

HOOSIER SURVEYOR



QUARTERLY PUBLICATION OF THE
INDIANA SOCIETY OF
PROFESSIONAL LAND SURVEYORS, INC.

VOLUME 30
NUMBER 1
SUMMER 2003



AFFILIATED WITH THE
AMERICAN CONGRESS ON
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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 assumed for errors, misquotes or deletions as to its contents.

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PRESIDENT'S THOUGHTS

by Greg Garrison, PLS, Boggstown, Indiana



RULE 12

Recently there has been controversy concerning whether Rule 12 requires lot corners within new subdivisions be monumented or whether the monumentation of the outer boundary of the subdivision and the roadways within the subdivision is sufficient. There has, in fact, been quite a bit of discussion on RSPLS.com concerning this subject.

A portion of the mission of ISPLS is to provide guidance to our members. Recently ISPLS was asked by some of our members to review Rule 12 and gather data regarding monumentation of lot corners inside of subdivisions. This task was assigned to our Standards Committee, which polled our board of directors and the members of their committee, as well as some other individuals, and held a meeting to discuss the issue.

What we discovered is that there is a difference of opinion among surveyors as to whether lot corners should be monumented or not, based on the way the law is currently written. Excellent surveyors on each side of the issue were able to defend their position, and this only furthered the confusion. There was, however, nearly unanimous consent that the wording and intent of Sections 17 and 18 of Rule 12 needs clarification in order to reduce or eliminate this confusion.

As a result of the Standards Committee report, a letter was prepared and sent to the Board of Registration requesting that the law be clarified so as to alleviate the confusion. I am happy to report that the Board of Registration has been reviewing the law and is currently working on language that will hopefully eliminate the confusion concerning this issue. I want to publicly thank the members of the Board of Registration for their quick response.

MEMBERSHIP RENEWALS

Membership renewals have been sent to all members. If you haven't received yours, please let headquarters know. If you do not renew, this will be your last Hoosier Surveyor.

UPCOMING EVENTS

Please mark your calendars for a couple of golf outings that are fast approaching. By the time you read this message, the Northeast Chapter will have hosted a golf outing at the Cherry Hill Golf Club in Ft. Wayne. Hopefully, all who attended had a great time. On Friday, September 26, the Central Indiana Chapter will host their annual golf outing at The Links in New Palestine.

NEW EQUIPMENT

We have recently acquired a new computer for headquarters. Over the past few months, the old system had crashed a few times, and the information had to be re-entered due to the inadequacy of the system to be backed-up. We now have a far superior system, which should enable Dianne to do her work more efficiently. It will be installed the end of July and the data base will be transferred shortly thereafter.

We also now own a laptop and a projector, for use in presentations at seminars and career days. Ed Sweetland will be utilizing this equipment for the next LS/SIT review courses, and it will be available for use by the membership for presentations at high school career days, or for presentations to other groups. Contact Dianne to obtain information on using this equipment.

TRIG STAR WINNER

I would like to congratulate William J. Young, of Hobart, as this year's Trig Star Winner. ISPLS has purchased a \$1000 savings bond to present to him.

UPCOMING SEMINARS

ISPLS and its chapters have several seminars planned over the next few months. I would encourage you to take advantage as many as your schedule will allow.

| | |
|--------------|--|
| August 15 | TR55/TR20 Speaker: Thomas Burke, Jr. Valparaiso University |
| September 12 | Erosion & Sediment Control Speaker: Randy Braun, et al Brown County State Park |
| October 10 | Legal Descriptions Speaker: Tony Gregory Plymouth |
| October 17 | Original Government Field Notes Speaker: Ken Anderson Indianapolis |
| October 18 | Indiana Survey Law – Theory of Location in Indiana Case Law, Gary Kent IUPUI Ft. Wayne |
| October 24 | TR-55 Computer Hydrology Speaker: Jeff Healy Vincennes University |

ISPLS BOARD OF DIRECTORS MEETING HIGHLIGHTS

by Dianne Bennett, Executive Director

April 26, 2003

The ISPLS Board of Directors held a meeting on Saturday, April 26, 2003 at headquarters. President Garrison called the meeting to order at 10:01 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 topic listed below.

Communication - Membership - The following membership applications were reviewed and approved: Professional Member - (newly licensed land surveyors) Matthew Cooper, Ross Taylor, Fulton Clinkscales, Jr., Kurt Vonderheide, Brian Rismiller, Jeffrey Barnes, Nathan Walker, Steve Casterline, Matthew Bertsch, Kenneth Pitts, Joseph Hile, Jason McCort, James Orr, Timothy Jones, David Boblitt, Jefferey M. Trout, Anthony Robinson, Joseph Mullins, Steven Lampen, Mark T. Seiler; Associate - Timothy Darnall.

The ISPLS roster is finished and membership should be receiving it shortly.

Intersociety Relations - Perry Cloyd will chair the committee this year and asks that the board members to review the submitted material and add any areas of concern and rate each area as to order of importance.

Hoosier Surveyor - Currently working on the spring issue.

Web page - The ISPLS's domain name renewal has been paid compliments of Chris Marbach.

Publications - The committee is working on recommendations and guidelines for updating Manual #3 (Law and Surveying). Manual #2 (State Plane Coordinates) is in the process of being updated. They are also looking into updating other ISPLS brochures.

Public Information & Marketing - Ron Wharry worked a career day at the North Central High School and Northwest High School.

Professional Development - Education - The income/expense from the April 4, 2003 ISPLS seminar was submitted.

The Education committee recommended the Hoosier Hills Chapter's seminar by Randy Braun, "Erosion and Sediment Control." for 6 CEH elective to the board. The seminar will be held May 2nd at the Spring Mill State Park. A motion was made and passed to approve this seminar.

Scholarships - Frank Ballintyn reported that the scholarship committee met and had 5 applicants for the Vincennes University scholarship this spring. Andrew C. Murray was awarded \$2000; Jason M. Page was awarded \$1000 plus Central Indiana Chapter's \$1000.

The 2002 Purdue University John McEntyre Endowment Fund Activity report was reviewed by the board. Purdue's scholarship interviews will be in the fall.

Trig-Star - Tony Gregory is chair of the committee. Tony reported that many are involved this year. Dick Ward has administered 22 tests.

Licensing Review Exam - Ed Sweetland reported on the LS/SIT review that was held in Fort Wayne on April 4 and 5th. 10 SIT and 12 LS students attended. There was discussion on

purchase of a laptop and projector before the next review. The second seminar will be 4-6 weeks before the exam this fall.

Government Affairs - Legislation - John Stephens reported on HB 1741 regarding protection of HARN points which was just signed by Senate President and HB 1798 regarding Phase 2 stormwater is going to the Governor's desk Tuesday for signatures, but has opposition from IDEM and conservation organization. The minuteman process was discussed.

Board of Registration - May 16, 2003 is the certificate presentation for new land surveyors. Greg will speak for ISPLS. Ken Curtis has resigned from the BOR effective that date. Rich Hudson and Les Weber have both again been recommended to the Governor for Ken's replacement for the rest of his term.

County Surveyors - John Stephens reported on Road School election results. Scott Zeigler is President, Al Frisinger is the North V.P., Kent Ward is the Central V.P., Dick Vermillion is the South V.P. and Dave Gaston is the Secretary/Treasurer. All are ISPLS members. There was discussion regarding private surveyors getting paid for corner perpetuation.

NSPS Governor/Great Lakes Council - Don Bengel reported that ACSM is revamping. He also informed the board that Bill Soderberg has passed away.

Standards - The Rule 12 subdivision monumentation issue was discussed. It was noted that we have two issues: (1) How does Rule 12 address this issue? Does it give a clear defined definition of what monuments are required to meet Rule 12?, (2) If it is such a gray and conflicting issue among surveyors then it needs clarification. The standards committee need to address this. Added was (3) the standards committee needs to come up with a consensus and we need to be sure that we are addressing the public good. It was emphasized that the public protection is important.

Internal Affairs - Chapters

Northwest Chapter - Rich Hudson reported that their next meeting is the 2nd Thursday in May.

Northeast Chapter - John Updike reported that they will meet April 29th.

Wabash Valley Chapter - They met April 23rd and elected officers.

Central Indiana Chapter - Their next meeting will be May 8th at 6:30 p.m. at IUPUI. The topic will be the surveying program at IUPUI. They are working on a trip to the Museum of Surveying in August; night at the ballpark; and plans for a workshop in late fall.

Southwest Chapter - Will meet 2nd Tuesday in May. They are working on the convention planning. About 75% of the program has been set. They are planning a Saturday afternoon panel discussion on national trends in surveying.

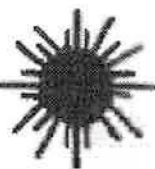
Purdue Student Chapter - They have submitted their income/expense report from the ACSM/ISPLS convention.

New Business - A motion was made and passed for ISPLS to renew its corporate membership in the Museum of Surveying.

New Business - It was noted that John Stephens has a new email address: jstephens@mixi.net.



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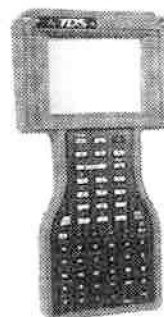
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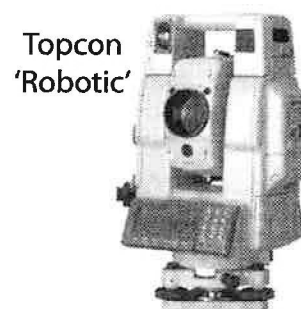
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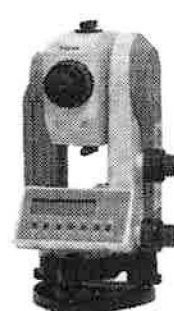
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BOCK & CLARK CORP. v DEPARTMENT OF CONSUMER PROTECTION

31Conn. L. Rptr. 599 (Conn.Super.2002)

by Knud E. Hermansen, P.L.S., P.E., Ph.D., J.D.

Knud is a licensed professional land surveyor, professional engineer, and attorney at law. He teaches at the University of Maine in the surveying engineering technology program and has a consulting practice specializing in boundary disputes, title, land development, liability, and easements. <http://www.umaine.edu/set/svt/articles/>

Note: The principles discussed in this case may not apply to all states. The readers are encouraged to research the law in their own state.

Bock & Clark Corp. (plaintiff) is a corporation with a principal place of business in Akron, Ohio. The firm mailed postcards to recipients (lawyers, realtors, etc.) in other states offering to provide a one source contact for ALTA/ACSM Land Title Surveys anywhere in the United States. Bock & Clark Corp. recruited licensed surveyors in the state to bid on and perform the ALTA/ACSM Land Title Surveys. Bock & Clark Corp. provided management service that entailed evaluating a client's land surveying needs, soliciting bids from firms on its database, choosing the firm to perform the service, reviewing the surveys for compliance with industry standards, and reviewing the performance of the locally licensed surveyor, in part, by reviewing the descriptions of the survey compared to the actual drawing itself.

Bock & Clark Corp. was turned into the Connecticut licensing board for practicing land surveying without a valid Connecticut land surveyor's license. An investigation was held, followed by a hearing. The licensing board determined that Bock & Clark Corp. practiced land surveying in Connecticut without a corporate registration from the board of examiners; and that Bock & Clark Corp. used a title or description that conveyed to the public that the Bock & Clark Corp. was authorized to engage in land surveying in Connecticut. The licensing board ordered Bock & Clark Corp. to stop their practice in Connecticut until Bock & Clark Corp. obtained the proper registration.

Bock & Clark Corp. appealed the licensing board's decision to the Connecticut Superior Court. In the appeal, the Superior Court noted that in making a decision, the licensing board must come to a decision based on substantial evidence. In determining questions of law (rather than fact), the licensing board's duty is to render a decision that is not unreasonable, arbitrary, illegal, or an abuse of discretion. Deference is given to the licensing board in interpreting a statute. Great deference is given where the statute gives the board jurisdiction for enforcement and the Board has expertise in the area and a history of hearings in the subject area.

The Court determined that the surveyor licensing act includes the function of "evaluating" surveying services. Bock & Clark Corp. went beyond simply facilitating surveys when they brokered surveying services for clients. Under Connecticut's definition of surveying, Bock & Clark Corp. did not have to actually conduct a survey in order to run afoul of the licensing act. The Court upheld the licensing board's decision and determined that Bock & Clark Corp. did practice land surveying in Connecticut and improperly implied to clients that it was authorized to practice land surveying in Connecticut.

This case has suggested several points of potential interest to land surveyors.

1. Tread cautiously when extending services beyond the boundaries of the state of licensure. Check the pertinent statutes for the state. Display the states of licensure in correspondence and advertisement to keep clients informed. (Does an out-of-state firm violate surveyor licensing acts when the firm offers evaluation services to lending institutions whereby the firm determines if selected property resides within a flood plain?)
2. Licensing boards have considerable leeway in evaluating the licensing act and what constitutes the practice of surveying.
3. Modern equipment and software simplifies technical tasks. More and more laypeople are able to use the equipment and software and perform what many believe are surveying services. For example, the familiarity with equipment and software has allowed laypeople to offer mapping or GIS services. Boards should periodically review licensing acts to insure the licensing act covers modern practice. (For example, does the licensing act cover wetlands mapping with GPS?)

Reprinted from TBM - The New Hampshire Land Surveyors Association Newsletter.

ACSM ANNOUNCES RESULTS OF REORGANIZATION VOTE

On June 18, 2003, the Tellers Committee for the American Congress on Surveying and Mapping (ACSM) counted ballots which asked ACSM members the question, "Shall ACSM replace its existing Constitution and Bylaws with the proposed Bylaws of Operation and Procedure as approved unanimously by the ACSM Board of Direction?" The Board of Direction had voted its unanimous approval of the proposal during its annual meeting in April 2003.

Article IX of the existing Constitution and Bylaws requires that amendments or additions to it must be approved by 75% of the Board of Direction, and ratified by approval of two-thirds of those members voting on a letter ballot.

The results of the Tellers Committee count was presented in a letter from Committee Chair Robert S. Schwenger to the Board of Direction. The letter was received at ACSM headquarters June 20, 2003.

The vote count was: Yes - 1390 No -196 Abstain - 1

In addition to establishing the current Member Organizations (MOs) as autonomous entities, the now approved reorganization plan also opens the door for other autonomous organizations to become part of the ACSM Congress family.

The leaders of the four current Member Organizations of ACSM, along with ACSM headquarters staff, will now begin the task of finalizing plans for implementation of the reorganization, set to take effect January 1, 2004.

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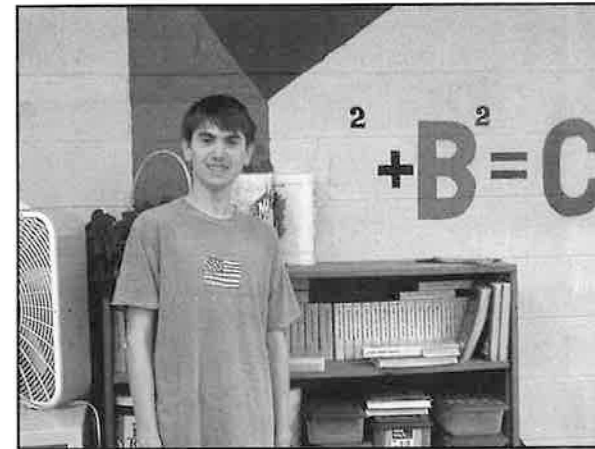


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HOBART HIGH SCHOOL SOPHOMORE IS STATE TRIG-STAR WINNER

by Tony Gregory, PLS, Trig-Star Comm. Chair



William J. Young, Hobart High School, IN 2003 Trig-Star Winner.

William Young, a sophomore from Hobart High School (Lake County), is the 2003 Indiana Trig-Star Winner. William scored a perfect 100 points in a time of 19 minutes and 50 seconds. As a result of his achievement, William is being awarded a \$1000 savings bond from ISPLS, and is offered one-year's tuition if enrolled in the Vincennes University Surveying Technology program, courtesy of Vincennes University. He had also been awarded a \$500 savings bond from the Northwest Chapter.

William completed the National Trig-Star exam earlier this summer, and his exam has been forwarded to NSPS for grading. At the time of this writing, the national results had not yet been published. William's exam was proctored by Jeff Gustke, PLS, of the Northwest Chapter, and Ms. Jackie Rogers, William's math teacher.

A total of 33 schools participated throughout Indiana in this year's competition. Richard Ward, PLS, of the Wabash Valley Chapter was responsible for arranging exam participation from 22 schools. On behalf of ISPLS, the Trig-Star committee acknowledges Dick's exemplary effort. Other chapter participation included 5 schools from the Southwest Chapter, 5 schools from the Northwest Chapter, and one school from the St. Joseph Chapter.

It is a goal of the Trig-Star committee to increase the number of schools participating in the program this coming year, and to get increased chapter participation. Any member with personal contacts with math teachers or guidance counselors at area high schools is encouraged to begin promoting school participation. ISPLS purchases a state license that allows the exam to be given at an unlimited number of high schools, so there is no direct cost or fees to the school or to the sponsoring chapter, other than copying costs. Most of the participating chapters have provided for awards to individual school winners.

The Trig-Star program is an excellent way to promote the profession of land surveying, and a way for us to give back to our profession.

THE WABASH VALLEY CHAPTER TRIG-STAR COMPETITION

by Richard E. Ward, PLS, Anderson, Indiana

The Wabash Chapter of ISPLS completed the 2003 Trig-Star math competition. They had all sixteen high schools that participated in 2002 and added another five to the list this year. Several other schools said that they would participate next year. There were 350 students (total) taking the exam. It was a great help to have Penny Narum working with this year's contest. She will be taking over the examination next year. With her teaching background, I can only see this contest getting better!

The winner by our calculations, of the Wabash Chapter, is Kurt Biehl, a senior from Northfield High School on the North side of Wabash, Indiana. He had a score of ninety (90) points out of 100 and completed it in 23 minutes. Kyle Wilson of Pendleton High School also received ninety (90) points but finished six minutes behind Kurt. Alan Cook from Manchester High School in North Manchester, Indiana came in third with eighty-five (85) points. The second and third place winners are juniors and they said they plan to take the examination next year. The chapter awarded twenty-one \$100.00 savings bonds to the winners of each school this year. A special thank you for each of our chapter members for their financial help.

A special thank you to Tony Gregory (Trig-Star Chairman for Indiana) for his last minute answers to our last minute questions. Also, my wife Gail, my office staff, especially Carol McElroy for coordination and Judy Byer for designing and preparing the certificates for presentations, our chapter president, Stephen Servies, for talking time out of his busy schedule to present awards to each winner at their high school, and Miller Huggins, Inc. of Anderson for the use of a time clock during the months of March and April for the exam.

It has been a great experience for me the last three years and I know that having Penny Narum take over will make it even better. Good luck, Penny!



Kurt Biehl, Wabash, Indiana, winner of the Wabash Chapter's competition.



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INDIANA'S INITIAL POINT - Part III

by Kenneth W. Anderson, PLS, Bedford, Indiana

The Initial Point was established by Buckingham in 1805. Parts I and II of these articles brought us up through the WW II years. This third part will cover from 1950 - to the present day.

Up until 1952 the land around the Initial Point was owned by private land owners and was in use for farming activities and some logging. The stone, marked with S 31, had been there about ninety years at that time. It is likely that there were barb wire fences right at the point during this time as there is still evidence of old wire that runs south and west from the point. Since there was no access to the area other than across the farm fields, it is probable that few or no visitors came to look at the point. To visit the site would have taken some dedication by some individual or surveyor and approval by the land owners. The stone may have been covered over with debris so if someone did come to see it, there may not have been much to look at.

In 1952 the land ownership changed for the parcel south and west of the Initial Point. R. and M. Tindal sold the land in the E1/2 NE1/4 Section 1, T1S, R1W and the land south of the branch of Hogs Defeat Creek in the NW1/4, Section 6, T1S, R1E, to the State of Indiana, Department of Conservation, Division of Forestry. The deed is dated 26 May 1952 and is recorded in Book 97 Page 339 of the Orange County land records. Later in that same year there was a land exchange between the State of Indiana and the United States of America, for the parcel. On 3 October 1952 the State of Indiana deeded the land to the United States of America, which is recorded in Book 97 Page 472. It then became a part of the Hoosier National Forest.

During the early 1960's it became obvious that surveyors and other people were thinking about how to protect or preserve the area around the stone. A few written notes have survived that indicate what some people were thinking, years before any action really did take place. There probably were some discussions by interested parties that went like, "wouldn't it be nice if we could" or "as surveyors we need to protect the point, because no one else will do it". One such person was Guy Shrum, a former county surveyor of Washington County during the years 1947 to 1955. In addition to Mr. Shrum, several of our older surveyors became involved with the planning and events that changed the land ownership and access to the area in the 1960's and 1970's.

Along State Highway #37 there is a roadside metal marker opposite the access road leading to the point. This is similar to the points of interest or historical markers that are commonly seen around the state. It has a brief description of the Initial Point and does alert the traveler where to turn. A newspaper article notes that it was placed there in 1961 but I could not document that.

A Certified Land Corner Restoration form was completed by the Forest Service for the Initial Point on 30 July 1964. Victor Hedman, Cadastral Surveyor for the U.S. Forest Service from Milwaukee, Wisconsin, visited the site, took notes and completed the form. This document recites the Buckingham original survey

data and notes the John McDonald County survey from 1877. Mr. Hedman described the corner evidence he found as follows - "At the corner position as described to me by Hugh Buercklin, Orange County Surveyor, I found a solidly set 6" x 13" stone protruding 3" above the ground and marked on top S 31". In addition he made three new bearing trees, two Sycamores and one Birch. The block for resident witness was signed by Leon Boland and Hedman signed as the surveyor. It was then recorded in the county land records. (1.)

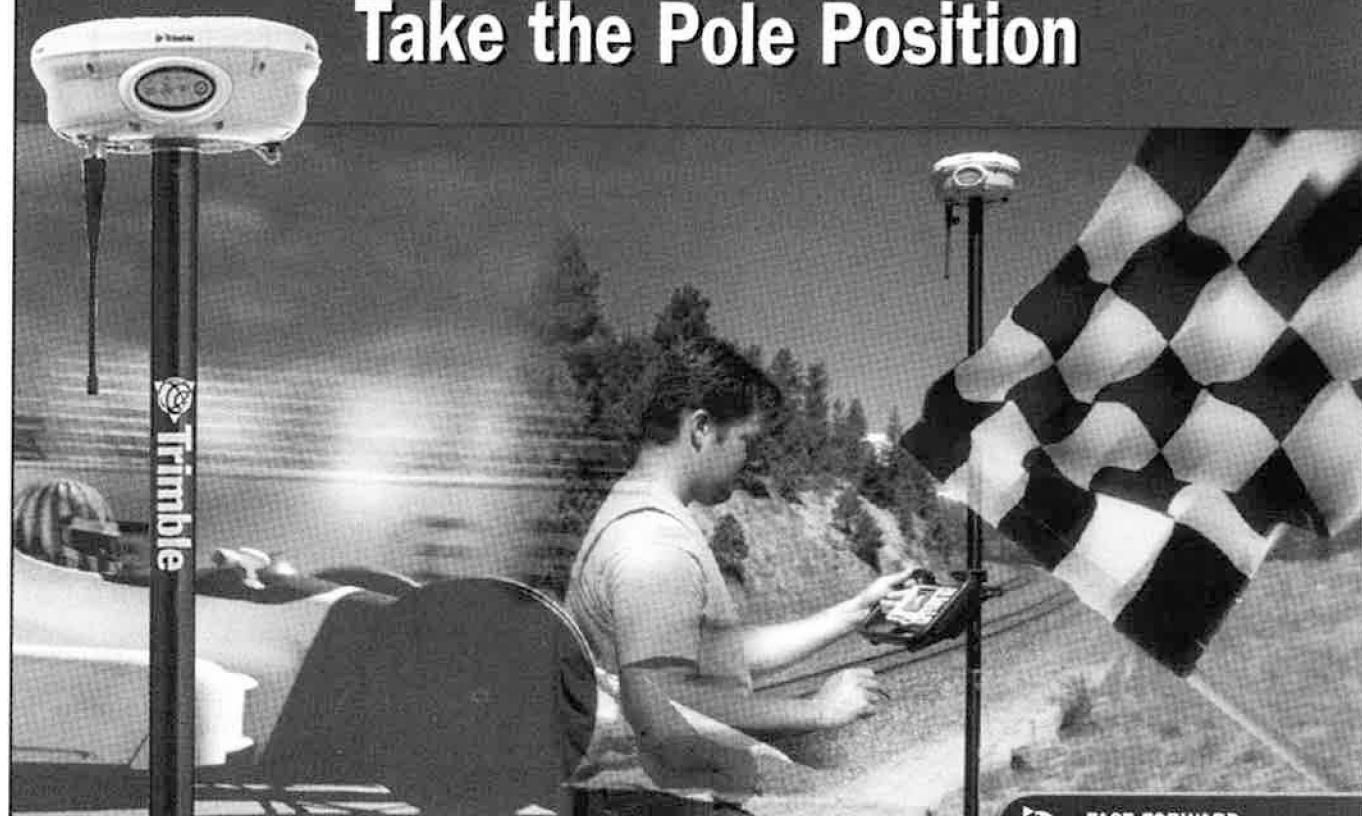
About ten years after the parcel southerly of the Initial Point was exchanged by the State of Indiana to the United States of America, other things started to happen. In 1964 there is a note that Paul Farlow of Paoli was successful in obtaining an option for the land north and east of the point. This precipitated the formation of a group or committee to decide on a course of action for the Initial Point. A newspaper article in The County Press of Washington County, dated Wednesday Feb 17, 1965, has a picture plus a headline that reads, "National Park planned in neighboring Orange County". The picture is of the officers of the association, which was unnamed at that time, and captioned with, "Hugh Buercklin, Orange County Surveyor, Vice-president; Charles Condra, New Albany, President; Paul Farlow, Paoli, Treasurer; John Maudlin, Washington County Surveyor, Second Vice-president; and Gladys Trinkle, Paoli, Secretary." I believe that all of these individuals have passed on at this time.

The organization, unnamed at the time of the February 1965 article mentioned above, soon became the Indiana Historical Landmarks, Inc. It was officially organized sometime in 1965 after the above mentioned meeting and a constitution was drawn up. The Preamble recites, "to educate the public on survey points and historical lore of Indiana," and later in the paragraph, "to perpetuate other historical landmarks in the State of Indiana". There was a membership section which allowed for individual members and association or organization members. This latter category included the Indiana Society of Professional Land Surveyors, Indiana County Surveyors and Engineers Association and Orange County Historical Association. Each of the three groups were to appoint five Directors from which the slate of officers were to be elected. While there was a provision for other members, the dominant force behind the group was the fifteen directors from the three organizations. This was nearly forty years ago, but the names on the original list are people that you would recognize if you are at all familiar with the surveying community in Indiana. It is of interest to note that Paul Farlow and Gladys Trinkle from the Orange County Historical Association were strong players in the group, and neither had a land surveying connection. (2.)

The group got right to work (the notes indicate several Sunday meetings) to raise funds, speak to people to inform, and educate, and to contact the various political and governmental agencies. On April 21, 1965 Edward and Hazel McFall deeded twenty acres, more or less, to Indiana Historical Landmarks, Inc.

...continued Page 11

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The Initial Point ...continued from Page 9

as found in Book 110 Page 103 of the Orange County land records. It is my understanding that Hazel McFall was a member of the McFall family I had mentioned in the last article. Most of the land was in a block that was north and east of the Initial Point but it also included a one-hundred foot strip for access to Indiana State Highway #37. The parcel included about four acres in the SE1/4SE1/4 Sec 36, T1N, R1W, about nine acres in the S1/2SW1/4 Sec 30, T1N, R1E and about seven acres in the NW1/4NW1/4 Sec 6, T1S, R1E. Acquiring the land was a major goal of the group and it allowed for future protection of the point.

A survey of the property was begun on Sunday April 4, 1965 by Hugh Buercklin, John Maudlin and Charles Condra, Professional Land Surveyors. They evidently ran out of time that day but had enough survey data so that the description found in the McFall deed (4/21) is the same as on the survey plat. On May 26, 1965 they came back and finished the project. The description in the deed starts at the Initial Point and runs in a clockwise metes and bounds description. The opening sentence of the description reads: "Beginning at a limestone marked S 31 at the Initial Point —".

At the time the Indiana Historical Landmarks, Inc. was formed the United States owned the land southwest of the point and the McFall's owned the land on all other sides. Shortly thereafter, as noted above, the McFall property was deeded to the organization. Since the Indiana Historical Landmarks had no intent of being a long term landowner, it is safe to assume that they explored the options open to them. The early newspaper article called for a National Park, there are some pamphlets that read "State Park", and it is likely that some of the local people considered the idea of a County Park. In the end the land went to the United States and became part of the Hoosier National Forest. I do not know how that decision was made or when. It is possible that it came down to a matter of available funds and the proximity of other National Forest lands. However the decision was made, on February 28, 1969 the Indiana Historical Landmarks deeded the land to the United States. It is recorded in Book 114 Page 547 of the Orange County land records.

By early 1971 the work of the organization had progressed to the point of having a dedication of the area. Once the land was deeded to the federal government in 1969 the Hoosier National Forest could spend some time and money on the planned developments. A Co-operative Agreement between the Indiana Historical Landmarks, Inc. and the U. S. Forest Service was entered into for the purpose of "development and preservation of the Initial Point". The access road, from State Road #37 to near the point, was reconstructed by corpsmen from the Job Corps camp near Branchville, Indiana. An Operation Mainstream Crew from Mitchell, Indiana helped with the construction by doing the mulching and riprapping of the ditches. Then a Green Thumb crew from Orange County constructed a picnic area and trail with steps down to the Initial Point by the stream. This multi agency and organization involvement indicates that the directors of the Indiana Historical Landmarks were busy coordinating and convincing people that this was a viable project to work on.

On May 23, 1971 a dedication of the facilities at the Initial Point was held at the newly constructed parking lot. There was local involvement in the ceremony with Owen Stout being the master of ceremonies, a Paoli boy scout troop, and two local pastors for the invocation and benediction. Charles Condra and Nelson L. Prall from the Indiana Historical Landmarks, Inc. welcomed the group and made other comments. A. Claude Ferguson, Forest Supervisor, welcomed the gathering to the Hoosier National Forest. The Honorable Roger Zion, U. S. Representative, 8th District, was the main speaker and did the dedication. In addition Chief Lawrence Godfroy of the Indiana-Miami Indians offered some brief comments. At that time there were no developments right at the site of the Initial Point. The wood fence that is currently around the "stone" was constructed several years later. The gathering that day was probably one of the largest groups to see the stone with the markings S 31 on a single day.

Two and a half years later, on October 14, 1973, the Dedication of Indiana Initial Point Memorial Monument was held. It again was done at the parking lot where the monument was just off to the side. This monument was the large limestone with bronze plaques on both sides that had a combination of a brief history of the Initial Point and the names of the contributing counties or individuals. This was paid for by contributions from individuals, county surveyors, other agencies and organizations. The directors must have worked hard to make all this happen and collect the funds needed to keep the group going and look to the future. For those who have never seen the monument, it was quite large and was from our own limestone industry at Bedford, Indiana. It was about nine feet tall, six feet wide and one and one-half feet thick and it sat on a constructed concrete base.

In this period of 1965 to 1975 there were some fairly elaborate plans to develop the site much more. There were proposals to: 1. Dam the stream and create Buckingham Lake. 2. Carve a miniature State of Indiana, approximately 150' x 300', out of the area around and northerly of the point. 3. Place a memorial building over the plaque mentioned above. 4. Resurface the access road and parking lot. 5. Add additional picnic and recreational facilities, including a shelter house. 6. Place a cupola over the Initial Point stone with a stone apron all around. None of these things happened as the years went by. However, it does point out what some individuals were thinking at the time.

After 1970 there was a road and parking lot with signs near the point. The number of visitors is an unknown as most of the time there was no one at the area to determine what the actual use was. Surveyors, engineers, local people and some curious tourists might have come on occasion. The site is wooded, secluded and out of sight from occupied buildings. This allowed for some secrecy, and in the summer of 1977, vandalism took its toll. The plaques on the large limestone were desecrated by removal on one side and spray paint on the other. Fortunately, right at the stone with the S 31 there was no destruction. Many public and historical sites all over the county face this type of problem and our Initial Point is no different. The limestone monument stood for many

...continued Page 12

The Initial Point
...continued from Page 11
years in the desecrated state.

With the advent of the vandalism, the Indiana Historical Landmarks, Inc. directors decided to redo the plaques and sought permission from the Orange County Board of Commissioners to set another similar monument on the lawn of the Court House in Paoli. The Board of Commissioners granted permission for a new monument to be set at the edge of the court house lawn on the south side of the building. It was made out of sandstone and the plaques were similar to the 1971 one. A dedication ceremony for the new monument was held on Sunday, September 10, 1978. This new position is not the ideal, but its very public and the likelihood of further vandalism is reduced. It also is much more available to the general public. The directors hoped that some day in the future a monument with the information could go back to the original site. (3.)

About this same time the picnic facilities that were present were removed. The Forest Service did not have the funds available to pay for the maintenance and decided against continuing that part. They agreed to leave the road open and continue some minimal maintenance on it.

In 1983 a problem surfaced near the corner stone down by the creek. A horse trail had been routed near by the corner and it became apparent that the stone with the S 31 on it needed to be protected from the horses walking over it or even breaking it with their horse shoes. It was decided by Indiana Historical Landmarks, Inc. to put up a triangular wood fence that centered over the Initial Point stone. On April 23, 1983 seven members and/or volunteers worked in a light drizzle and completed the job. This eight foot triangle wood fence is still there and has adequately protected the stone for several years. They again asked for donations to help pay for the costs of materials and future maintenance costs.

From 1983 to this year (2003) there has been little activity or change at the Initial Point. Although these last twenty years have been quiet, perhaps more people saw the Initial Point in the 1960 - 2003 period than during the other 155 years combined. The Indiana Historical Landmarks, Inc. still functions but at a reduced number of members and activities. The bylaws for the group allows them to work and/or preserve other historical land corners in Indiana and there has been minor activities in that direction. All of us in the profession need to be thankful that the directors of the group worked so hard and accomplished the things that were done at the Initial Point. So what does the future hold for this area? Part IV will look at some possible actions.

FOOTNOTES:

(1.) Certified Land Corner Restoration form — This is a document that has been used nationwide by the Forest Service. The purpose of this form is to tell what, when and why of an individual corner, primarily for the original government corners i.e.. section corners and quarter corners. On this document a registered land surveyor notes the data from the original government survey, subsequent survey work and what was found at the date the work was done.

So, it may read something like, 1807 Wood Post with two Beech bearing trees during the GLO survey, 1875 stone set with Oak and Hickory bearing trees from a county survey, 1935 stone found and metal tag put on Poplar tree during the CCC's and in 1998 a found stone with + on top and ½ on side with existing stump from 18 Oak tree. It was then signed and dated by the land surveyor and could be recorded in the county land records. It can be used with or without a survey as it deals only with corner evidence.

(2.) Indiana Historical Landmarks, Inc. — This group first met at Paoli, Indiana on January 12, 1965. The members formed the Indiana Historical Landmarks which was Incorporated on March 17, 1965. There were five members from each of the following organizations: Indiana Society of Professional Land Surveyors, Indiana County Surveyors Association and Orange County Pivot Point Association. In addition there was a provision for other individual and organizational members. A newspaper article from February 1965 listed the original fifteen members as:

ISPLS - Charles Condra, New Albany; Ken Curtis, Lafayette; Nelson Prall, Bedford; Stephen Bures, Indianapolis; Owen Smith, Fort Wayne.

County Surveyors - Hugh Buercklin, Orange County; John Maudlin, Washington County; Alfred Forgey, Jackson County; George Crowder, Bartholomew County; Rohr Smith, Shelbyville County.

Orange County - Paul Farlow, Gladys Trinkle, Joe Davis, Louise Mackey and Owen Stout, all from Paoli, Indiana.

Nelson Prall, Bedford, IN. continually stayed a member and currently is treasurer. He is 97.

(3.) Orange County Board of Commissioners — The memorial on the Court House lawn was placed there after consent was given by their action on November 7, 1977 as recorded in the Orange County Commissioners Record Book 26 Page 51.

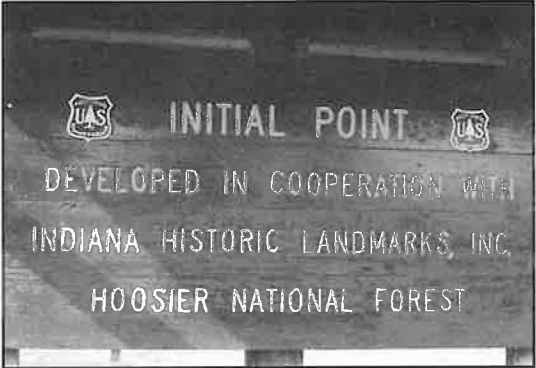
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The Indiana Lewis and Clark Bicentennial Commission was created by Public Law 7-2001 to highlight Indiana's important role in the Lewis and Clark Expedition and assist with events to commemorate the Expedition's bicentennial beginning in 2003.

The commission invites you to visit Lewis and Clark sites in Indiana to see where the Corps of Discovery was born and to learn about the first men to joint its ranks. In October 1803, Meriwether Lewis and William Clark spent time in Clarksville, Indiana at the cabin of General George Rogers Clark planning for the Expedition. They recruited and enlisted the first members of the Corps of Discovery before departing down the Ohio River for the west from Clarksville on October 26, 1803. In 2003, southern Indiana and Louisville, Kentucky will commemorate the bicentennial of these events during a "National Signature Event" designated by the National Council of the Lewis and Clark bicentennial. For further information see page 19.



In the early 1950's I made a point to visit the initial point when the land surrounding the area was in private ownership.



The Historic Landmarks, Inc. helped the USFS by acquiring the remaining private land at the point.



The large limestone memorial marker near the point was dedicated in 1973 and, unfortunately, vandalized in summer of 1977.



More recently in 2001, a sandstone replica of the memorial monument, which was dedicated in 1978, was visited in Paoli.

INITIAL POINT MONUMENTATION THROUGH THE YEARS

(As observed through the eyes of
your editor, Ken Curtis)



In 1974, the site was protected by a 4-rail triangular fence which was later, in 1983, replaced with a sturdier 2-rail fence & posts.



Profs. Curtis and McEntyre visited the site many times with their students when the USFS acted as their "client" during the summer surveying project course.



The replica stands on the south lawn of the Orange County courthouse in Paoli and is about 10 miles north of the initial point and original monument.



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County Surveyors Association

by John Stephens, PLS, , Wabash

FUTURE EVENTS

Association of Indiana Counties Fall Conference
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COUNTY SURVEYORS ASSOCIATION – BOARD OF DIRECTORS MEETING

The Board of Directors for the County Surveyors met on July 16th. to outline goals and objectives for the next two years. President Scott Zeigler submitted a reorganization of the legislative committee of which Steve Murray, Tippecanoe County Surveyor, will be the organization's representative.

The committee will be divided into five sub-committees as follows:

1. **Stormwater** – Kent Ward (Hamilton County Surveyor), Steve Murray (Tippecanoe County Surveyor), Allan Frisinger (Allen County Surveyor)
2. **Wetlands** – Dave Smoll (Hancock County Surveyor), Jay Poe (Huntington County Surveyor), Scott Zeigler (Noble County Surveyor)

3. **Lakes and Rivers** – Rex Pranger (LaGrange County Surveyor), Richard Kemper (Kosciusko County Surveyor)
4. **IDEM AND IDNR** – Jay Poe (Huntington County Surveyor), Scott Zeigler (Noble County Surveyor), Steve Murray (Tippecanoe County Surveyor)
5. **Administrative** – Kent Ward (Hamilton County Surveyor) and Allan Frisinger (Allen County Surveyor)

It is the intention of the board to make additional appointments to these subcommittees. Please contact one of the above-mentioned surveyors in order that your input and participation will further the organization's objectives this upcoming legislative session.

HB 1741 regarding the repair or replacement of HARN monuments was passed into law this past session. The law specifies that written notice must be given to a county surveyor when a monument marking a corner is removed or buried while working on a state road. Requires a person who damages or removes a monument marking a corner or a high accuracy reference network (HARN) point to reimburse the county for the expense of repairing or replacing the monument.

The Governor vetoed HB 1798, which includes the county stormwater utility legislation and an attempt to override the veto will take place this fall. 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.

Other board objectives for the next two years include:

1. Develop and maintain a web page for the organization possibly through LTAP at Purdue
2. Work with ISPLS to obtain a grant or permanent funding for an Executive Director of the County Surveyors Association of Indiana
3. Develop a new member package for newly elected county surveyors including a mentoring program provided by existing county surveyors
4. Develop a certification program for Deputy County Surveyors in various maintenance and erosion control areas
5. Provide section corner monumentation guidance for non-licensed county surveyors
6. Recruit affiliate membership for the organization.

GIS/LIS COMMITTEE UPDATE

The committee has been meeting monthly and is actively pursuing the web site access for section corners and benchmark information. CSA representatives Dave Gaston (Hendricks County Surveyor), Steve Murray (Tippecanoe County Surveyor), David Smoll (Hancock County Surveyor), and the ISPLS GIS committee have been actively representing the county surveyors in this organization.

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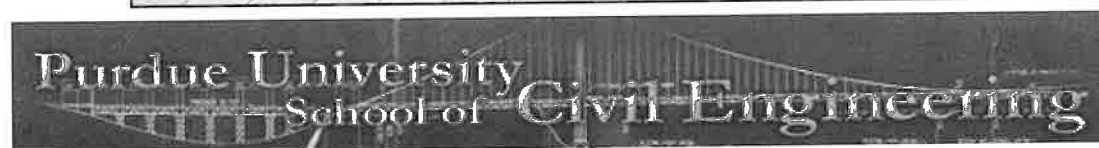
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2003 GEOMATICS SUMMER DESIGN PROJECT AT PURDUE UNIVERSITY



(Front Row, L to R) **Professor S.D. Johnson**, **Chris Costello** (Carrollton, NY), **Christi Hoy** (Watertown, WI), **Professor B.H.W. van Gelder**, **Aaron Braun** Teaching Assistant (Second Row, L to R) **Seth Johnson** (Tipton, IN), **Clem Kuns** (Flora, IN), **Lee Powers** (West Harrison, IN), **Heath Titzer** (Boonville, IN), **John Boline** (Rockford, IL) (Third Row, L to R) **Joe Crouch** (Fowler, IN), **Nick Charnas** (Valparaiso, IN), **Matthew Knoy** (Bloomington, IN), **Brian Nelson** (Michigan City, IN)

"Niemand is ooit aan hard werk gestorven," as Professor B.H.W. van Gelder knows it in his primary language of Dutch, it means: "Nobody ever died because of hard work." The casualties this summer in LS400 totaled zero, however, with 11 students, it required over 3000 hours of intense course and field work to make the final product a success.

LS 400, an integral course at Purdue University in the Land Surveying Engineering curriculum, is a transition course for students from the Junior year to the Senior year. The course is taken in a period during the summer called Maymester, a four-week period from mid-May to mid-June. Students engage in a design and application process for a hands-on experience. One of the main objectives for LS 400 is to integrate previously learned surveying fundamentals and apply that knowledge in planning, designing, executing, and analyzing one or more comprehensive surveying problems.

The 2003 LS 400 class started on May 19th and ended with a presentation to clients, Purdue faculty, and local surveyors and engineers on June 12th. With 11 students and 3 instructors, two main projects were completed. The first project was an Industrial Metrology project proposed to the class by Professors Bethel and Dunston from the Purdue School of Civil Engineering. The second project was

a survey for the Girl Scouts of Sycamore Council (GSSC) at their camp on Highway 26 east of Lafayette. The GSSC project included establishing survey control, boundary location, and topographic mapping.

The metrology project was a pilot project to evaluate and improve methods of performing as-built surveys on industrial sites. Many methods for completing such surveys are too intrusive and time consuming. The goal was compare manual surveying methods to photogrammetric and laser scanner methods. The School of Chemical Engineering provided access to a laboratory processing facility comprised of framing, tanks, valves, gages, and piping. This robust test object measured approximately 10 ft wide by 4 ft deep by 6 ft in height. The LS400 class established an array of control targets throughout the object and measured the control by traditional triangulation and taping methods. The control was to be a basis of comparison for alternative methods used to build a digital model of the object and its features. Professor Bethel conducted a photogrammetric survey of the test object using a high resolution digital camera. Falk PLI donated a 3D laser scan of the test object. The comparison and evaluation of these methods is still ongoing at the conclusion of the class. The LS400 class reported on the terrestrial survey

...continued page 17

Summer Design Project

...continued from Page 16

observations and the challenges encountered in designing precise close range networks.

The Girl Scouts of Sycamore Council camp project was a more comprehensive and traditional survey and mapping project. The camp ranger wanted to gain a better understanding of location of the property boundary lines and obtain large scale mapping of existing camp facilities. The GSSC parcel contains approximately 150 acres of mostly wooded area situated east of Monitor, Indiana. The parcel would prove to be too large for LS400 students to complete in a single summer campaign. The class concentrated on the north and west boundaries, leaving the south and east boundaries for following classes to complete.

The class considered ALTA/ACSM standards, NSPS standards for topographic surveys, USACE standards for mapping, FGCC control standards, and FGDC GPS and terrestrial survey standards. Static GPS methods were used to establish horizontal and vertical control on-site. NGS control points within a six-mile radius of the project were used to bring in the horizontal control for the GPS. Selected section corners were included in the static GPS survey. Vertical control was obtained by completing a level route from a nearby FEMA benchmark and compared to GPS relative elevations.

The section line, property boundary, and topographic surveys were completed using terrestrial traverse methods. Terrain and vegetation presented large obstacles for the class to overcome. No property corners were set, but our deed research was given to the client and the Tippecanoe county surveyors office. All products were certified by the class as meeting course requirements for educational purposes only. Aspects of the boundary survey included the following: protracting the section, surveying field evidence of monumentation and possession, and deed research. The class had to resolve several boundary issues involving riparian rights, interpretation of the deeds, and the written intent of the deeds. A new metes and bounds description of the parcel boundary and a surveyor's report, which documented uncertainties and explained our theory of boundary location, were completed.

The topographic survey was completed on only the northerly portion of the camp due to time constraints. All improvements, trails, buildings, utilities, and terrain features were located for the final topographic map. A network of ground elevations was determined to produce a digital elevation model and a computer generated contour map of the camp entrance and the facilities in the area covered by the survey. Final products of this survey included a planimetric feature map, a two-foot contour map, and permanent on-site vertical and horizontal control for future use.

In conclusion, the 2003 LS400 class learned that hard work pays off. All of the previous course work was implemented into making the above projects a success. We would like to thank Professors Johnson and van Gelder and Teaching Assistant Aaron Braun for all their effort, mentorship, knowledge and best of all—FORESIGHT!

COMPLETED CAREER

Bill "Sod" Soderberg, P.S., 64
NSPS Area 5 Director

Bill "Sod" Soderberg, 64, P.S., of Clinton Township, Michigan died on April 23, 2003. He was a past president of the Michigan Society of Professional Surveyors, the MSPS Foundation, and a current director of ACSM. He was a member of NSPS and had participated in FIG. In 1994, he was selected as the MSPS Surveyor of the Year. From 1993 to 1995, he was the MSPS Governor to the NSPS and currently served as Area 5 Director of NSPS (which includes Indiana).

He had worked for MDOT, Valentine Thomas & Associates and was part owner of Anderson Eckstein & Westrick, prior to his retirement. He had his own consulting business, was involved with remonumentation programs in several Michigan counties and also worked for Fenn & Associates in Sterling Heights, MI.

Sod had been a 4-H and Cub Scout leader, a Little League coach and Connie Mack baseball manager. He is survived by his wife, Sharron, two sons, one daughter, 11 grandchildren, one great grandchild and three brothers.

CORRECTION

In the last issue of the Hoosier Surveyor (Vol.29, No. 4, Spring 2003, page 25) we printed a picture of Roger Woodfill displaying a "Terra Meter" measuring wheel. The wheel was not Roger's, but instead belongs to Past ISPLS President Orwic Johnson, Columbus, IN. Your editor regrets this error.

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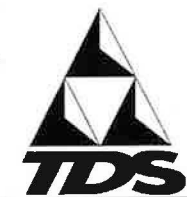
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Writing: An Important Tool in Business

By Jane Watson

Peter Drucker, father of the science of office management says, "As soon as you take one step up the career ladder, your effectiveness depends on your ability to communicate your thoughts in writing and in speaking." In other words, if you want to be noticed within or outside your organizations, you have to be able to express yourself clearly and concisely.

However, many companies don't realize that this advice is as true today as it was ten or twenty years ago. For example, a senior executive recently told me, "No one in my company writes anymore. We just send emails." Interesting thought. But totally naive. Emails have reduced the need for paper, snail mail and limbo time (the time a message spends in transit), but they still require the sender to convey his or her thoughts clearly and concisely, using the rules for good business writing.

In addition, emails are not as easy to write as some would think. In a recent consulting job, I found that the employees were sending such sloppy emails that they frequently had to send two or three messages to interpret and clarify their first transmission—a complete waste of time.

And writing short email messages is often harder than writing long documents. As Rudyard Kipling once wrote, "Sorry this is such a long letter, but I didn't have time to write a short one."

Our Writing Creates an Image

The company's and the writer's image are two more reasons for good writing skills. When a reader scans a document, he subconsciously builds a picture of the writer. The writer can project the image of a conscientious, energetic professional, or the image of a bored bureaucrat making time with an antiquated company. Quite recently, a manager asked me to work with one of her new salespeople. After reading copies of the correspondence the salesman was sending to his customers, I pictured a man in his late fifties, probably with grey hair and blessed with old-world good manners. In actual fact, the salesman was just out of the university. It turned out the young man had been taking home all his correspondence to write under the guidance of his father. The cheerful, straightforward and almost flip manner the salesman used on the phone and in fact-to-face situations was in direct contrast to the old-fashioned, stilted correspondence he was submitting. Both customers and colleagues were confused by the opposing communication styles.

Good Writing Attracts Customers

Good writing is a way of combating today's high cost of face-to-face sales calls. The president of a plumbing supply company recently told me that it doesn't pay to send his sales staff out on the road visiting smaller customers or to have them spend a day on the phone making long distance calls. He has found it more profitable to have his staff to build relationships with customers by fax or by mailing them well crafted letters and flyers.

And a salesman's correspondence doesn't always have to be of a sales nature. Smart salespeople use the writing process to keep their names in front of a customer on a regular basis. George Rummage, former director of Direct Mail Advertising, said, "A good letter can be you calling on a customer again and again."

Every person within an Organization is in customer relations, but this message has not yet gotten through to all employees. I have seen situations where salespeople do back flips to get an account and then lose it because of the poor correspondence sent out by other departments within their companies.

Check Your Own Business Writing

I have heard people say, "I don't need help with my writing. I've never had any complaints." Well if you are a manager, chances are your staff is not going to tell you that your memos require time and energy to interpret. If you haven't taken a business writing course in the past five years, your writing is probably in need of a tune-up.

Business writing has changed dramatically, as have readers. Years ago, to be able to write was a sign of nobility and wealth. And to receive a letter was something special. Even up to the 1970's, writers sought to impress readers with their literary skills, and readers still took the time to thoroughly read their mail. In today's workplace, readers are too busy to spend vast amounts of time deciphering messages from long-winded letters and reports. Today's writer must write to inform, seek immediate action and create goodwill - in as short a space as possible.

Progressive companies carry on regular analysis of the correspondence and reports produced by their employees to ensure that the image and service level projected is consistent with the one they wish to convey. The analysis includes an examination of randomly chosen letters, memos, reports, proposal form letters and boilerplate material and may also involve interviews with staff and clients.

Reprinted from the Evergreen State Surveyor, Spring 2002 and The Kansas Surveyor, November 2002

NATIONAL SIGNATURE EVENT

October 14-26, 2003

Falls of the Ohio Lewis and Clark Commemoration and National Signature Event will be held during the two-week period with many activities in the southern Indiana and Louisville, Kentucky area. Check out these events at

www.ai.org/dnr/lewis-clark/events/

(October 14: Opening Ceremonies at Waterfront Park, Louisville, KY)

(October 26: Departure Ceremony at Falls of the Ohio State Park - George Rogers Clark Home Site, Clarksville, IN)

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PROMOTING THE PROFESSION BY USING THE BOY SCOUT MERIT BADGE PROGRAM

by Wayne Hebert, PLS, New Orleans, LA

We have seen many programs in the past for promoting the Professions of the Land Surveyor and Engineer as a career opportunity to our youth. I would like to add to that genre of articles. Many of us have had children and are aware of the opportunities for involving youth in development of character and career choices. I would like to inform you of the Merit Badge program of the Boys Scouts of America. Specifically I would like to make you aware of the Surveying Merit Badge. There is a need for interested individuals and adults to serve as Merit Badge Counselors. Many of the Professional Land Surveyors in our state have served and a few still serve as Scoutmasters for their local Troops. This responsibility is quite burdensome and while a Scoutmaster (who is a Land Surveyor) may be able to apply his career expertise in the instruction of the Surveying Merit Badge, it would be beneficial to not add additional burdens to these individuals and to promote our profession, if each district and community would have an interested Professional Land Surveyor as a Merit Badge Counselor for his area to promote the Merit Badge and the career guidance of youth toward a truly interesting and unique profession.

To be a Counselor you may visit a Boy Scout Council Service Center or a local Boy Scout Troop. Ask to be registered as a Merit Badge Counselor for the Surveying Merit Badge. You will NOT have to pay a registration fee to serve as a Merit Badge Counselor unless, you wish to join a troop or the Council as an adult leader. They will provide you with a BSA Adult Leader Application and a Merit Badge Counselor form. Simply complete the forms (with references) and your qualifications for the merit badges you wish to instruct. For youth protection purposes the BSA Adult Leader Application will be checked. You will have the options of instructing scouts from only the unit you are affiliated with or council wide. I suggest the Council Wide would not be overly burdensome. Additionally you may wish to see if your council has a "Merit Badge University." At this or a similar activity many merit badges are offered. Another opportunity may exist at an extended camping experience such as at Summer Camp. Most Councils run a weekly summer camp program, where scouts with their troops may enjoy Summer Camp and earn 4-6 merit badges during a week. This does require some dedication on the part of the MB Counselors. Depending on your council, you may be able to apprentice some youth Counselors in the instruction for the Surveying Merit Badge and "oversee" this one program for the Council.

**Trustworthy, Loyal, Helpful, Friendly, Courteous, Kind,
Obedient, Cheerful, Thrifty, Brave, Clean, Reverent.**

These are the twelve points of the Scout Law. They are great qualities for a professional or an employee as well. Below you will find the present requirements for the Surveying Merit Badge. There is a Merit Badge booklet that each scout and counselor should own. Advancement policies are that you require no less or no more than written requirements for a scout to earn the merit badge. This does NOT preclude you from adding more instruction about the surveying profession and techniques

And if you are looking for a way to promote a profession you have chosen as your career, you may have to look no further than the requirements set in many of the merit badge booklets for professions. The Surveying Merit Badge has the following requirements: "Discuss the importance of surveying with a licensed surveyor or another qualified individual. Also discuss the various types of surveying and mapping and applications of surveying technology to other fields. Discuss career opportunities in surveying and related fields. Discuss qualifications and preparation for such a career."

Some additional Internet resources you may wish to surf:

A Guide for Merit Badge Counseling

<http://usscouts.org/boyscouts/MBCounseling.html>

Merit Badge Counselor Orientation

http://www.usscouts.org/boyscouts/MBC_Training.html

Introduction to Merit Badges

<http://usscouts.org/mb/intro.html>

MB Counselor Form

<http://usscouts.org/boyscouts/mbcounselorform.doc>

SURVEYING MB REQUIREMENTS

<http://usscouts.org/usscouts/mb/mb109.html>

SURVEYING MERIT BADGE REQUIREMENTS

1. Do ONE of the following:

a. From a set point (stake, nail, etc.), measure a range line north 300 feet and south 300 feet. From the same point, measure a base line east 300 feet and west 300 feet. From one or more points (stations) marked along the range and/or base line, take compass readings to trees, shrubs, and rocks. Take measurements from the range or base line to the located features. Make the measurements using instruments, methods, and accuracies consistent with the current technology, as directed by your counselor.

b. Find and mark the corners of a five-sided lot that has been laid out by your counselor to fit the land available. Set an instrument over each of the corners and record the angle turned between each line and the distance measured between each corner, as directed by your counselor. With the assistance of the counselor, compute the error of closure from the recorded notes. The error of closure must not be more than 5 feet. From the corners, take compass readings or turn angles to trees, shrubs, and rocks and measure to them. All measurements should be made using instruments, methods, and accuracies consistent with current technology, as directed by your counselor.

...continued page 23

Communication, Public Relations, and the Land Surveyor

By R.A. Ainsworth, LS

Now there are three terms you rarely see used in the same sentence! Land surveyors with good communications and public relations skills are scarcer than hen's teeth. But, it's about time that land surveyors come in out of the woods (or the field) and start acting like the professionals that we so eagerly want to be considered. There is probably no other profession in America where good communication and public relations skills are more important - particularly when dealing with the typical land-owner. Private property-and the boundaries thereof - is sacred. And messing with a person's property boundaries is almost as touchy as messing with their spouse and in some instances, probably more risky.

Land surveying is an art that very few property owners have even a limited knowledge of. They do not begin to understand what is involved in confirming or reestablishing the boundaries of their property. And, the fact that many people feel that no two surveyors ever come up with the same answer anyway, only adds distrust to this misunderstanding. And, if they do not understand what is involved in establishing their boundaries, they cannot be expected to have an understanding of the costs involved.

So we have a profession that few of our clients understand, dealing with one of the most sacred issues in America-private property boundaries. And, more often than not, it involves a boundary between two parties that are hostile towards one another (generally over the sacred boundary line we have been hired to survey). We should go into jobs like these as if we are walking on eggshells. Instead, we act like the proverbial bull in the china closet, charging around telling our clients and their neighbors just as little as possible (trust me, I know what I am doing, so you don't need to), bad-mouthing all previous surveyors that have even thought about working in the area, and in general being belligerent. In addition, far too often we alienate our clients by giving them a minimal or best-case cost and time estimate for doing the work they employ us to do-apparently because we do not want to scare them away by being realistic.

Then, when we get into the job and discover that we can not do the work for the quoted fee (which we generally consider to have been only a ball park estimate anyway, and not something we are bound to) or within our projected time table, we typically fail to communicate this upcoming overrun in cost and time to them. We apparently prefer to surprise them with our bill once the job is complete, or close enough to being complete that we feel we can send them a bill. Believe me, I don't have all the answers, but I do know that land surveyors are more often than not their own worst enemies. I have been in this business long enough, and have watched enough land surveyors alienate enough clients and their neighbors (many to the point of filing a complaint with the licensing board and/or a lawsuit against them), that I feel I am qualified to provide some suggestions for dealing with clients and their neighbors. Following are my very basic "Guides to Better Communication & Business Relationships," which are offered in no particular order of importance:

Always be realistic and honest as possible when providing a cost and/or time estimate to a prospective client.

Always provide your client with a written proposal, and ideally, get them to sign something indicating that they are in agreement with your proposal (and that they plan to pay you for your work).

Always make every effort to complete the job within the estimated time frame, and for the estimated cost. And, if you can see that you will be running over either the estimated cost or time, notify your client immediately, preferably in writing, explaining the reasons for the overrun and/or delay. The fewer surprises, the better.

Always tie up all the loose ends when finishing a job, and don't leave bits and pieces (i.e., corner records, filing of plat, final billing, etc.) hanging for weeks or months.

Always remember that one property owner may have hired you, but the property line(s) you are surveying are not only your client's but their neighbor's as well. (In reality, the neighbors are your defacto clients, and not someone to ignore and/or fight with).

Always be as cordial as possible when discussing any aspect of a job with anyone (client, neighbor, other surveyor, government officials, etc.).

Always instruct your survey crews to be as cordial as possible, and to not comment or speculate on things they are not certain of or that may be better off left for you to discuss with the client and/or neighbor. Survey crew members can (and often do) get us in a good deal of hot water by making what they consider to be harmless comments.

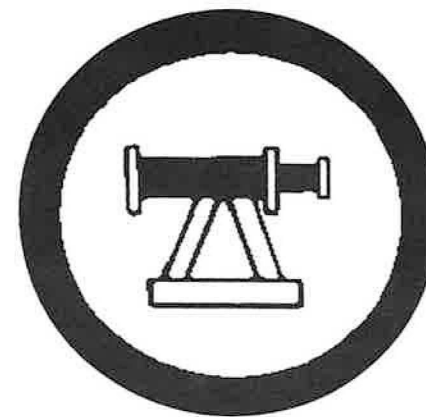
Never bad-mouth another surveyor to your client or their neighbors. We have enough of an image problem that we don't need to add to it ourselves. If you disagree with another surveyor or surveyor, simply tell the client or neighbor that you may have a difference of opinion regarding a corner or line location, and that you will discuss it with the other surveyor. And then do just that in a non-confrontational manner.

Always keep an open mind, and remember that it is possible that you may be wrong! Although most surveyors that I know do not believe it possible, none of us are perfect, and we should never forget that! If, on the off chance you did make a mistake, always do everything you can to make it right, at no cost to the client. (You were paid to do it right the first time; they should not have to pay for it again.)

...continued page 23

Surveying Merit Badge Requirements ...continued from page 21

2. From the field notes gathered for requirement 1, draw to scale a map of your survey (as directed by your counselor). Submit a neatly drawn copy.
3. Use one of the corner markers from requirement 1 as a benchmark with an assumed elevation of 100 feet. Using a level and rod, determine the elevation of the other four corner markers.
4. Without first measuring the distance, determine the length between two points, then measure the length using a tape or instruments consistent with current technology. The answer you first determined must be within 5 percent of the length measured.
5. Determine the height of a point (tree limb or the like) that can be checked using a tape or level rod. Check the height using instruments and methods consistent with current technology, as directed by your counselor. Your original determination must be within 5 percent of the measured height.
6. Discuss the importance of surveying with a licensed surveyor or another qualified individual. Also discuss the various types of surveying and mapping, and applications of surveying technology to other fields. Discuss career opportunities in surveying and related fields. Discuss qualifications and preparation for such a career.



BSA Advancement ID#: 109
Pamphlet Revision Date: 1992
Source Boy Scout Requirements Y2K
#33215D, revised 2001

Reprinted from the *L'Arpenteur Louisiane* of the Louisiana Society of Professional Surveyors a part of *Louisiana Engineer and Surveyors Journal*, November 2001

Communications ...continued from page 22

Always make every effort to satisfy your client. (The old saying "The client is always right" has a good deal of merit.) Even if they are not right, if you let them think they are, and they go away happy, it will save you untold future grief. You can satisfy 100 clients and 98 of them will never say anything about you-good or bad! But make one client mad, and he will tell everyone he knows that you are a rotten, no-good surveyor, and a poor excuse for a human being. With written communications (and particularly billings), always take the time to explain yourself in some detail. The better informed your client (neighbor, other surveyor, etc.) is, the less likely they are to question you.

Always be willing to negotiate (or recommend your client consider negotiating) a middle ground if necessary to resolve a dispute. Disagreeing or fighting with a client, a neighbor or another surveyor is not the solution! This will always cause you grief and it will nearly always cost you money in the long run. Keeping attorneys out of your disputes will save everyone money in the long run. Don't be bull-headed about winning the battle, only to lose the war!

Always take advantage of any opportunity to further develop your oral and written communication skills. Workshops, seminars, and classes in these subject areas are among the most critical forms of professional development for a registered land surveyor, and one that most of us pay little attention to.

I can absolutely guarantee you that if you follow these simple, and seemingly obvious guidelines, it will cut your grief, and the bad reputation you may be giving the land surveying profession, significantly (and in all likelihood, increase your profitability). I know-most land surveyors just want to survey-they don't like to deal with people, they don't like to take time to write letters to send out bills, and least of all, they don't want to even consider compromising with anyone about anything. But if you are going to be in private practice, no matter the size (or even doing a bit of moonlighting), these are all necessities of doing business. If you are not willing to follow these guidelines, either hire someone who will run this end of your business for you, or seriously consider changing professions.

Good communication and public relation skills are the missing ingredient that holds the land surveying professional back from other skilled and highly successful professions. However, through education and commitment we can become the professionals we so eagerly want to be, and at the same time, provide meaningful benefit not only to our profession as a whole, but to the public, which we have taken an oath to serve and protect.

As seen in the *Georgia Land Surveyor*, January/February 2002 and the *Kansas Surveyor*, May 2002

BOOK REVIEW

Measuring America

by: Andro Linklater
Publisher: Walker & Company, Inc., N.Y. (2002)
Hardcover, 310 pages \$26.00 suggested price

Stories of the U.S. rectangular survey and how it fostered the success of this country are seldom found in history books. Most books about the rectangular surveys deal with technical or legal issues for a specialized audience. Until recently a book written for general readers about the importance of the public land survey did not exist.

"Measuring America" is the story of how measurement standards, land ownership concepts and the success of a new democracy were closely intertwined. Andro Linklater did a marvelous job of dealing with technical and historical issues, while keeping the story interesting and easy to understand.

A little over 200 years ago our country had just won its war of independence. The central government had an estimated 40 million-dollar war debt, but no powers to impose taxes. Its best potential for revenue was the sale of land in the western frontier, but before it could be sold it had to be surveyed and mapped. A Congress that could not decide on a uniform system of weights and measures appointed a committee to devise a plan for surveying and mapping the frontier. Their task was enormous.

A rectangular land system was widely supported, but otherwise there was much disagreement about measurement standards. Some supported old familiar standards while others saw this as an opportunity to adopt new standards. Linklater explains how fate and "simple arithmetic" played the main role in determining the final system.

In addition to the urgent needs for money from land sales, national leaders also recognized a successful "democracy depended on getting the land into the hands of the people." Rapid decisions were necessary on a wide range of issues dealing with how the national surveys would be administered to land title issues. The early system was almost immediately hampered with corruption and other administrative problems. Corrective actions were rapidly enacted in an attempt to deal with many of the problems and in the end, "a new kind of society was evolving from the way in which the public land was being measured."

According to Linklater, American have typically not recognized how important the rectangular surveys and system of land ownership were to the success of this country, but many visitors to this country often find "the pattern of land ownership something quite distinct." In the same context, the author of this remarkable book about the history of the U.S. land measurement and ownership is from Kent, England.

Reviewed by John Freemyer, LS, Carver County Surveyor and past editor of Minnesota Surveyor.
(Your editor has a copy of this book and agrees with the above review.)

NEW REGISTERED LAND SURVEYORS IN INDIANA

The Indiana State Board of Registration for Land Surveyors held the certificate presentation for new professional land surveyors on Friday, May 16, 2003. The ceremonies were held at 1:30 p.m. at the Government Center South Auditorium, Indianapolis. The following land surveyors were awarded certificates.

| NAME | LS# | LOCATION |
|----------------------------|----------|--------------------|
| Jeffrey S. Barnes | 20200084 | LaPorte, IN |
| Matthew G. Bertsch | 20200087 | Bluffton, IN |
| David R. Boblitt, II | 20300007 | Odon, IN |
| Steven K. Casterline | 20200086 | New Haven, IN |
| Fulton V. Clinkscales, Jr. | 20200081 | Hendersonville, NC |
| Matthew L. Cooper | 20200079 | French Lick, IN |
| Joseph N. Hile | 20300003 | Indianapolis, IN |
| Timothy E. Jones | 20300006 | Linton, IN |
| Steven Lampen | 20300010 | Holland, MI |
| Jason N. McCort | 20300004 | Franklin, IN |
| Joseph K. Mullins | 20300011 | Richmond, IN |
| James A. Orr | 20300005 | Fort Wayne, IN |
| Kenneth P. Pitts | 20300002 | South Bend, IN |
| Brian C. Rismiller | 20200083 | Zionsville, IN |
| Anthony J. Robinson | 20300009 | Mt Gilead, OH |
| Mark T. Seiler | 20200078 | Harrison, OH |
| Ross H. Taylor | 20200080 | Bedford, IN |
| Jefferey M. Trout | 20300008 | Erie, CO |
| Kurt M. Vonderheide | 20200082 | Indianapolis, IN |
| Nathan J. Walker | 20200085 | Cannelburg, IN |

Will YOU Win the Inspection Lottery?

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

I was asked to do a presentation for a state surveying association awhile back. The members of the organizing committee had read my articles in *POB* and thought a safety presentation would be an appropriate addition to their educational offerings. The 1/2 day seminar covered many aspects of OSHA Compliance for the surveying profession. During the first part of this type of a presentation I generally cover the various ways that can lead to an OSHA inspection. When I reached a certain point in the presentation I noticed a member of the audience appeared to be really uneasy about what I was discussing. Let's look at some of the ways OSHA might hit your company and we will discuss this person's "discomfort" with my message a little later.

First of all, any company can be inspected by OSHA at any time. (We will use *OSHA*, but as all of you know in Indiana we are inspected by the Indiana Occupational Safety and Health Administration; IOSHA.) The probability of receiving an inspection can vary with the type of work that you are performing. If your employees are on construction sites the likelihood of an inspection certainly increases. There are four major categories of inspections.

IMMINENT DANGER SITUATIONS - Any jobsite or job activity where there is a high potential that someone could be seriously injured or killed. OSHA may find out about this situation in any way, but Imminent Danger Situations will always get the highest priority. If you think, it really makes sense. If OSHA's job is to prevent accidents, then they should first emphasize preventing those that could be of a very serious nature.

FATALITY/CATASTROPHE INVESTIGATIONS - The definition of a fatality may be quite simple, someone is killed while working, but the definition of when an employee is working can be confusing. Anytime an employee is engaged in a work activity, even if it is not their normally assigned job, they are working. A Catastrophe can also be some what confusing. When three or more employees require hospitalization from a single incident, OSHA defines that as a catastrophe. The employees do not have to be from the same company, in fact, there could be three separate employers involved. The really bad thing about a Fatality/Catastrophe is that the employer must call the local OSHA office within 8 business hours. If it is a federal OSHA state, then there is a toll free number listed on the OSHA poster. If it occurs in a state plan state, like Indiana, then you would call that agency. Think about this...you have a situation where there is a high likelihood that at least one or more OSHA regulations may have been violated and yet you have to call them. Be assured, they will inspect...they have to follow up on all fatality/catastrophe incidents. Even worse, if you fail to call them there can be up to a \$ 5,000.00 per day citation for not reporting the incident! We are currently dealing with a fatality investigation and the company was owned by a four-way partnership of brothers. One of the brothers was killed while working and the company was not only cited for the violations that lead to his death, but also received a citation for not reporting the incident. Many law enforcement agencies and emergency services will automatically call OSHA if a fatality is involved,

but that still doesn't diminish your responsibility.

COMPLAINT/REFERRAL INVESTIGATIONS - A complaint comes from an employee about a specific situation and a referral comes from someone other than an employee. Both will be investigated. There can be a difference in the procedures followed depending on if the reported problems are put in writing and signed or if they are simply phoned to the agency. All will be followed up, but non-formal complaints may be verbally investigated as opposed to an onsite inspection. If the company says the situation is not as it was stated in the complaint/referral then OSHA may or may not conduct an onsite investigation. If it is then stated that the company was not telling the truth by the person making the complaint/referral then a formal investigation will start. There are many complaints filed by employees in today's business environment that lead to major citations for companies.

PROGRAMMED INSPECTIONS - This means that your business was selected for an inspection out of all the businesses in your state. OSHA does take a cross sampling each year to get inspections in just about all types of businesses. There is absolutely no way to predict when they will visit any given establishment under the programmed inspection area. I have heard of companies in business since OSHA was started in the early 1970's and they have never received an inspection while other businesses in the same SIC code have received several inspections.

One of the other potential areas of inspections would be Follow Up Inspections. OSHA has to do compliance verifications on a certain percentage of all settlements each year. They do this by re-visiting the company to make certain those items that had previously been cited have been corrected. You never want to get caught having said that something was corrected and then on a follow-up inspection OSHA finds that the violation still exists. They can get a little testy when that occurs.

I hope this helps all of you understand how an inspection may come about. Most OSHA offices have certain emphasis programs ongoing. If a Compliance Officer sees a potential violation while they are on a public thoroughfare or other public way then they may institute an inspection after conferring with their supervisor. There has even been an experiment in New Jersey where state police officers have been given a 10 hour Voluntary OSHA compliance class. If they spot violations while on patrol they are to call in a referral to OSHA.

What about the person in the seminar who showed "discomfort" when I was discussing inspections? He had an employee (surveying tech) killed in a road side accident several months before. He didn't know about the reporting of the incident and he was counting the number of days times the \$ 5,000. Not a pleasant thought! Keep it safe and remember that at any time and anyplace someone could walk up to you and say "Hi, I'm from OSHA and I'm here to help you!"

CALENDAR

August 12-15, 2003

Surveyors Review Course. Campus of University of Missouri-Rolla (UMR). Co-sponsored by UMR and Missouri Society of Professional Surveyors. Topics: Exam Preparation, Legal principles, USPLSS, Errors Analysis, Route Surveys, Celestial Observations, Instrumentation, Photogrammetry, GPS Surveys, State Plane Coordinates, problems Session, Practice NCEES-like Exam. Missouri board preapproved for 3.7 CEU's, 37 PDU's. Instructors: Dick Elgin, David Knowles, Joe Paiva, Norman Brown. \$730.00. Contact: Sue Turner, Engineering Continuing Education, University of Missouri-Rolla, Rolla, Missouri 573-341-4132.

August 13-16, 2003

82nd Annual Meeting of the National Council of Examiners for Engineering and Surveying. Renaissance Harborplace Hotel, Baltimore, MD. Check: www.NCEES.Org

September 5-9, 2003

Rendezvous 2003, Surveyors Historical Society, Lansing, Michigan. Theme: History of Surveying Education. Contact Roger Woodfill at (812) 537-2000.

September 12, 2003

ISPLS Seminar, Erosion & Sediment Control, Speaker: Randy Braun, et al, Abe Martin Lodge, Brown County State Park, Nashville, Indiana 6 CEH Elective

October 10, 2003

ISPLS Seminar, Topic: Legal Descriptions, Speaker: Tony Gregory, Plymouth, Indiana (Pending)

October 17, 2003

ISPLS Seminar, Topic: Original Government Field Notes, Speaker: Ken Anderson, Ramada Inn, Indianapolis (Pending)

October 18, 2003

Northeast Chapter ISPLS, Topic: Indiana Survey Law - Theory of Location - In Indiana Case Law, Speaker: Gary Kent (6 CEH Mandatory) I.U.P.U. Ft Wayne

October 25, 2003

ISPLS Seminar, Topic: TR-55 Computer Hydrology Workshop, Speaker: Jeff Healy, Vincennes University, Vincennes, Indiana (Pending)

November 7, 2003

The Central Indiana Chapter of ISPLS will present a Technicians Safety Seminar at the Primo Conference Center, Fort Harrison, Lawrence, Indiana.

The topics for this day long seminar will include:

- Roadway Safety for Surveyors
- Woods, Field, and Water Safety for Surveyors
- Permit Required Confined Spaces

For more information contact Rick Rayback at 317-826-7146

January 15-17, 2004

52nd ISPLS Annual Convention at Marriott Downtown Hotel, Indianapolis, IN. sponsored by Southwest Chapter.

WELCOME NEW ISPLS MEMBERS

April 26, 2003

Jeffrey Barnes - Member
Matthew Bertsch - Member
David Boblitt, II - Member
Steven Casterline - Member
Fulton Clinkscales, Jr. - Member
Matthew Cooper - Member
Timothy Darnall - Associate
Joseph Hile - Member
Timothy Jones - Member
Steven Lampen - Member
Jason McCort - Member
Joseph Mullins - Member
James Orr - Member
Kenneth Pitts - Member
Brian Rismiller - Member
Anthony Robinson - Member
Mark Seiler - Member
Ross Taylor - Member
Jefferey Trout - Member
Kurt Vonderheide - Member
Nathan Walker - Member

New Indiana Statewide Color Digital Orthophotography Planned for Summer 2003!

The plans are on the table to obtain statewide coverage of one-meter resolution, ortho-rectified color imagery through the USDA National Aerial Imagery Program (NAIP). The imagery will be "leaf-on" (taken during the growing season) in natural color taken in July/August 2003.

For Details on the program see:

<http://www.apfo.usda.gov/whitepapers/NAIP02.pdf>

The Indiana Geographic Information Council, working through its I-Team Orthophotography Workgroup, has been evaluating a statewide digital orthophotography update program for the last several months. The workgroup is continuing to evaluate additional programs for other orthophotography products such as leaf-off. IGIC is working with the NAIP Partnership Program to acquire the imagery in early December. Attention will now turn to developing robust distribution mechanisms for the new imagery. The new imagery program will produce annual updates statewide at a minimum of 2 meter resolution in subsequent years.

More information will be posted soon on the INGISI web site (www.in.gov/ingisi) and upcoming newsletter.

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