbed wire fence. I'm still trying to stop the bleeding on my arm where a blackberry bush ripped a gash in my skin less than an hour previously. (I usually stop bleeding quickly but the insect repellent was causing this cut to burn and bleed.) My position on wearing a suit is simple. You can have a view or a coat and tie but not both within the same hours.

I have conducted hearings where the parties agreed only the surveyors and attorneys would be present at the hearing. The only difference between that small hearing and meeting with the same people in a bar is that beer is lacking in the former while plentiful in the latter. Conversation is pretty informal where the landowners are not present. There is quite a crowd at this hearing, including the landowners. As a general rule, when the landowners are present, I mirror the decorum of the courtroom. I can't guarantee they'll be happy with the outcome but I can go a long way toward making them feel they've been fairly heard and had their day in court.

The first witness is one of the surveyors I've spent the last two hours talking to at the view. I've got to be careful to address him as "Mr.." and not his first name. I try to look solemn as I put him under oath even though we both know he can lie with a straight face. Not more than an hour ago I suspect he doubled the size of the trout he caught on his last fishing trip when recounting the details of the trip to me. He begins his testimony. It's not long before both lawyers are thoroughly lost. They have to start asking questions in the guise of helping me understand what they don't. In truth, I can't hold the lawyers at fault. You can hardly blame the attorney for asking a question when the surveyor identifies a corner as the one where I slipped on the dew laden grass and fell on my ass. Such testimony tends to limit the number of people comprehending the location of the corner to exactly three people in the room. Of course, there are some questions from legal counsel that give surveyors in the room the opportunity to look bewildered. "Could you explain to the arbiter why you didn't question the possibility of the monument being moved? Let me remind you that you previously stated that you measured 3,234.45 feet between the monuments you found while the deed clearly calls for 3,233.82 feet." Questions like that cause the surveyor to stare at

... continued Page 23

COMPLETED CAREERS

Nelson L. Prall, 97, P.L.S., P.E. ISPLS Charter Member and Past President (1963)

Nelson L. Prall, 97, PLS and PE, of Bedford, IN died July 29, 2003 from injuries sustained in a traffic accident on Ind. 37 about two miles north of Mitchell. Nelson was born in Henryville in Clark County, IN on July 9, 1906. He married Bertha Mahan on February 3, 1933 and she died July 1, 1984. He held degrees in both civil engineering and law. He, besides being a land surveyor, engineer, and lawyer, was a lobbyist and world traveler, who had a passion for golf and tennis. In fact, he was returning from playing golf when the accident occurred.

He originally went to Lawrence County in 1930 as a member of the state highway team surveying for U.S. 50 and Ind. 54. In the depression years he worked for the Civilian Conservation Corps (CCC) at the Clark State Forest near Henryville. Later he worked for the U.S. Forest Service, helping type the soils of Orange, Crawford, and Perry counties for the Hoosier National Forest. Nelson opened a land survey office in Bedford in 1950, alternating his survey work between Lawrence and Clark counties. He practiced until 1990, when he retired. He served as Lawrence County Surveyor from 1961 to 1965 and 1969 to 1971.

He was a member of the Henryville Masonic Lodge, Indiana State Bar Association, Indiana Society of Professional Engineers, and the Indiana Society of Professional Land Surveyors where he was a charter member and past president (1963). He served many years as chairman of the ISPE and ISPLS Legislative Committees and wrote several bills defining the duties of land surveyors which are still on the books today. He also was a lobbyist for both associations. He attended night school at the University of Louisville and earned his law degree, becoming an attorney in 1959. He was also very active in the Indiana Historical Landmarks, Inc. and its plans for preserving Indiana's Initial Point.

Nelson is survived by two sons: Eric Prall of Harker Heights, Texas and Daniel Prall of Newark, Delaware; five grandchildren and ten great-grandchildren. Funeral services were conducted on August 2 in Bedford and internment was at the Mt. Zion Cemetery in Henryville.

It is interesting to recall some unique interests of Nelson, as recently remembered in the Bedford *Times-Mail* newspaper based on a previous interview with him:

An avid traveler, Prall visited every <u>county</u> in the United States.

"When I was a junior in high school, I decided I would keep a record of every place I had been. Whenever I would travel, I would take a round trip instead of going direct so I could see more counties. When the kids were married, they lived away. When I went to visit them, I took a roundabout trip to get there."

Prall also visited all continents with the exception of Antarctica.

His fascination with statistics and figures led him to predict the outcome of high school basketball games. The "Prall System" forecast the winners and margins of victory for boys and girls high school tournament games.

"I love basketball and this keeps my mind alert. The most fun

George A. Crowder, 86, P.L.S., P.E., ISPLS Charter Member and Past President (1958, 5

George A. Crowder, 86, PLS and PE, of Columbus, IN died on September 30, 2003 at the Columbus Health and Rehabilitation Center. George was born in Harris, GA November 16, 1916. He was a 1941 graduate of Georgia Tech with a degree in civil engineering and did graduate work at the U.S. Naval Academy. He was an ensign in the Navy and served as a weather forecaster on Attu Island in Alaska during World War II.

He worked for Texas Eastern Transmission Corp. until 1951 when he became city engineer in Seymour and then in Columbus in 1953. He was co-founder of Sieco Engineering in 1956 and in 1960 founded Crowder & Associates, now known as Crowder & Darnall, Inc. He was elected Bartholomew County Surveyor in 1964, had been city engineer at Kokomo and county engineer for Bartholomew and Fountain counties. He did extensive work designing residential subdivisions as well as numerous bridges in southern Indiana.

He was a charter member and past president (1958, 59) of the Indiana Society of Professional Land Surveyors and past president of the James B. Eads Chapter of the Indiana Society of Professional Engineers. He had received the distinguished service award from the ISPLS and was a member of Hope Masonic Lodge and First Baptist Church where he was a trustee and served on the building committees. He enjoyed fishing and story-telling

He married Martha Moncreif September 16, 1940 (died is October 1988) and Virginia "Pat" Wilson September 30, 198 Survivors include his second wife; a son, Brian Scott of Columbus; daughters, Susan Carter and Joan Sturgeon, both of Columbus, Jeanne Kern of Hope and Jan Barber of Knoxville, Tenn.; and thirteen grandchildren and seven great grandchildren.

Memorial services (and military graveside rites) were conducted October 2 at the First Baptist Church with internment in the Flat Rock Baptist Cemetery. Memorials may be made to First Baptist Church Foundation or ISPLS Scholarship Fund.

for me is seeing if my predictions come out right."

Prall had been a season ticket holder at Bedford High School and then BNL since 1945. Prall twice shot 18-hole scores of 76 at Otis Park and carded a nine-hole score of 54 when he was 94.

Joe Jacobi, Sr. of Clarksville (ISPLS past president - 1966) has recently stated: "I met Nelson about 1955 when I began my survey practice. It was always a pleasure to follow his survey work. You could always depend on it and his precision was extraordinary in a time when land was cheap and surveys were often careless."

Editors note:

Indiana land surveyors are indeed indebted to these dedicated land surveyors who played major roles in formulating the profesion as we know it today. It was a pleasure to work with them in the years past. Ken Curtis, editor.

County Surveyors Association

by John Stephens, PLS, Wabash

JTURE EVENTS

Stormwater Drainage Conference

February 24, 2004 Purdue University West Lafayette, IN

Purdue Road School
March 10-11, 2004
Memorial Union & Stewart Center
Purdue University
West Lafayette, IN

ASSOCIATION OF INDIANA COUNTIES 2003 FALL CONFERENCE

Congratulations to David Gaston, Hendricks County Surveyor for receiving the 2003 AIC County Surveyor of the Year award. Dave has been the Secretary-Treasurer for the County Surveyor's Association for the past several years and has represented the County Surveyors on the GIS/LIS Committee this past year.

GIS/LIS COMMITTEE UPDATE

The committee has been meeting monthly and is actively pursuing common web site access for section corners and benchmark information. CSA representatives include Dave Gaston (Hendricks County Surveyor), Steve Murray (Tippecanoe County Surveyor), and David Smoll (Hancock County Surveyor). ISPLS HARN/GIS committee chairman Tom Mahon and committee member Perry Cloyd have been representing ISPLS and the County Surveyors.

Section corner perpetuation has been a primary mission of both the County Surveyors Association and ISPLS. There has been a multitude of county information compiled to date and the recent committee discussions have been centered on the digital format roadmap, which could be implemented statewide. There is an ISPLS grant application in progress to be used by the County Surveyors Association in helping to fund a portion of the section corner information gathering.

LEGISLATION

HB 1798, which includes the county stormwater utility legislation, was vetoed earlier this year and an attempt to override the veto will take place this legislative session. It is imperative that all county surveyors get involved with this legislation; it will have an impact on your county in the future if not at the present time.

There is proposed legislation being discussed by Indiana Department of Natural Resources and the County Surveyors Association

ith regard to the drainage code. Officers and members of the county Surveyors Association have been attending the most recent meetings and expressed various points of view from the surveyor's perspective.

What To Do If You Lose Your Purse or Wallet

by Raye J. Blundell

We've all heard horror stories about fraud that's committed using your name, address, Social Security number, credit, etc. Unfortunately I (author of this piece) have firsthand knowledge, because my wallet was stolen last month and within a week the thieve(s) ordered an expensive monthly cell phone package, applied for a Visa credit card, had a credit line approved to buy a Gateway computer, received a PIN number from DMV to change my driving record information online, and more.

But here's some critical information to limit the damage in case this happens to you or someone you know.

As everyone always advises, cancel your credit cards immediately but the key is having the toll free numbers and your card numbers handy so you know who to call. Keep those where you can find them easily (having to hunt for them is additional stress and you won't need at that point!). File a police report immediately in the jurisdiction where it is stolen, this proves to credit providers you were diligent, and is a first step toward an investigation (if there ever is one).

But here's what is perhaps most important: I never ever thought to do this. Call the three national credit reporting organizations immediately to place a fraud alert on your name and Social Security number. I had never heard of doing that until advised by a bank that called to tell me an application for credit was made over the internet in my name. The alert means any company that checks your credit knows your information was stolen and they have to contact you by phone to authorize new credit.

By the time I was advised to do this-almost two weeks after the theft all the damage had been done (there are records of all the credit checks initiated by the thieves' purchases, none of which I knew about before placing the alert). Since then, no additional damage had been done, and the thieves threw my wallet away this weekend (someone turned it in). It seems to have stopped them in their tracks.

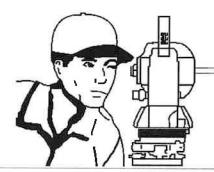
The numbers are:

Eqifax 1-800-525-6285 Experian (formerly TRW) 1-800-302-7195 Trans Union 1-800-680-7289

Social Security Administration also has a fraud line at: 1-800-269-0271

We pass along jokes, we pass along just about everything - do think about passing this information along as it could help someone else.

Reprinted from "Wisconsin Professional Surveyor" as seen in the "Treasurer State Surveyor", First State Surveyor" and the "NHLSA Newsletter" September 2003.



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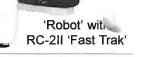












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The Day of the Landmark by Roy Minnick

Do you believe in the death penalty for anyone caught removing a landmark? The ancient Romans did.

In the days before maps, when commonplace ownership was identified on the ground by long-lasting, easily recognizable stones or posts, there wasn't any public record office to record a claim of ownership and, hence, no record-based resurveys were possible. In this situation, the most important means of identifying land ownership was to plant a marker, visible to all that passed by. Since these markers were the sole means of identifying property, their disturbance or removal made bad neighbors out of good and disrupted the peace and harmony of whole neighbor-

Successful boundary marker preservation depends upon two things: continual publicity to familiarize as many people as possible with the location and value of the marker, and penalties to deter those few who would willfully disturb or destroy a marker.

The ancient Romans were a clever and resourceful people who were able to devise a solution that preserved their property markers in a most pleasant and satisfying way.

A god of landmarks was created, and annual days of festivities were arranged in his honor. The god was named, appropriately, Ferminus, which, in Latin, means end, limit, or boundary. riginally, each landmark boundary stone was a separately worshipped deity. Later Romans tended to worship one god of all landmarks who was represented on earth by each stone.

With a deity involved, setting a boundary stone soon became a ritualized festivity. Adjacent property owners, with their families, friends, and slaves, met at the site selected for the planting of Terminus. After the hole was dug, a fire was lit in the hole, and the blood of a sacrifice was poured into the fire along with incense, honey, fruits and wine.

In the meantime, Terminus, represented by the boundary post or stone, was anointed and draped with garlands of flowers. While the ashes were still hot, the post was placed in the hole and the dirt was tamped around the base to hold it upright. Girls danced around the stone while placing a curse on would-be thieves, and vandals. The whole ritual was dignified, but not solemn.

In addition to the curse, the custom of the day allowed the slaying, on the spot, of any person caught moving or destroying a boundary stone. Possibly this liberty was abused by those with personal quarrels and, quite possibly, creeping civilization took its toll. At any rate, this harsh sentence was later reduced to a fine. The curse apparently remained in full force.

The Romans recognized both the value of public recognition of a boundary stone and the necessity to keep later generations apprised of the location of the boundary posts. Hence, at the end

of every year, the Romans held a festival called Terminalia. During the festival, everyone again met at the stone. Each owner draped garlands of flowers over his side of the marker. An altar was set up, a sacrifice was made and then eaten along with cake, wine, and all the other goodies of the day necessary for a party. Music was provided and everyone—servants and owners alike danced and made merry as only the Romans could. With a yearly festival like that, who could possibly forget the location of a boundary stone?

Numa Pompilius (715-672 BC), the second king of Rome is credited with creating the god of landmarks, as well as many other gods. King Numa believed that fear of the gods was the only way to keep his people in line. To convince his people that the new gods were real, he told them he had married a diving nymph named Egeria, whom he met secretly at night in her garden to obtain inspiration.

Less divine were his Augures, who were responsible for interpreting the will of the gods. In their eyes, Terminus was a number-one god. When a temple for all powerful Jupiter was being constructed on Capitoline Hill, the contractor wanted to destroy a terminus post. The Augures refused. Instead they forced the contractor to build the temple around the stone, leaving a hole in the roof to keep the marker open to the sky. The Augures believed that the permanence of the landmarks was an indication of the permanence of the Roman territory.

Of course, the philosophy of the permanence of landmarks is still with us, carried down from the ancients. We dogmatically follow the doctrine of the immovability of the boundary marked by tan original monument, although, without the religious power of the Augures, we are unable to force a contractor to change his plans to preserved any landmark, no matter how important.

Unpleasantly for us, festivals have never accompanied the planting of our average boundary marker in the United States. Not so in parts of tradition-minded England, where a custom called "beating the bounds" is still observed.

Beating the bounds dates back at least to King Alfred (871-899 AD) and probably even back to the days when the Romans occupied England. It is observed on Ascension Day or during Rogation Days, and it fulfilled the same need as the Feast of Terminalia did for the Romans.

The priest and church wardens, leading a group of boys around the parish perimeters, observed the bounds beating, or "ganging day", as it was sometimes called. At each boundary stone the boys were beaten with green boughs. In some instances the boys' heads were banged against the boundary stone. One cannot help but wonder if the severity of the beating was related to the boys' behavior during the rest of the year. Who could blame

... continued Page 22

Day Of The Landmark ...continued from Page 21

a priest or warden harassed all year by the pranks of healthy boys, if they "beat the bounds" with a little extra zeal?

The theory behind "beating the bounds" was this: If the boys were beaten by or on the stone, they would more likely remember its location. Boys were selected because they lived longer than girls. Besides girls, in those days were considered to be little more than sex objects and seldom held real property interest. To assure a good turn-out for the procession around the bounds, a festival was held after the beating.

During the reign of King Henry VIII, the bounds festivities became an excuse for the revelry for which the good King was famous. Course, the ire of one preacher was sufficiently aroused for him to declare: "These solemn and accustomable procession and supplications be now grown into a right foule and detestable abuse."

Later, Queen Elizabeth I prohibited the religious aspects of beating the bounds, but the procession and festival remained as a secular function. Apparently, the English enjoyed the same kind of good times as did the Romans in their observance of landmarks.

Other functions were sometimes a part of beating the bounds. On one occasion at Leighton Buzzard, England, the trustees of the Almshouses of Ed Wiles (died in 1646), in accordance with his will, accompanied the procession. Beer and plum rolls were distributed at each marker and, as the bequest was read, a boy had to stand on his head.

We may deduce from this article that boundaries were important to others besides ourselves. It appears that the legal significance we place in original boundary markers has a root directly back from our own law, through English common law, through the bounds beating of the parish priest, back to the second Roman king. Of course, other cultures have used boundary markers in similar ways, but none are as directly traceable into our own time as those of the Romans and the English.

In comparing our modern practice in the United States with those of the English and the Romans, it appears the major difference between us is that the ancients attempted to preserve their boundary markers. We tend to plant them, ignore them, and then spend much time and fight many battles to find where the marker was originally located.

In retrospect, it appears that the Romans and the English had the best ideas, and had much more fun doing it.

Reprinted – The Kansas Landmark and the Wisconsin Professional Surveyor December 2002

National Council of Examiners for Engineering and Surveying

NCEES News Release

For Immediate Release August 27, 2003

NCEES Acts to Enhance Examination Security

Clemson, SC—Beginning with the April 2004 examination administration, the National Council of Examiners for Engineering and Surveying (NCEES) will begin strictly enforcing materials prohibited in examination rooms. Calculators with communication or text editing capabilities will be banned from all NCEES exam sites. These include, but are not limited to, the following models:

Hewlett Packard, HP 48GX (communicating and text editing) Hewlett Packard, HP 49G (text editing)

Texas Instruments, TI-83 Plus and TI-83 Plus Silver Edition (text editing)

Texas Instruments, TI-89 (text editing)

Texas Instruments, TI-92 and Voyage 200 (text editing and QWERTY keypad)

NCEES Exam Policy 15 prohibits devices or materials that might compromise the security of the examination or examination process. It has been determined that certain models of calculators might have been previously allowed in NCEES examination site that provide communication capability through the use of infired technology or through the use of cards that enable communication via radio transmission. In many cases, these models may also afford a text editing capability that enables the user to enter and store information in the calculator's memory.

For further information, please contact Jerry Carter at 1-864-654-6824 or visit the NCEES Web site at www.ncees.org.

The National Council of Examiners for Engineering and Surveying (NCEES) is a national non-profit organization composed of engineering and land surveying licensing boards representing all U.S. states and territories. NCEES provides leadership in professional licensure of engineers and land surveyors by assisting Member Boards in the promotion and promulgation of regulatory processes for engineering and land surveying which demonstrate high standards of knowledge, competence, professional development, and ethics. NCEES also provides services to Member Boards that promote uniform licensing procedures that emphasize quality education, examination, experience, and continuing professional competency.

Arbitrating

... continued from page 17

the questioning attorney with a look of bewilderment. I let several of see questions and the resulting answers go before I feel compelled explain to the attorneys that certain facts are no more cause for concern than the number of clouds that will be in the sky next week. Fortunately for me, most attorneys that are involved in arbitrations are good real estate attorneys and don't seek answers from the obvious.

We work through the testimony in a methodical manner similar to trial - direct, cross, re-direct, re-cross, and so on. At this point, the only difference between an arbitration hearing and a court hearing is that I ask questions. I enjoy retracing boundaries so I have lots of questions. Often the lawyers become lost because my questions and the answers from the surveyors are spoken in technical terms. Whispered conversations between the lawyer and surveyor on the other side of the room are common as the other surveyor explains to his client's attorney what I asked and what the other surveyors said in response. I suspect the attorneys are clearly surprised at this point by my interest in the testimony. No doubt in court hearings, the judge is starting to nod off at this time. This is one reason why parties specify a surveyor as an arbitrator in boundary disputes.

Finally both surveyors are done testifying. Rather than leave the room, I'm surprised to see that they remain. No doubt they are waiting for a fight to erupt when the litigant-landowners testify. Rather than one side presenting their entire case then the other side presenting their case like a trial, my arbitration hearing lets each side offer a witness in turn. Attorneys seem pleased with the flexibility as they make deals to allow elderly witnesses or those with pending appoint-

nts or jobs testify and go on about their normal business. Hearsay and extraneous evidence run on without objection. My hand movements signal attorneys that I understand the marginal benefit of the testimony but to let it continue. Justice not only requires that the hearing be fair but the landowners sense they have been fairly heard. I listen to one witness explain why the boundary should be in a certain location because her grandmother told her the boundary location when she was seven years old. I figure that must be almost forty years ago. I listen to this testimony attentively and with some amazement. In truth, I tend to forget what my wife asked me to pick up at the store an hour earlier. This person's memory must be remarkable, if true. I'm mindful that a conversation about a boundary to a seven year old some forty years ago is to be taken with some trepidation on my part.

Testimony brings in every rancorous act - dogs shot, trees cut, cuss words shouted, and so on. This is better than day-time television. Fortunately, the fight expected when the litigant-landowners testify does not occur. Apparently there is some deal between the attorneys to keep a tight rein on their client's testimony. Clearly the failure of a fight to break out disappoints some witnesses and the surveyors who stayed. Looking around the attorney's conference room at all the antiques and costly paintings, it is easy to see why at least one attorney is eager to prevent fights.

We have been at the hearing for six hours. All the testimony has been wrapped up. I now provide some closing comments. I ask the surveyors for their coordinates files so I can reconcile the different is sis of bearings between the respective plats. Each surveyor has a cally excluded measurement information about the other surveyor's location. There is some reluctance to hand over large coordinate files but the two surveyors quickly agree on providing coordinates for three

common points so I can reconcile the different basis of their bearings. The attorneys can't follow the conversations that are occurring at this point. They got lost at the mention of coordinates. The surveyors ignore the attorney's bewilderment and promise to send me the information. That done, we review the arbitration agreement to make sure we are all clear on the leeway I am allowed in my decision. In some cases I must choose between one of two monuments. In this case I can place the boundary whereever I feel a location is appropriate. The arbitration agreement in this case specifies that the parties will execute and exchange quit-claim deeds to seal the decision. I offer to prepare the descriptions for the deeds. I have seen two many descriptions and decisions prepared by attorneys and judges that are problematic. Often the description the judge prepares or adopts is worse than the description the parties were fighting over. The attorneys accept my offer with relief. I also put them on notice that my decision will require one or both parties retain surveyors to adequately mark the boundary I describe. They have no objection with that part of the decision even though it is unusual after a court hearing. Finally, I promise to publish my decision within two weeks after receiving the coordinates from the surveyors. Their clients will be pleased with the quick decision. They have waited over two years to get into court. Once they agreed to arbitration, a hearing date was set within three weeks and the decision followed in two weeks. Everything will be over in slightly more than a month. The judicial sleigh ride on their wallets is coming to an end.

A week later the coordinates arrive by electronic mail. My decision is reached after carefully considering the evidence and rules of construction. I have never had an easy time reaching a decision because I agonize over each piece of credible evidence. My decision is documented and sent to the attorneys. One will be pleased, the other disappointed. I don't believe in splitting the difference unless the facts clearly show that to be proper. The landowners came for justice not reconciliation. I prepare an affidavit with a description of the boundary. The affidavit with supporting documentation is sent to the registry with the proper recording fees. I do this myself to make sure a record of the decision will exist for future landowners. The boundary location is fixed. No doubt the feuding will continue over some other matter.

Reprinted from the West Virginia Surveyor.

Spring Courses Offered At Indiana University-Purdue University Indianapolis, IN

Surveying Computations (CE 210), instructor Kevin Potter 5:45 p.m. to 9:35 p.m. Mondays.

Legal Descriptions for Surveyors (CET 304), instructor Gary Kent 5:45 p.m. to 8:35 p.m. Tuesdays.

Surveying Law (CET 402), instructor Gary Kent

5:45 p.m. to 8:35 p.m. Thursdays.

Classes start Monday, Jan. 12.

Registration is under way for the spring term.

For more information, contact the Department of Construction Technology at (317) 274-2413 or by e-mail at et cnt@iupui.edu.

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The Value of a Life

by Ronald E. Koons, RoSaKo Enterprises Safety Consultant, Middletown, Indiana

I am certain we would all agree there is no specific dollar amount that we could put on the value of a life. What would you say your spouse is worth to you (careful now)? Your children? Your parents? However, if we look around us on a daily basis there are values being put on a human life. Let me give you an example. An individual is in a motor vehicle accident. The responsible party was under the influence of a controlled substance and was clearly at fault for the accident; has good insurance along with sizable assets. A party who was not responsible was killed. After all of the dust settles a lawsuit is filed. As the result of the fatality a jury is asked to determine what amount of pain, suffering, loss of consortium and other lost values the aggrieved persons faced. That is then put into a dollar value. What goes into that determination? Many things that are really detailed. Expected earnings, age, the number of children at home, and lifestyle are all some of the considerations. The job of the defense is to take emotion out of the case. The job of the plaintiff is to put emotion into the case. The end result is a lot of legal maneuvering with a dollar value being put on the loss of a human life. Most health insurance policies have an upper lifetime limit on coverage. Reach that upper limit and the insurance company will no longer pay for any claims. This may be as much as 1 or 2 million dollars, but it is still a value.

What does all of this have to do with surveying? Consider this. Every time you send a crew out into the field unprepared for the hazards that are facing them, you are putting a value on human life. u are saying that the time needed to give adequate safety training more than you can afford to spend. Therefore you have assumed a risk and put a value on the lives of your employees. Sound harsh? I don't think so. If you knew before an incident occurred that it was going to happen wouldn't you spend the time and money? Of course you would! Let's say you have provided the training, but employees either forget or just simply don't comply. What then? Training and more training. The end result is that if you have an employee who simply won't comply with safety policies that employee should go through all company disciplinary procedures ending up with dismissal. Time and time again I have had owners and managers say "I can't fire him, he's my best employee!" Any employee who disobeys company policy is not your best employee. It is no different than if they were constantly late for work or were rude and harsh with your customers.

Due to my profession, I get a lot of phone calls about terrible accidents/incidents that have occurred. I received a call just a few weeks ago that is probably one of the most horrific that I have ever received. In the Greenwich, Connecticut area a 69 year old surveying crew employee was in a manhole. This manhole was situated out of a public thoroughfare, but on a private drive leading to a residential development. There were no cones or barricades around the manhole. As the employee came out of the manhole an SUV drove over the opening. A source close to the incident reported that the employee was decapitated in the accident. So terrible of an accident that was most clearly preventable. Was it inadequate

ning? A lack of safety on the employee's part? We may never know, but a life is still lost. In the past few weeks a surveying crew employee right here in Indiana was hit while working on one of the busiest roadways in Indiana. The employee had on a vest and cones and signs were reportedly in place, but a driver entering the roadway paid more attention to the direction traffic was flowing from and not enough to where he was traveling. Fortunately in this case even though the employee was taken to the hospital, he was not critically injured and should return to work in a matter of days.

I am asked during just about every seminar if I believe that sometimes "stuff just happens" and there is nothing anyone could do to prevent the accident. I take a firm stance on this issue. 99.9999% of all accidents are preventable! Let's say you are walking in a field and a tire falls off an airplane and hits you, resulting in death. Is there anything you could have done to prevent the accident? Probably not. Is it a preventable accident? Of course. The individuals responsible for maintenance on the airplane most likely let something get by them. Purely an accident from one standpoint is most of the time a preventable accident from another.

Anytime a tragic accident occurs people surrounding the incident will tend to re-evaluate their safety efforts. Are we doing enough? Are our employees complying with our safety regulation? Are we scheduling our work in a manner that allows employees to take the time to be safe at their job? Many things go into an effective safety effort. The two most important are an effective Written Safety Program and Effective employee training. Do everything possible so your company isn't in a situation someday where a jury of 12 peers is deciding the value of life for one of your employees. Keep it safe!

Lincoln Surveyor Statue ...continued from Page 2

regarding surveying which is still used today.

"The purpose of the statue is to let the public know that Lincoln was a surveyor and in turn let people become aware of the surveying profession," says IPLSA Executive Director Robert E. Church, who spearheaded the project. "We feel surveying was an important part of Lincoln's early life and helped him develop as a statesman." Only one year after Lincoln began working as a surveyor, villagers elected him to the Illinois House of Representatives.

The statue shows a 25-year-old Lincoln peering through a Rittenhouse surveyor's compass on a Jacob's staff. The leather patches on his pants hint at the sometimes rough, muddy conditions in which Lincoln surveyed. The statue is set in the middle of a 26-foot diameter concrete base made to look like a compass face.

New Salem has been reconstructed to look like it did during Lincoln's time there and is now an Illinois historic site. The statue is located at its entrance.

It was unveiled during an elaborate ceremony attended by hundreds of people, including IPLSA members and their families; surveyors from Michigan, Wisconsin, Indiana, Kentucky, Missouri and West Virginia; local dignitaries; and many visitors to the historic site.

"We were amazed at the number of people who came to the unveiling," says Church, who presided over the ceremony.

To learn more about the Lincoln Statue Project, visit the IPLSA's Web site at: www.iplsa.org.

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CALENDAR

November 15, 2003

ISPLS Seminar, Topic: TR-55 Computer Hydrology Workshop, Speaker: Jeff Healy, Vincennes University, Vincennes, IN (6 CEH E) January 15-17, 2004

52nd ISPLS Annual Convention at Marriott Downtown Hotel, Indianapolis, IN. co-sponsor Southwest Chapter.

February 5-7, 2004

PLSO Conference, Sheraton Cleveland City Centre Hotel, Cleveland, Ohio

February 12-14, 2004

KAPS 2004 Conference, Lexington, Kentucky

February 18-21, 2004

47th IPLSA Annual Conference, Crowne Plaza Hotel, Springfield, IL. September 3, 2004

ISPLS Seminar, Spring Mill State Park, Mitchell, Indiana April 16-21, 2004

2004 ACSM/TAPS Conference & Technology Exhibition, Nashville Convention Center, Nashville, Tennessee

HOW TO STAY YOUNG

- Throw out nonessential numbers. This includes age, weight and height. Let the doctor worry, that is why you pay them.
- ► Keep only cheerful friends. The grouches pull you down. If you really need a grouch, there are probably a few dozen of your relatives to do the job.
- Keep learning. Learn more about the computer, crafts, gardening, whatever. Just never let the brain become idle.
- Laugh often, long and loud. Laugh until you gasp for breath. Laugh so much that you can be tracked in the store by your distinctive laugher.
- Do not worry about situations beyond your control. Karma is Karma. What shall be will be.
- The tears happen. Endure, grieve, and move on. The only people who are with us our entire life, is ourselves.
- Surround yourself with what you love, whether it is family, pets, keepsakes, music, plants, hobbies, whatever. Your home is your refuge.
- Cherish your health. If it is good, preserve it. If it is unstable improve it. If it is beyond what you can improve,
- Don't take guilt trips. Go to the mall, the next county, and a foreign country, but not Guilt.
- Tell the people you love that you love them, at every
- Remember, life is not measured by the number of breaths we take, but by the moments that take our breath away.

Reprinted from Treasure State Surveyor, July 2003

WELCOME NEW ISPLS MEMBERS

June 7, 2003

Jimmie Allen - Affiliate C. Brian Lounsbury - Associate

August 23, 2003

Richard Brown, II - Student Jorge Camacho - Member Anthony Carson - Associate Tyler Copeland - Associate William Hogstrum - Associate Thomas Lingle - Associate George Lukas - Associate Mark McMahan - Member John Miller - Affiliate James Mulrvan - Member Edward Northrop - Associate Thomas Nugent - Associate Zac Partlow - Associate Kevin Santelik - Associate Jeffrey Woodall - Associate

Self Help For A Heart Attack

Let's say it's 6:15 p.m. and you're driving home (alone of course), after an unusually hard day on the job. You're really tir upset and frustrated. Suddenly you start experiencing severe pain in your chest that starts to radiate out into your arm and up into your jaw. You are only about five miles from the hospital nearest your home, unfortunately you don't know if you'll be able to make

What can you do? You've been trained in CPR but the guy that taught the course neglected to tell you how to perform it on yourself.

How To Survive A Heart Attack When Alone

Since many people are alone when they suffer a heart attack, this article seemed in order. Without help, the person whose heart stops beating properly and who begins to feel faint, has only about 10 seconds left before losing consciousness.

However, these victims can help themselves by coughing repeatedly and very vigorously. A deep breath should be taken before each cough, and the cough must be deep and prolonged, as when producing sputum from deep inside the chest. A breath and a cough must be repeated about every two seconds without let up until help arrives, or until the heart is beating normally again.

Deep breaths get oxygen into the lungs and coughing movements squeeze the heart and keep the blood circulating. The squeezing pressure on the heart also helps it regain normal rhythm. In this way, heart attack victims can get to a hospital.

Tell as many other people as possible about this, it could save their lives!

...From Health Cares, Rochester General Hospitals, reprinted from the Wisconsin Professional Surveyor.

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