# HOOSIER SURVEYOR



**QUARTERLY PUBLICATION OF THE INDIANA SOCIETY OF** PROFESSIONAL LAND SURVEYORS, INC. **VOLUME** 34 NUMBER

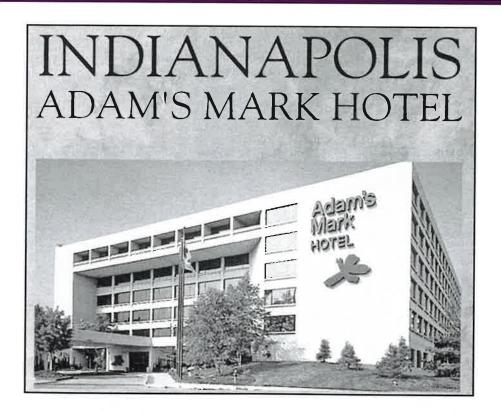
**FALL** 2007

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## **HOOSIER SURVEYOR**

VOLUME 34 NUMBER 2 FALL 2007

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#### **EDITORS NOTE**

Deadlines for copy for various planned issues of the Hoosier Surveyor are as follows: Winter - December 31; Spring - March 31; Summer - June 30; Fall - September 30.

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 umed for errors, misquotes or deletions as to its contents.

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**ISPLS BOARD OF DIRECTORS (2007)** 

First row, I to r: Frank Ballintyn, Sellersburg; Jim Tibbett, Linton; Richard Hudson, Valparaiso; Harold Hart, Charlestown; Don Bengel, Valparaiso; Ron Wharry, Frankfort; Second row, I to r: Dan Kovert, Fishers; Ed Sweetland, Greenfield; Mark Isaacs, Brownstown; Steve Murray, Battle Ground; Perry Cloyd, Columbus; not pictured Todd Bauer, Leo.

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## PRESIDENT'S THOUGHTS

by Ed Sweetland, Greenfield, Indiana



Hello fellow surveyors:

As I prepare my fourth and final president's message, I look out my office window to see that autumn has finally arrived to Indiana, which hopefully means no more ninety-plus days until next year. I hope that you and your family are enjoying the season and its cooler conditions by attending high school football games, running marathons, playing golf, camping, picnicking and other outdoor activities. If you or any of your family members have completed in a notable event this autumn, please let Dianne

know so we can publish it in the Hoosier Surveyor. As I have mentioned before we want to learn more about our members and their lives outside of the Surveying profession.

I recently signed up with Dan Kovert to participate in the 2008 Indianapolis Mini-Marathon. We are the first members of TEAM ISPLS and welcome other members to join us in the 13.1 mile endeavor. Our goal is to finish the race in two hours and 30 minutes which means we need to average a 5.24 mile/hour pace. My best time was this last year at two hours and 54 minutes so I have my work cut out for me. I believe Dan is in great shape since he trains with his son frequently and only needs to shave a few minutes off his time. If you are a runner or a walker, I challenge you to become a member of the 1% of population that participates in mini-marathons and join TEAM ISPLS. The society will be supply matching t-shirts to the team so our family members and friends can find us during the race and when we are passed out under a tree in Military Park. If you are interested you will need to sign up for the event on your own at www.500festival.com and then contact Dan or I to be placed on the team. We will be contacting each of the members of TEAM ISPLS in January with more details.

As many of you know the Purdue University Land Surveying Geomatics Engineering program will be changing after May of 2010. Dr.Katherine Banks, Bowen Engineering Head and Purdue Professor of Civil Engineering has created an industry advisory board to analyze the current program and to provide recommendations to improve its enrollment and research funding. The advisory board will meet on November 5 to discuss charges and to establish committees. This advisory board is made up of several ISPLS members and Purdue faculty members. Our society is well represented on the board.

In addition, Pat Cunningham and I are chairing a committee to market the current Purdue program and its post 2010 program. The committee's goals are to market the Purdue programs to freshman engineering students, to provide our members with a voice to the advisory board and to challenge the advisory board to create an accredited four year Land Surveying degree for post 2010. I would like to invite Purdue BSLSGE alumni to become involved with our committee. The program is at a turning point you can influence its future by getting involved! To become involved with the committee please contact Pat or me for more details. I will also be contacting Purdue alumni and all firm members to request their support and involvement.

The legislative committee is interviewing firms to replace Amber Van-Til as the ISPLS lobbyist. We hope to have the new lobbyist hired by early December to begin contact with legislators on behalf of ISPLS for the 2008 Indiana legislative session. Our new lobbyist will be attending the 2008 business meeting for introductions and to answer questions by our members.

Page 2

2007 ISPLS committees are finalizing their charges for the year and will all be preparing their final reports for presentation at the 2008 business meeting. I respectfully request that all committee chairmen report their committee activities to their respective administrators so detailed reports can be prepared. My thanks go out to all committee members, chairmen and administers for their participation. I hope you will continue your involvement in ISPLS activities in 2008.

In closing, I invite you to attend the next ISPLS board of directors' meeting scheduled for 9 December 1st at ISPLS headquarters. I also want to thank you again for electing me as your president. It has been an honor to serve you.

Ed Sweetland, PLS



Ed Sweetland at the Evansville Grad Prix eating dust and bringing up the rear. (Sept. 8)

#### The ISPLS Indianapolis Mini Marathon Challenge

Nike running shoes	\$100
ISPLS running shirt	\$20
Dry Fit running shorts	\$20
One bottle of Body Guide	\$10
Five mile training runs in February	COLD
Hanging out with 35,000 of your	
closest friends	ENERGIZED
Seeing Dan and Ed in running shorts	BLINDING
Running the IMS 2.5 mile oval track	LEGENDARY
Being 1% of the population that competes in a marathon or a mini-marathon	COMMENDABLE
Crossing the finish line	PRICELESS

I hope you accept the challenge. See you at the starting line, Ed

### ISPLS BOARD OF DIRECTORS MEETING HIGHLIGHTS

by Dianne Bennett, Executive Director

ie 16, 2007

The ISPLS Board of Directors met on Saturday, June 16, 2007 at ISPLS Headquarters. President Ed Sweetland called the meeting to order at 9:15 a.m. The minutes and treasurer's report were reviewed and approved.

Staff Activity Report - A written report was submitted for board review.

Communication - Membership - The BOD reviewed and approved the membership applications submitted by the membership committee.

Hoosier Surveyor - Articles for the Summer issue need to be submitted July 15th. The committee met on June 4th at headquarters to discuss articles for the Summer 2007 issue.

Public Information and Marketing - A written report was submitted from a telephone conference call held on June 15th.

Professional Development - Education - The committee finished its Spring schedule of seminars and is seeking presenters for the Fall seminars.

The Southwest Chapter submitted its income/expense report to the BOD for their May 4th seminar.

Doug Herendeen presented the 2008 ISPLS Convention program.

A motion was made and passed designating the Northwest Chapter of ISPLS to be host the for the 2010 convention.

Scholarship - A written report was submitted to the BOD. \$2700 is available for this year's Vincennes Foundation departnt scholarship. A motion was made and passed to make up the difference of the \$300 deficiency to the Vincennes University Scholarship award.

Trig-Star - The Trig Star competition is complete. The state winner will take the national exam.

Government Affairs - NSPS Governor/Great Lakes Council - The fall national convention for NSPS and ACSM is September 28th through October 1st, 2007 in Arlington, Virginia. Also, September 26th and 27th are "Lobby Days".

GPS-GIS Monumentation - The committee's next meeting will be June 19th.

Legislation - Plans are to meet with PLA and to continue conversation about "proposed civil penalty legislation".

Internal Affairs - Bylaws - The committee will hold a meeting on June 21st in Lafayette, Indiana.

Chapters - Reports on chapter activities were reported for the Tecumseh Chapter, Central Indiana Chapter, and the Northwest Chapter. There were no reports for the Northeast Chapter, Southwest Chapter, Greenville Chapter, Wabash Valley Chapter, Hoosier Hills Chapter, Initial Point Chapter, and St. Joe Chapter.

#### August 18, 2007

The ISPLS Board of Directors met on Saturday, August 18, 2007 at ISPLS Headquarters. President Ed Sweetland called the meeting to order at 9:13 a.m. The minutes and treasurer's report were reviewed and approved

Adjustment to the Agenda: Ryan Swingley made a presentation on "How to create a GIS using Google Earth". Kevin Enright made a presentation on how Monroe county uses Google Earth to create a GIS. Surveying Program Panel Discussion - Bill Clark, Austin Yake, Vincennes University, Tony Gregory, P.U. Calumet, and Bruce Franke, IUPU Fort Wayne were participants. Discussed were the enrollment, accreditation, faculty, licensure requirements, scholarships, alumni support, programming and degrees in the three schools.

Staff Activity Report - A written report was submitted for board review

Officers' Activity Report - Frank Ballintyn and Dan Kovert presented a report on finding a geocatching site and an overview of how it works.

Communication - Membership - The BOD reviewed and approved the membership applications submitted by the membership committee. Life member - Orwic Johnson, James Q. Morley, Max Newkirk, and Ronald Nolan. Firm Member - Torrenga Surveying, LLC. Associate - Josh Briggs, Amanda S. Inman, Daniel Maxwell, David Meier, Richard W. Miller, Brian M. Murray, John W. Page, and Maciej Zurawski. Affiliate - Michael Mizeur.

Hoosier Surveyor - The committee's next meeting will be August 27th. The agenda for the meeting will be the final planning for the 2007 Fall issue.

Professional Development - Education - A motion was made via email to approve the committee's recommendation to approve the Northwest Chapter's seminar, "From Error Analysis to Relative Positional Accuracy" presented by Tony Gregory on August 3, 2007.

The Hoosier Hills Chapter will also be presenting the same seminar as presented by the Northwest Chapter on August 3rd.

LS/SIT review - The review is scheduled for September 29th at the University of Southern Indiana in Evansville.

Scholarships - Interviews with Purdue students were changed from November to April.

Trig-Star - A thank you was received from Becky Moulder, mathematics teacher at Kokomo High School.

Government Affairs - A verbal report was given.

Legislation - Amber VanTil is no longer our lobbyist. We will be going through the process of hiring a new lobbyist.

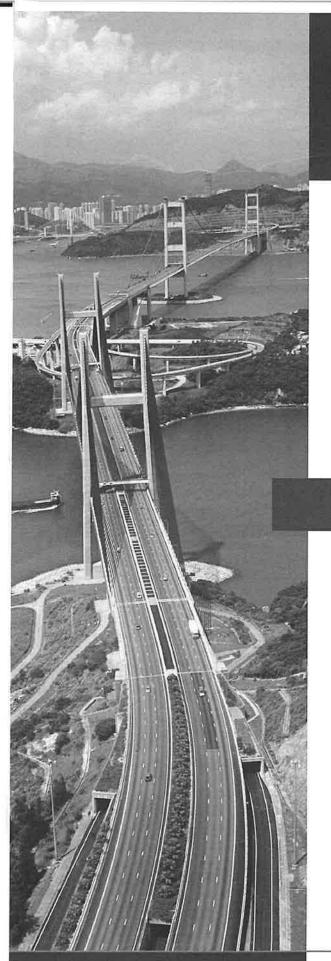
Internal Affairs - Bylaws -A presentation on the bylaws will be made at the next BOD meeting.

Finance and Planning - The Wallington quarter report (June 30, 2007) was reviewed.

Chapter reports - Reports on chapter activities were reported for the Northwest Chapter, Northeast Chapter, Tecumseh Chapter, Central Indiana Chapter, and Hoosier Hills Chapter. There were no reports from the Wabash Valley Chapter, Initial Point Chapter, Southwest Chapter, Southeast Chapter, St. Joe Chapter, and Greenville Chapter.

Old Business - Vincennes University needs for survey equipment. A proposal from Positioning Solutions Company was presented to the BOD to provide financing for four (4) total stations to be revolving for years to come. A motion was made and passed to support the proposal with the stipulation that not more than half of the money comes from the investment interest and that we solicit the chapters for any additional monies.

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# Surveying Students To Benefit From Donation

by Duane Chattin, Director of Public Information, Vincennes University

DATE: October 5, 2007

VINCENNES, IND. – Thanks to the support of the Indiana Society of Professional Land Surveyors (ISPLS), students at Vincennes University will train with the latest technology.

Officials from the ISPLS recently presented the VU Surveying Program with four new "total stations" representing the cutting edge of technology in the field. VU will own two of the instruments and the annual use of two others that will be replaced annually for the next five years, at no cost to the Surveying Department.

"We really appreciate the efforts of the ISPLS Board to provide money to support our program. The ISPLS has been supportive for many years and it serves as the advisory board for the program. This donation will really help our students," said Bill Clark, coordinator for the VU Surveying Program.

Two members of the ISPLS Board came to VU for the presentation. They include Edward Sweetland, VU '91, the president of the ISPLS Board and the project manager of Right-of-Way Engineering for USI Consultants Inc., Indianapolis, and James Tibbett, VU '81, owner of CB & M Surveys, Inc. in Linton.

"I'm just trying to help VU students. These instruments will make students more prepared to go out into the workplace. We need students coming out of VU to be trained on the latest equipment available so that when they enter the private sector they will be dy to work right away. This equipment provides the opportunity get a step up on job readiness and be productive workers from day one," Tibbett said.

Sweetland said that the ISPLS appreciates the support of Topcon Corp. and Positioning Solutions Co. in assisting with the acquisition of the total stations for VU.

"Topcon has an educational program to meet the needs of colleges. This new equipment has been purchased to benefit VU students," said Steve Pfingsten, Indiana sales manager with Positioning Solutions Co. in Indianapolis. He will be coming to VU for the next five years to annually upgrade the equipment.

VU Technology Division Dean Art Haase, a professor of Surveying Technology, said donations such as this are important to the future of the program. "This is a great continuation of a partnership between VU's alumni, the profession, the state society, and corporations involved in surveying technology," Haase said.

Haase and Clark are particularly pleased that alumni take an active role in supporting the program because it demonstrates satisfaction with the preparation students receive. "I definitely would not be here today without the help of Art Haase, Bill Clark and Vincennes University. It is a great program to go through within the land surveying career path that I have pursued," Sweetland said.

#### SURVEYING TECHNOLOGY

The two-year VU Surveying Technology program prepares surveyors to establish land and water boundaries, write descriptions legal documents, lay out construction and mineral sites, and collect information for the mapping and design of subdivisions, roads, power lines, and industrial sites. Much time is spent outdoors

in addition to office duties such as planning surveys, preparing reports, running computations, and performing computer-aided design.

For the past 30 years, all of VU's Surveying Technology students became employed at the time of graduation. Graduates received job offers ranging from \$30,000 to \$35,000.

#### VINCENNES UNIVERSITY

VU is a state-supported college with campuses in Vincennes and Jasper and additional sites such as the Indianapolis International Airport. In addition to offering 200 associate degree and certificate programs, VU also offers seven bachelor degree programs in technology, health care management, homeland security, nursing, and three secondary education programs in mathematics, science, and special education.

VU enrolls students from all 92 Indiana counties, 28 states, and 37 foreign counties. Tuition and fees are the lowest among Indiana campuses with residence halls. VU is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools.

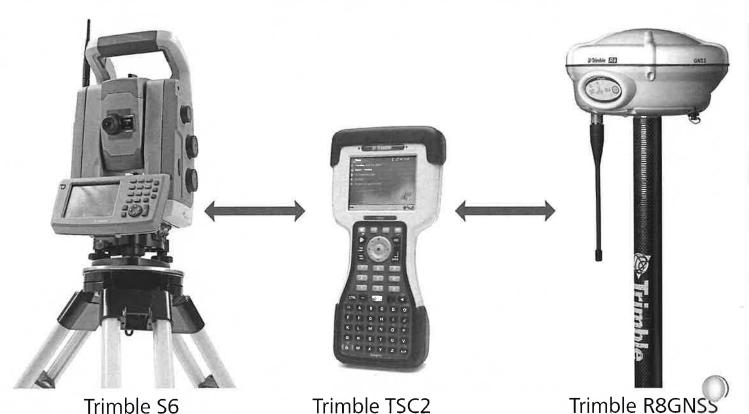
Founded in 1801, VU is Indiana's first college and is the only college in the nation founded by an individual who would later become President of the United States. William Henry Harrison, the ninth U.S. President, founded VU while serving as governor of the Indiana Territory. More information is available at <a href="https://www.vinu.edu">www.vinu.edu</a>.



From left, James Tibbett and Steve Pfingsten join Ed Sweetland in presenting Topcon total stations to Austin Yake, instructor of Surveying Technology at Vincennes University. Standing at the right are some of the students currently enrolled in Surveying Technology who will benefit from the donation from the Indiana Society of Professional Land Surveyors (ISPLS). Sweetland, a 1991 VU alumnus, is president of the ISPLS Board and Tibbett, a 1981 VU alumnus, is a member of the Board. Pfingsten is the Indiana Sales Manager for Positioning Solutions Co., Indianapolis.

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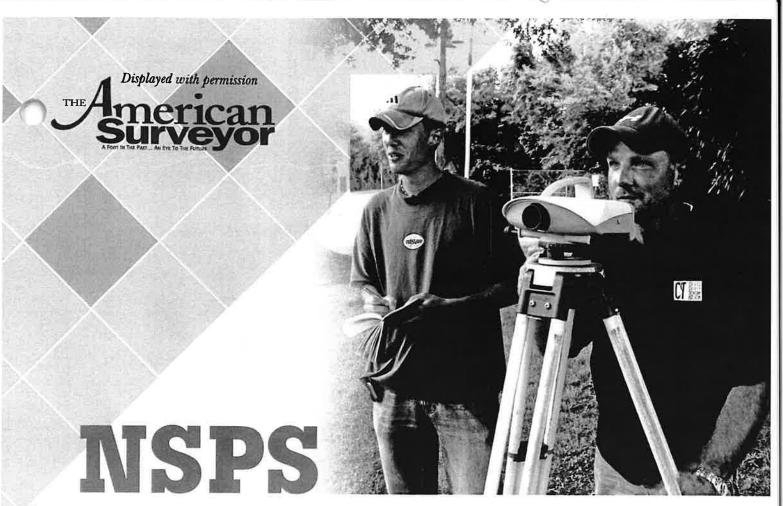
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# CERTIFIED SURVEY TECHNICIAN PROGRAM

Who's Using it and Why?

emphasis being

placed these days on enhanced professional standing of surveying through the development of educational opportunities in our four-year university programs, it is sometimes easy to overlook a significant segment of the profession. That segment is the multitude of technicians who every day collect and process the data on which we, the professional surveyors, base and form our opinions.

As we pursue and encourage the concept of a four-year degree require-

Above: All of Washington

D.C.'s Metro surveyors are

CSTs, or licensed, or both.

Matt Whitehead and Dave

Simms just completed CST

testing for Level I.

ment for licensure, it is important that we also plan for the career advancement of those who, for whatever reasons, will not attain that status. We must understand that the incentive and initiative necessary to keep our invaluable technicians in the business can only be recognized if a clear career path has been defined. A uniformly recognized method for documenting one's progress and achievements can be a major factor in this process.

Certification is used by many organizations to acknowledge, through testing or some other mechanism, that someone has met requirements it has set forth for a

>> By Lee Canfield

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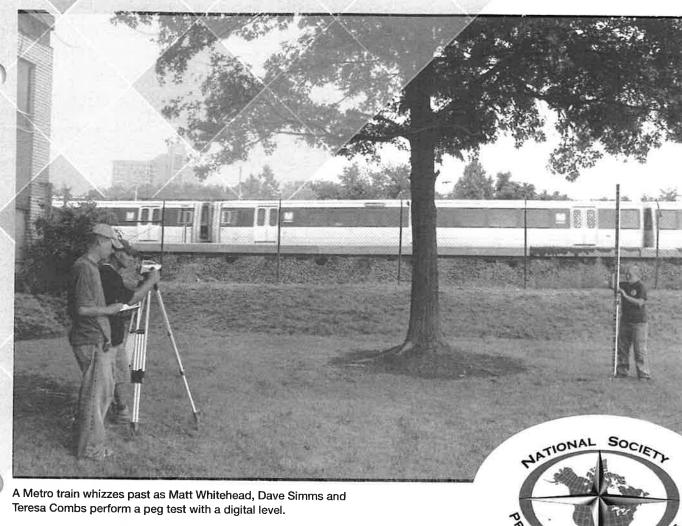
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particular activity. Certification is not the same as licensure, which bestows upon one the right to provide a service to the public in return for acceptance of the responsibility and liability associated with that right. It does, however, provide credibility for the person holding the certification.

It is within the context of providing both a credential and an evaluation tool that the Certified Survey Technician (CST) Program, run through NSPS, was created. The program has been in existence for several years and has generated a great deal of interest from employers,

# A CST certification on a resume is useful when evaluating the capabilities of a prospective employee.

Likewise, certification is a tool that can be used by anyone who wishes to purchase something for which the value may be subjective. In surveying, a certification statement on a plat, signed by the surveyor, indicates that the service provided in order to create the plat was conducted at a level of high professionalism and quality.

technician level employees, and those who procure surveying services. A company owner can now have the ability to better gauge an applicant's capabilities by using the CST Program than is typically possible through what is written on a resume. Likewise, those seeking employment need a credential to show that they have achieved recognition for

a certain level of competence. These are among the many factors that make the CST Program a meaningful benefit to the surveying profession.

SIONAL SURV

Another aspect of the CST Program is that it can serve as the basis for a career track for the technician level employees who may not have the opportunity to achieve the professional surveyor level because of existing or impending laws requiring a four-year degree. The CST Program should be promoted as a benefit to members who can offer it to their employees at a reduced rate. Building a career track for technicians is critical to the future of the surveying profession because people need to have documentation that they have reached a particular level of competence. Without that documentation, the incentive to not only progress, but also just to stay in the profession may not exist.

For example Ron Collier, Survey Division Manager for Charles P.

Johnson and Associates in Silver Spring, Maryland, is using the CST Program for several purposes. With the advances in equipment today, field crew personnel and survey technicians are not exposed to or taught a lot of the basics. Most surveyors have not taken any exams since they graduated high school. The CST Exam is a great tool to get them back into a test-taking mode. They have recently tested 13 individuals in their office. Over the last few years they have tested up to 25 people, and one employee is now a Level IV CST. Charles P. Johnson provides in-house training for their employees. Ron says, "We emphasize the idea that the more that you know and can do, the more valuable you are to the firm." He goes on, "I believe that this is the best tool that we have today to promote the profession within and to build a much stronger work force."

Evan Brown, Project Manager for Britt Surveying, Inc. in Venice, Florida, is using the CST Program to train and advance their staff. They are using in-house workshops for employees to



Teresa Combs, Party Chief CST Level II, is preparing for the Level III exam.

# Building a career track for technicians is critical to the future of the surveying profession.

share knowledge and learn from senior staff members, and also encourage staff to participate in educational seminars hosted by the Florida Surveying and Mapping Society (FSMS). Britt Surveying is a steadfast supporter of the CST Program. They also offer a financial bonus and opportunity for advancement to individuals who attain certification.

One of the major supporters of the CST Program has been McKim and Creed. They have tested employees from Florida, the Carolinas, and Virginia. They use the CST Program to provide a career ladder for their technicians. They currently offer bonuses for the different levels of achievement. Currently, more than 160 employees have taken the CST Exam from McKim and Creed. They offer study sessions for the staff and have created a study manual on all of the different levels.

Barry Savage, President and Adjunct Faculty at Cleveland State Community College and owner of Savage Surveying and Mapping, says "The CST Program insures a standard skill-set for employees that I can depend on." He encourages all employees and students to take the CST. They have an education reimbursement program for employees to encourage certification.

As you can see, survey managers and business owners use the CST Program to help survey technicians with their career development. Certification also provides employers with credentials to offer clients and a means to evaluate and promote personnel. Those familiar with the CST Program know that it becomes more than just a test because of the training and development conducted by organizations in preparation for the exam. While studying, surveying technicians become familiar



with the academic knowledge behind the field procedures they follow every day. By advancing through the CST Program, a survey technician moves progressively into more responsible positions. Having gained confidence, some technicians will hit the books even harder and go after the Fundamentals of Land Surveying Exam. This grassroots movement is a way to help technicians become professionals.

With the help of many volunteers across the county, the CST Board, and the leadership within NSPS in particular, the program has made great strides. This is a program that deserves to be encouraged and utilized by the surveying community.

Lee Canfield is the Education Program Coordinator for MSPS and is responsible for the administration of the CST Program.

# CERTIFIED SURVEY TECHNICIAN (CST) PROGRAM





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- Can Be Used as an Assessment Tool in Conjunction with Survey Education Programs

For more information contact **Lee Canfield** at (240) 632-9716 ext. 112, email lee.canfield@acsm.net or visit our website at www.nspsmo.org/cst/get\_certifled.shtml

NSPS, 6 Montgomery Village Avenue, Suite 403, Gaithersburg, MD 20879



## PROGRAM SCHEDULE 2008 ISPLS CONVENTION

Adam's Mark Hotel, Indianapolis (January 16-18, 2008)

### Vednesday, January 16, 2008

# Working with FEMA's Elevation Certificate - Rod Renkenberger, PLS (3 CEH Elective)

This seminar will provide Professional Land Surveyors an opportunity to broaden their knowledge and skills in Floodplain Management and to promote professional development through the Certified Floodplain Manager (CFM) Program.

Attendees will receive a copy of "Surveyor's Toolkit CD", a resource CD with FEMA Forms, NFIP Information, State of Indiana Forms, and Floodplain Management Study Guide for those interested in pursuing the Certified Floodplain Manager accreditation.

#### Tree ID for Surveyors - Frank Ballintyn, PLS (3 CEH Elective)

This short course on basic tree identification related to surveyor notes and deed calls (i.e. corner trees and references) will assist surveyors in correctly identifying called for trees or establishing trees as witnesses, references or corners. This course will provide useful information on various surveys (i.e.: Topographical Surveys, Route or Corridor Right-of-Way Surveys etc.)

#### The 21st Century Surveyor's Office - David Hurley, (3 CEH Elective)

This seminar will help surveyors apply some of the available technological advances in the office process. We use GPS, CADD, GIS and other technologically advanced tools in our profession and often ignore the efficiency of the office operation.

Topics to be discussed: What good is paper anyway?; Scanning archived files; Scanning current work; Bar codes; Bar code scanners; On-line services: Ordering, Project tracking, Customer data bases, Client downloading, and Interaction with government agencies.

#### Major Changes in 2008 for FHWA Employee Protection Requirements and Update on the MUTCD - Ronald Koons, (3 CEH Elective)

The Federal Highway Administration has made major changes on worker safety on all federally funded roadways. These changes may even be more stringent than OSHA regulations. This seminar will cover the blending of FHWA, the MUTCD, and OSHA Regulations and how a surveyor can survive in this multi-agency maze of regulations.

Those attending will obtain an understanding of the major changes the Federal Highway Administration has made in the safety of all personnel working on federally funded highways in 2008. This will be combined with an update on the Manual on Uniform Traffic Control Devices requirements and OSHA.

#### Thursday, January 17, 2008

# <u>Hydraulics for Stormwater Quality Design</u> -Jeff Healy, (6 CEH Elective)

The student will learn to predict soil infiltration and percolation. He also will learn to design and evaluate flow through grassed/vegetated swales, to design and evaluate multi-stage pond outlets to meet stormwater quality criteria, to design and evaluate Best Management Practices that rely on soil infiltration, such as Sand Filters, and to evaluate the hydraulic impact of structural Best Management Practices in the stormwater management system.

# From Error Analysis to Relative Positional Accuracy - Anthony (Tony) Gregory, PLS, (6 CEH Mandatory)

Land Surveyors have long been expected to understand how errors occur in their measurements, and how to quantify those errors. As technology has changed measurement methods, and as computers have allowed for more thorough means of error analysis and adjustment, today's land surveyor is in a position to deal with and report measurement errors in a more detailed manner than in the past.

The objective of this workshop will be to review the fundamental principles associated with the analysis of surveying measurement errors in an effort to present a practical understanding of Relative Positional Accuracy, which is included in Title 865 IAC 1-12. Attendees will work on assigned problems. Attendees will need to bring a calculator to this workshop.

# <u>Boundary Disputes: Resolving Client Conflicts</u> - David Hurley, (3 CEH Mandatory)

This seminar's objectives are to assist the surveyor in addressing boundary conflicts that are just waiting to pounce, help with avoiding problems but being comfortable with addressing them when they occur, and to assist the surveyor to create an organized approach to preparing for litigation and testimony at deposition and trial.

This course will cover: What Your Survey Should Reflect; The Role a Land Surveyor Plays: Educating Your Client; A Systematic Approach to Boundary Survey Problems; The Surveyor's Obligations to the Client in Relation to Environmental Problems; Noting Restrictions, Encroachments, Zoning, Flood Plains and Similar Matters; Resolving Conflicting Surveys; Handling Problems Between Adjoining Property Owners; Prescriptive Rights; Adverse Possession; Parol Agreement; Acquiescence; Using Land Surveys to Resolve Disputes; Trial Preparation; The Role of the Surveyor in Court.

#### <u>Littoral/Riparian Rights</u> - David Hurley, (3 CEH Elective)

This seminar will review the different methods used to determine water boundaries and littoral rights division. Many states have *generally* settled on one method but there are instances where issues of equity arise and other methods are used.

A little information on tidal boundaries will be imparted for the benefit of those surveyors who will someday retire to Florida and want to keep active in the practice of surveying.

This course will cover: Water Course as a Boundary; Riparian Rights; Flood Plains; Accretion, Avulsion and Erosion; Wetlands.

#### Friday, January 18, 2008

#### Mock Trial - Gary Kent, PLS, et al (6 CEH Mandatory)

This session will feature a boundary dispute between two property owners that has reached the point of litigation. The two parties have each had a survey conducted - which, of course, do not agree - and each has engaged an attorney to make their case. We will watch the case unfold in court while the parties testify and their expert witnesses present their opinions under direct and cross examination. Our judge is a current Marion County Superior Court Judge.

#### Design Code Analysis for Land Surveyors - Mike Fink (3 CEH Elective)

Professional Land Surveyors in Indiana have the right to perform certain engineering design tasks under the licensing statute. Conforming to the adopted municipal, county and/or state codes, standards and design criteria is essential to performance of these design tasks for the client, whether the client is a public or a private entity. Gathering and understanding these codes, standards and design criteria efficiently can often mean the difference between on-time, on-budget professional performance and losing fees and clients. Mr. Fink presents a usable and easy to understand process for this component of professional design service.

#### National Height Modernization Program - Renee Shields (3 CEH Elective)

NOAA's National Geodetic Survey is the federal agency responsible for defining, maintaining, and providing access to the National Spatial Reference System (NSRS), the Nation's official reference frame for geospatial data. Height Modernization is a Program within NGS designed to enhance the vertical component of the NSRS, and to make it more easily accessible through the use of new technologies such as GPS. The Height Modernization Workshop will provide an overview of how the Program began and is being implemented across the country. Attendees will learn about the various heights involved and how they are related, the process of doing height modernization surveys, and work being done at NGS and with its Height Modernization partners to support implementation, including development of guidelines, models, and tools.

#### NSRS Readjustment - Chris Pearson (3 CEH Elective)

The release of the national readjustment and the resulting development and complete set of new coordinates for all geodetic control marks and a new geoid model, have combined to produce the biggest change for users of geospatial data in the last decade. This talk is designed to update the surveying community in Indiana about these major new initiatives.

Topics covered include:

- \*Review of least square adjustment techniques and relevant datum
- \*Methodology behind the National Adjustment including the Helmut blocking technique and the influence of plate tectonics
- \* Local and Network accuracies
- \* Results of the National adjustment with particular attention to Indiana
- \* New procedures for data submission
- \* Review of heights geoids
- \* Geoid 06

#### SPOUSE/GUEST PROGRAM

Welcome to the 56th ISPLS Convention. For your convenience we have arranged to have the Hospitality Room for your enjoymer Here you will find coffee and assorted soft drinks and a place catch up with old friends and make new ones.

The hospitality room at the Adam's Mark Hotel will be available both Thursday from 7:00 a.m. to 5:00 p.m. and Friday from 7:00 a.m. to 3:00 p.m. You will meet in the hospitality room both mornings prior to your departure from the hotel. A continental breakfast will be available in the hospitality room each morning.

An itinerary of fun, interesting and educational activities is planned for this year's ISPLS Spouse/Guest program.

The formal program will start on Thursday by departing the hotel at 9:00 a.m. and departing on Friday at 8:30 a.m. The itinerary for your group follows:

Thursday		<b>January 17, 2008</b>
8:30 a.m.	Meet	in ISPI S Hospitality St

8:30 a.m.	Meet in ISPLS Hospitality Suite
9:00 a.m.	Board bus and depart for Indianapolis Motor
	Speedway
9:30 a.m.	Indianapolis Motor Speedway Museum &
	Track Tour (weather permitting)
11:00 a.m.	Depart for Lunch at LS Ayres Tea Room
11:30 a.m.	Lunch at LS Ayres Tea Room in the Indiana
	State Museum
12:30 p.m.	Depart for Tour of GRT Hot Glass Studio
1:00 p.m.	Tour of GRT Hot Glass Studio (includes
	demonstration)

Board bus and Return to hotel

#### Friday January 18, 2008

3:30 p.m.

8:00 a.m.	Meet in ISPLS Hospitality Suite
8:30 a.m.	Board bus and depart for Bloomington
	Cooking School
10:00 a.m.	Demonstration and assist in preparing lunch of
	gourmet foods at Bloomington Cooking Schoo
11:30 a.m.	Eat Lunch at Bloomington Cooking School
12:30 p.m.	Dessert Scavenger hunt in shops or square
	(weather permitting)
1:30 p.m.	Board bus and Return to hotel

#### TECHNICIAN PROGRAM - THURSDAY, JANUARY 17, 2008

8:15 a.m.	Safety for Field Personnel - Ron Koons (0 CEH)
	Dendrology - Frank Ballintyn (0 CEH)

#### TECHNICIAN PROGRAM - FRIDAY, JANUARY 18, 2008

8:00 a.m.	R/W Plans - Ron Raney (0 CEH)	
Reading, under	standing and interpreting old and new plans.	
Field interpreta	tion vs office. How does the field crew know	
what the L.S. needs to establish rights-of-way?		
12:30 p.m.	Rule 12 Round Table Discussions of Field	

Procedures (0 CEH) "What are we doing?" and "Why are we doing it?" GPS Surve ing Procedures-RTK-Static Surveying - procedures and note ta ing and the errors in the field - what to do to reduce them. How

to recognize them. How to solve them.

# **CONVENTION REGISTRATION FORM**

## Wednesday January 16 2008

we	anesaay January 16, 2008	Thursday January 17 (	
9-00 - 12:00 p.m.	Board of Directors Meeting International Board Room	12:45 – 3:45 p.m.	Littoral/Riparian Rights David Hurley (3 CEH Ele
12:00 - 7:00 p.m.	*** REGISTRATION *** ATRIUM ***	4:00 – 5:00 p.m.	ISPLS BUSINESS MEE
1:00 – 4:00 p.m.	Working with FEMA's Elevation Certificate Rod Renkenberger (3 CEH Elective)	6:00 p.m	Social and Banquet (Hall
1:00 – 4:00 p.m.	Tree ID for Surveyors Frank Ballintyn (3 CEH Elective)	All seminars will	Friday January 18 be pre-registered. Classroost choice ( ) and alternate (
1:00 – 4:00 p.m.	21st Century Surveyor's Office David Hurley (3 CEH Elective)	be attended in full	to receive CEH credit. Reginitomatically registers you in
1:00 – 4:00 p.m.	Major Changes in 2008 FHWA Employee Protection	7:00 a.m. – 12:00	p.m. *** REGISTRATIO
	Requirements and Update on the MUTCD Ronald Koons (3 CEH Elective)	7:00 – 8:00 a.m.	Past Presidents Breakfast (Room)
1:00 – 6:00 p.m.	EXHIBIT HALL OPENS (Golden Ballroom 4-7)	7:00 a.m.	EXHIBIT HALL OPENS (Golden Ballroom 4-7)
4:00 – 6:00 p.m.	Exhibitors Reception	8:00 – 11:00 a.m.	Mock Trial Gary Kent, et al (6 CEH M (Part 1 of 2)
6:00 - 8:00 p.m.	Vincennes and Purdue Alumni and Friends Reunion	8:15 – 11:15 a.m.	Design Code Analysis for I Mike Fink (3 CEH Elective
6:30 p.m.	Board of Directors Dinner  ursday January 17, 2008	8:30 – 11:30 a.m.	National Height Moderniza Renee Shields (3 CEH Ele
	be pre-registered. Classroom space may be limited.	11:00 - 12:30 p.m.	Lunch (Staggered start and
Please indicate first be attended in ful	choice ( $\checkmark$ ) and alternate (A). NOTE: Seminars must ll to receive CEH credit. Registration in a seminar 2 automatically registers you in Part 2.	12:30 – 3:30 pm.	Design Code Analysis for I Mike Fink (3 CEH Elective
	m. *** REGISTRATION *** ATRIUM ***	12:30 - 3:30 p.m.	Mock Trial Gary Kent, et al (Part 2 of 2
7:00 - 5:00 p.m.	EXHIBIT HALL OPENS Iden Ballroom 4-7)	12:30 - 3:30 p.m.	NSRS Readjustment

8:00 – 11:00 a.m.	Hydraulics for Stormwater Quality Design Jeff Healy (6 CEH Elective) (Part 1 of 2)

8:15 - 11:15 a.m.	From Error Analysis to Relative Positional Accu
	racy
	Tony Gregory (6 CEH Mandatory)

	•
3:30 – 11:30 a.m.	Boundary Disputes: Resolving Client Conflicts
	David Hurley (3 CEH Mandatory)

## 11:00 - 12:45 p.m. Lunch (Staggered start and finish)

(Part 1 of 2)

15 - 3:15 p.m.	Hydraulics for Stormwater Quality Desig
	Jeff Healy (Part 2 of 2)

12:30 - 3:30 p.m.	From Error Analysis to Relative Positional Accuracy
	Tony Gregory (Part 2 of 2)

## Thursday January 17 (Afternoon)

	David Hurley (3 CEH Elective)
4:00 – 5:00 p.m.	ISPLS BUSINESS MEETING
6:00 p.m	Social and Banquet (Hall of Champions)
All seminars will Please indicate first be attended in full	Friday January 18, 2008 be pre-registered. Classroom space may be limited at choice (1) and alternate (A). NOTE: Seminars mut to receive CEH credit. Registration in a seminar that tomatically registers you in Part 2.
7:00 a.m. – 12:00	p.m. *** REGISTRATION *** ATRIUM ***
7:00 – 8:00 a.m.	Past Presidents Breakfast (International Board Room)

#### (Golden Ballroom 4-7) 0 - 11:00 a.m.Mock Trial Gary Kent, et al (6 CEH Mandatory)

8:15 – 11:15 a.m.	Design Code Analysis for Land Surveyors
	Mike Fink (3 CEH Elective)

8:30 – 11:30 a.m.	National Height Modernization Program
	Renee Shields (3 CEH Elective)

11:00 -	12:30 p.m.	Lu	nch	(Sta	agg	ere	d s	tar	t ar	ıd fi	nish)	
10.20	2.20	-		_			_		_			

12:30 - 3:30  pm.	Design Code Analysis for Land Surveyor
	Mike Fink (3 CEH Elective) (Repeat)

12:30 - 3:30 p.m.	Mock Trial
	Gary Kent, et al (Part 2 of 2)

12:30 - 3:30 p.m.	NSRS Readjustment
12.50 5.50 p.m.	
	Chris Pearson (3 CEU Elective)

#### 2:00 p.m. **EXHIBIT HALL CLOSES**

## Technician Program

"Participants signed up for the Technician Program are not eligible to attend the other convention sessions. If you wish to attend the other sessions you must pay the full or 1 day convention fee. The Technician Program fee includes meetings, handouts and luncheons only."

## Thursday, January 17, 2008

3:15 - 11:15 a.m.	Safety for Field Personnel Ron Koons (0 CEH)
1:15 - 12:30 p.m.	Lunch - Golden Preconvene
2:30 - 3:30 p.m.	Dendrology - Frank Ballinty (0 CEH)

# **CONVENTION REGISTRATION FORM**

#### Friday January 18 (Technician) **ISPLS** 55 Monument Circle, Suite 719 8:00 - 11:00 a.m. R/W Plans Indianapolis, IN 46204 Ron Raney (0 CEH) Phone: 317-687-8859 Fax: 317-687-5053 11:00 -12:30 p.m. Lunch - Golden Preconvene Name to be printed on badge: Rule 12 Round Table Discussions of Field Procedures (0 CEH) L.S. Number LODGING Adam's Mark Indianapolis Address: 2544 Executive Drive Indianapolis, IN 46241 City, State: (800) 444-2326 www.adamsmark.com Zip Code: \_\_\_\_\_ Phone: \_\_\_\_ Convention rates (below) have been arranged. Please indicate you are Spouse Name: attending the 2008 ISPLS Convention when making reservation. SINGLE REGISTRANT & SPOUSE FORM Reservations must be received by 12/31/07 in order to guarantee room For additional registrants please make copies of this form or contact ISPLS and availability. for additional forms. Single: 95.00 Double: 95.00 Fee Triple: 95.00 Member \$320.00 Quad: 95.00 Non-Member \$650.00 Spouse Registrations received after 12/31/07 (including walk-in's) will include a \$140.00 ☐ Student (Full Time) \$50.00 late fee, and will be accepted based on available space, and will not \$ 40.00 be guaranteed handouts or meals. Refund requests received before 1/04/08, ☐ 1 Day (Member) \$230.00 a 50% discount will be made. After 1/04/08, no refunds will be made. 1 Day (Non-Member) \$500.00 1 Day Technician Program \$ 75.00 No further Registration will be accepted after 1/02/08. ☐ 2 Day Technician Program \$150.00 After 1/02/08 registration will be at the door with availability of seating. ☐ Late Fee (After 12/31/07) \$ 50.00 ☐ ACSM/NSPS Member (Full Convention) \$320.00 The full time registration fee for the convention includes all handouts. ACSM/NSPS Member (One Day) refreshment breaks, two luncheons and the banquet. The registration fee \$230.00 Extra Banquet Ticket Thursday Night for spouses includes a like number of meals. The student (full time) reg-\$ 50.00 ☐ Exhibits Only istration fee includes meetings and luncheons only. One-day registrant's \$ 30.00 fee include handouts and luncheons for the day registered. ACSM/NSPS Member- Membership # TOTAL The technician program fee includes technician meetings, technician handouts and luncheons only. Participants signed up for the technician program are not eligible to attend the other convention sessions. If you Firm Member – Deduct 20% wish to attend the other sessions you must pay the full or 1 day convention fee. TOTAL AMOUNT ENCLOSED Method of Payment Check (Please make check payable to ISPLS) As a reminder indicate your first choice with an $(\checkmark)$ and an Alternate (A). We will appreciate it, that you will indicate by a $(\checkmark)$ , if you plan on attending the Banquet on Thursday Night. Account Number Expiration Date The Better Half of the Tecumseh Chapter of ISPLS will once again be having its Silent Auction for the Margaret Cunningham Scholarship Fund. Printed Name:

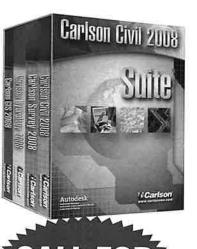
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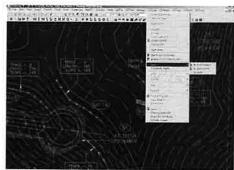
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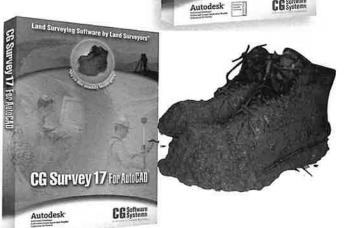
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### MEET A MEMBER

by David B. H. Best, PLS, Indianapolis

In this issue we profile Eugene L. O'Brien, P.E., L.S., founder and principal of O'Brien Engineering, Madison, Indiana. Gene's membership in ISPLS dates from our society's inception. He considers land surveying to be a "... a vocation of the love of the land..." Our interview produced the following observations:

# Q: You are not a native of Indiana. Where is your hometown and how did you spend your early years?

A: I come from Middleport, New York. My high school graduating class numbered 37. In 1937 at the age of 14 I became a caddy at a local golf course. During the next four years I matured considerably while caddying for men in their forties and fifties. Golf became my game. In my senior year I was the high school golf champion. A. D. McDonald, one of my caddied golfers and an engineer, urged me to apply to the University of Cincinnati and its five-year engineering work-sturdy program. I entered U. of C. in 1941. The co-op portion of the program was with the McDonald Tool and Die Company in Middleport.

# Q: Midway through the five-year program you elected to serve in the U. S. Navy. Tell about your Navy service.

A: I served in the Navy from 1944 to 1946 enduring boot camp at the Great Lakes Naval Training Station. I attended the electrical engineering course at Texas A and M University and then served aboard the heavy cruiser U.S.S. Wichita in the South Pacific as ship's electrical engineer. After my two-year stint in the Navy returned to U. of C. and graduated in 1948 with a degree in mechanical engineering. I found my experience at the U. of C. to be smooth and rewarding just as I had found golf to be. I took the two-day engineering registration examination in Columbus, Ohio, scoring 98.6 and placing second out of 600 taking the test. During my career I've been licensed as an engineer and a land surveyor

### Q: I understand you are a real family man. What are your hobbies?

in Ohio, Indiana, Kentucky, and Florida.

A: Yes, I am a family man. My wife Jean, now deceased, and I met at the U. of C. She was majoring in graphic arts. We married after my graduation in 1948. We named our three children Jack, Jill, and Jo. All are married and between them I have six grandchildren. To show my consideration of the grandchildren I quit smoking. Jean became a graphic artist. A noted work of hers is the pictorial Ohio River walkway in Madison, Indiana. I still play golf as often as possible. Aside from golf I consider my work to be my hobby. I simply enjoy engineering and surveying work.

# Q: When did you establish O'Brien Engineering? Of the projects you've been involved in which ones stand out in your mind?

A: As soon as I became registered in 1948 I established my firm. James Rupel, my first client, remained with me for 55 years! Our first project was for the Highland County Water Company in Chio. Rupel needed water service and the Highland County Water npany needed customers. This company was another 55-year client of mine. Located in Madison, Indiana my company had as other clients the City of Madison and Jefferson County. O'Brien Engineering projects are in southwestern Ohio and southeastern

Indiana, including numerous projects in Lawrenceburg and North Vernon.

# Q: I understand that you served as a county surveyor for many years. Tell about this experience.

A: I served as Jefferson County, Indiana, county surveyor for 20 years from 1978 to 1998. I began the lengthy process of scanning all recorded surveys. I developed computer-generated quarter section plats for ready reference. The project cost \$38,000 and took two years to complete with the able assistance of two dedicated young women in my office. For a fee of three dollars a surveyor can now have access to any Jefferson County quarter section with a listing of all surveys of record within the quarter section. These surveys are at your fingertip by simply inputting the section, township, range and quarter section.

# Q: Of all the surveying projects you've been involved in which ones provided the greatest challenges?

A: My relationship with James Rupel whom I mentioned earlier resulted in the Hidden Valley Lake development in Dearborn County, Indiana not far from Lawrenceburg. The project includes some 6000 deluxe homes and a golf course developed over a period of 45 years. We discovered a 1780 Revolutionary War Cemetery with eighty graves on the site. An old iron fence surrounded the cemetery. On occasion during the development of Hidden Valley we discovered graves located beyond the bounds of the cemetery requiring consultation with representatives of the Historic Preservation and Archeology Division of the Indiana Department of Natural Resources. "Nasty" is the word I use to describe the problems associated with the cemetery and the means whereby we solved the problems.

# Q: Please comment on your involvement in ISPLS and its importance to Indiana land surveyors.

A: I served on the ISPLS Board of Directors from 1978 to 1980. The society's greatest service to its members is its educational program, the continuing education seminars offered throughout the year. It is well-organized with active committees serving all the needs of its members.

# Q: How can we encourage more young people to enter the profession of land surveying?

A: At the present time the only Indiana schools providing degrees in surveying are Purdue University and Vincennes University. And now Purdue is in the process of revising its surveying program. Unfortunately, most people decide on a career in surveying after working for a surveyor for many years. With the limited choices for obtaining a degree in surveying we are placing a limitation on the number of future surveyors. If we are to target students in college, we must encourage those in the civil and mechanical engineering fields to double major in surveying. However, these students are a select few who would elect to follow this path. Many would feel that they would "get it later." The limited schools to accomplish this make it unlikely that many will.

... continued Page 21

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## THE NATIONAL MUSEUM OF SURVEYING TO BE ESTABLISHED IN SPRINGFIELD, ILLINOIS

In the spring of 2008 the new home of The National Museum of Surveying will be in downtown Springfield, Illinois, in the "Land of Lincoln." The building selected faces the Old State House Plaza and is only one block from the new Abraham Lincoln Presidential Library and Museum. More than one million people visit this busy tourist district annually.

A \$1.1 million campaign is underway for renovation of the three-story building. The basement will house the collection and storage area. The permanent and rotating galleries and the surveying archives will be located on the first floor with offices, classrooms and a meeting hall on the second floor.

In the first floor archival area researchers will have access to one of the largest publicly held collections of surveying related books and papers in the United States. The Museum director will coordinate rotating exhibits with state surveying societies to emphasize the importance of regional surveys, historic surveying landmarks, and specialized regional surveying systems. Displaying to the public the extraordinary history of surveying in the United States will be a principle aim of the Museum.

Surveyors countrywide are encouraged to contribute to the founding fund. All contributions will be tax-deductible. ISPLS embers may request a contribution brochure by calling the ISPLS ice at (317) 687-8859 or writing to its address at 55 Monument Circle, Suite 719, Indianapolis, IN 46204. The ISPLS email address is: ISPLS@aol.com.

#### Meet A Member ... continued from Page 19

#### Q: What can be done to reverse this trend?

A: We must acquaint the younger generation with what I consider to be the best-kept secret of surveying. Surveying is a vocation for lovers of the land. While doing our work as surveyors we experience the advantage of fresh air and exercise. We are witnesses to the history of the land and we are a party to the future.

#### Q: What final words can you offer about your storied career as a surveyor and engineer?

A: As I mentioned earlier I believe that the practice of land surveying is the best-kept secret of any profession. It's a vocation that reflects what I choose to call "a love of the land." The surveyor is there when the first whistle is blown. This is not true of other professions. Nothing can compare with the life of a surveyor. With my dual registration I cover all aspects of a site's development from the boundary and topographic surveys to the land planning, site design, and stakeout work. We can transform a 100-acre parcel into a modern subdivision with its recorded plat and development plans.

oroughly enjoy researching original deeds and records in the courthouse. These documents represent the paper trail of a parcel of land. I DON'T BELIEVE THERE'S A BETTER VOCATION THAN THAT OF THE LAND SURVEYOR! AND THAT'S MY FINAL WORD!



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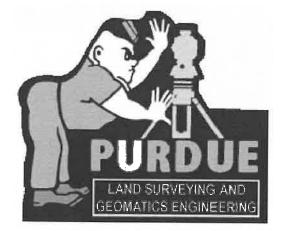
# SURVEYING ALUMNI REUNION

Wednesday Jan. 16, 2008 6:00 - 8:00 PM

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Heavy-Duty Wood/Fibgls tripod	\$188.00	\$2.59	
Single Tilting Prism	\$178.00	\$2.19	
8ft Prism Pole	\$155.00	\$1.70	
Total:	\$8,330.00	\$172.65	



**Engineer's Kit** 

Lists at \$7,348, you pay only \$5,295 for package price or \$152.49 a month!

Item	List Price	Monthly Lease Price
Nikon DTM-332 total station with On-Board Data Collection	\$6,495.00	\$139.58
Heavy-Duty Wood/Fibgls tripod	\$188.00	\$2.59
Single prism & prism pole	\$366.00	\$3.92
Nikon 9 pin download cable	\$100.00	\$1.89
Nikon Connex Software for download & data manipulation	199.00	\$4.51
Total:	\$7,348.00	\$152.49



Contractor's Kit Lists at \$7,517, you pay only \$5,495 for package price or \$158.25 a month!

Item	List Price	Monthly Lease Price
Sokkia SCT6 Construction total station	\$4,999.00	\$108.00
TDS Recon w/ Layout Pro, in- cludes cable, & bracket	\$2,095.00	\$45.93
Heavy-Duty Wood/Fibgls tripod	\$109.00	\$1.98
Mini Prism package	\$159.00	\$2.56
8ft Prism Pole	\$155.00	\$1.70
Total:	\$7,517.00	\$158.25
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**Purchase Anytime Cancel Anytime** No Penalties

Better than cash A cash purchase is final. It's yours whether you like it or not. It uses your valuable cash reserves. It means using equipment until it becomes obsolete and then disposing of it. Profits come from using your equipment, not

Better than a bank loan A bank loan has the same disadvantages as paying cash, plus interest costs. Many banks won't even make loans on 'high-tech' to new businesses or newly licensed individuals. Bank loans can be put off or renewed if business is slow. Meanwhile you are making payments on equipment that has become obsolete. With the 'Worry-Free' Lease, just turn the equipment in!

Better than other leases Most commercial leases are non-cancelable, meaning you can't return the equipment before the end of the lease term for any reason, even death! Most non-cancelable lease contracts state that you must pay the total of all lease payments. In other words, you don't save any money by paying off the lease early. The 'Worry-Free' Lease purchase or cancel anytime option eliminates both of these objections to

'Worry-Free' Leasing Service Banks and commercial lease companies have no interest in the performance of your equipment after the Lease contract is signed. The Hayes 'Worry-Free' Lease cancellation option guarantees that we are going to do everything in our power to keep you productive and happy with your equipment, so you will continue Worry-Free' Leasing as a permanent way to solve your surveying equipment financing

Example monthly rental cost for a 4-month project on a \$10,000.00 system

Industry Average	'Worry-Free' Lease	Average Savings
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2nd mo. \$1000	2nd mo. \$288	\$7.12
Brd mo. \$1000	3rd mo. \$288	\$1,424
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June 11, 2007

Hoosier Surveyor ATTN: David Best, Editor 5402 Washington Boulevard Indianapolis, IN 46220

KENNETH CURTIS, PLS

Dear Mr. Best

Volume 33-(4) of the Hoosier Surveyor depicted Zach Beasly, PLS presenting the Service Award from ISPLS to Kenneth Curtis, PLS. I have known Mr. Curtis for more than 40 years through mutual service in the American Congress of Surveying and Mapping; the National Society of Professional Surveyors; a summer session at Purdue University studying surveying and related courses; national meetings of surveying teachers and other professional organizations and endeavors. I have great respect for Mr. Curtis and his efforts in promoting the ethics and professionalism of the surveying industry and hereby thank the ISPLS for bestowing this honor on Ken Curtis.

Very truly yours,

Edward Springer, P.E. SPRINGER ENGINEERING, INC.

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## Any of these sound familiar?

By Ronald E. Koons, RoSaKo Safety

OSHA doesn't just require you to

train your employees, you have to

train them adequately to recognize

hazards and be able to take cor-

rective measures.

I have always felt that one of the keys to education is studying what others have done previously to see how we can improve. (I believe that may be called History!) Even when we observe something that appears on the surface to be "nearly perfect"; we still might find a better way to perform the task. I would like to look at a few examples of actual situations we have found while traveling across the United States this year. While some may be good, if not great examples; others may have a great room for improvement.

In our first situation we were traveling on an interstate highway. The traffic was moderate and the flow of traffic was around 75-78 mph with a posted speed limit of 65 mph. The sky was sunny and it was a crisp winter day. I began to notice orange signs ahead at each side of the road in our direction of travel. As we got closer I saw they read "Survey Crew Ahead". I touched the brake to get off cruise and shortly noticed two more signs with the same wording. Shortly thereafter amber flashing lights caught my attention in the center of the median. There was a pickup truck with internal strobes and a light bar. All were activated. Just after the truck there was a survey crew member standing at a station and I noticed a rod person about 200 feet away also in the median. Both were wearing high visibility vests (Class III) and high visibility knit caps. There was no mistaking there were

o people there with the shape and bility. Just after the work crew I noticed a set of signs on the opposite side of the interstate and then shortly later another set of signs. This kind of dedication to safely protecting crew members is a model for everyone to follow. There is no question that sur-

veying is a dangerous profession. When crews are given the tools and knowledge to safely perform their job there is an even better chance they will go home each day at the end of their shift.

Our next experience was on a two lane state highway during the summer months. Temperatures were quite warm in the upper 80's. Traffic was light and wasn't going too much faster than the posted 55 mph. There was an occasional speedy driver, but not many. As we rounded a gradual curve that had trees on the inner circumference, I noticed something ahead partially in the roadway. I wasn't certain if was a wreck or a broken down vehicle so I slowed down very quickly. As we got closer I noticed it was a pick-up truck with a cap and the rear door was open. There were no emergency lights and the four-way flashers weren't even activated. The truck was around three feet on the roadway since the berm was very narrow and then there was a deep ditch off the right side. I concentrated so much on the vehicle in the roadway that all of a sudden just in front of me I noticed two workers. One

iust beyond the truck inside the roadway about a foot. He had an instrument set up and was looking toward a rod person over the fence row on what appeared to be private property. Neither of the crew members had on any type of high visibility clothing.

I guess we could say they did have one thing correct in putting their vehicle as a barrier between them and the oncoming traffic. That is certainly the only thing they were doing correctly. One of the crew members was wearing shorts and tank top while the other was wearing jeans and a tee shirt with some type of printed graphics. Whenever I see a situation this egregious I always wonder if the crew members had received any safety training. You would think that if they had received even minimal training they could have gotten a few things correct.

Our next occurrence was in a small town around 45 miles from the downtown of a very major U.S. city. Most of the town folks worked in the big city or suburbs and commuted. We had just completed a safety audit for a surveying firm. Several of us were in the parking lot across the street from the office looking over their field vehicles. As we looked to the corner there was a two person crew from another surveying firm removing the lid of a sanitary manhole. Both crew members were wearing Class II high visibility vests. There was one 28" safety cone setting next to the crew. One of the workers was on his knees looking into the manhole and a rod was inserted also. The other crew member was looking at a portable data acquisition device. There was no signage, no one was watching for traffic, no one was flagging traffic...they were just counting on motorists to avoid them and

> hopefully not even get close enough to knock the worker who was on his knees into the manhole opening. Not only were we looking at several traffic safety issues, there were definitely some confined space concerns also. When it comes to traffic safety we can't just say that because there is low traffic count

we have no risk. At least minimal precautions must always be taken. In this case, one safety cone and two vests while in the middle of an intersection just don't cut the mustard.

The old adage "You can lead a horse to water, but you can't make it take a drink." doesn't work when it comes to safety. OSHA doesn't just require you to train your employees, you have to train them adequately to recognize hazards and be able to take corrective measures. Your only defense in the event an OSHA Compliance Officer observes negative safety efforts by your employees is if you have done an adequate job of training, have reinforced the training, and have offered discipline when needed. If you are missing any of the elements you will receive a citation and most likely won't get out of it during a hearing.

While we had two not so good and one really good example, any of the work places could lead to serious injuries. Just because you are doing everything correctly doesn't always mean someone won't get hurt. However, doing everything correctly sure gives your employees a better chance at coming home each night and greatly reduces the potential for serious injury. Have a safe day!

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## CALENDAR

December 13, 2007

Northwest Chapter ISPLS Christmas Party,

January 16-18, 2008

56th ISPLS Annual Convention, Adam's Mark Hotel (Airport), Indianapolis, Indiana, Hosted by Initial Point Chapter and Wabash Valley Chapter.

January 16, 2008

ISPLS Convention - Boy Scouts of American Meeting Organizational meeting with BSA councils in Indiana. When: 10:00 a.m. Wednesday, January 16, 2008 at the Adams Mark Hotel in Indianapolis. At this meeting we are seeking volunteers for a surveying liaison to each of the seven councils in Indiana. Note: This meeting will not conflict with any continuing education workshops.

February 7-8, 2008

PLSO Annual Conference, Cleveland Renaissance Hotel, downton Cleveland, Ohio, Hosted by Cleveland Chapter.

February 14-17, 2008

KAPS Annual Conference, Griffin Gate Marriott Resort, 1800 Newton Pike, Lexington, KY 40511

February 21, 2008

IPLSA 51st Annual Conference, Crowne Plaza Hotel, Springfield, IL

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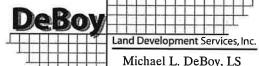
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