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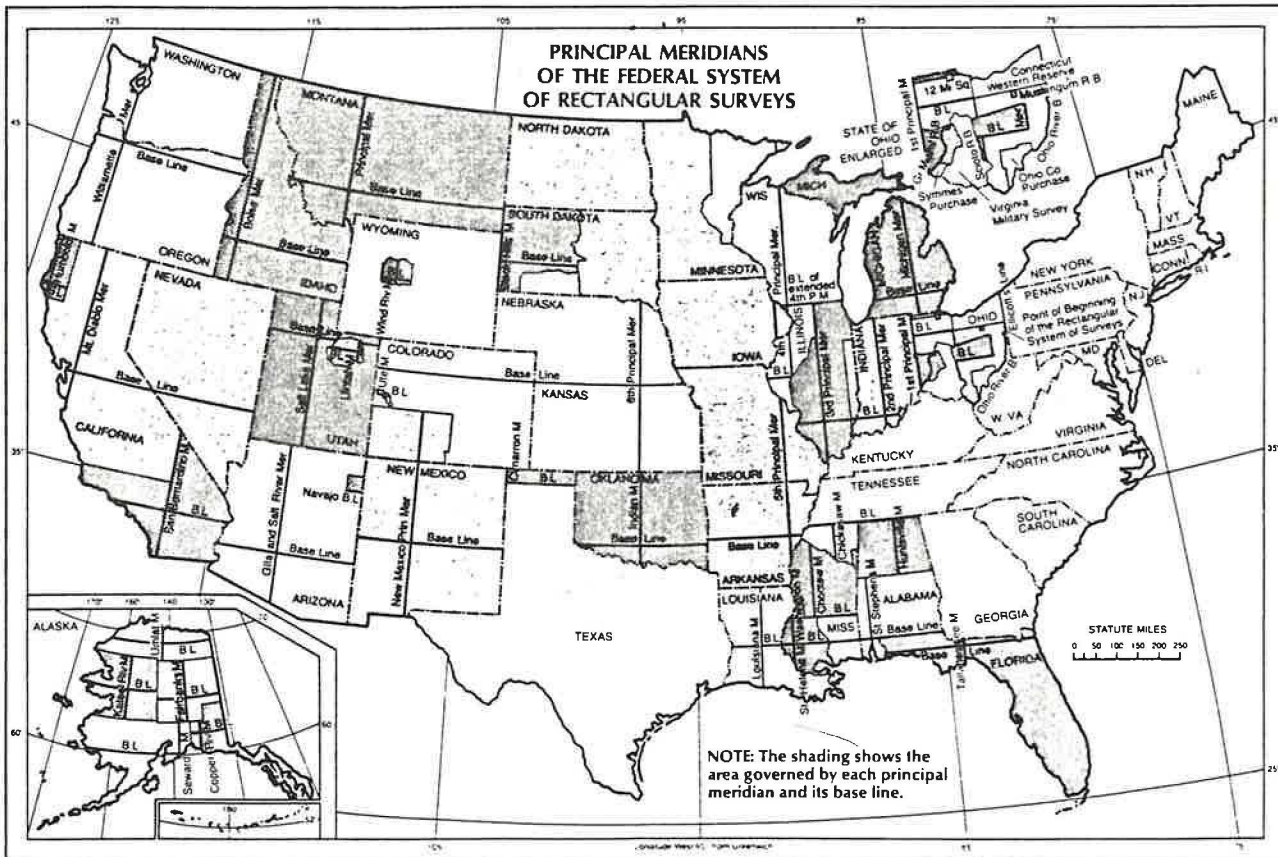
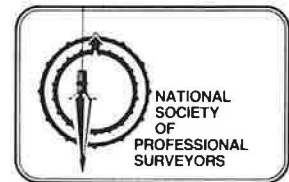


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VOLUME 23
NUMBER 4
SPRING 1997



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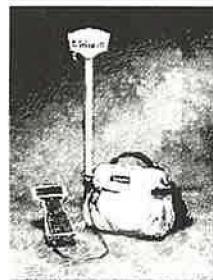
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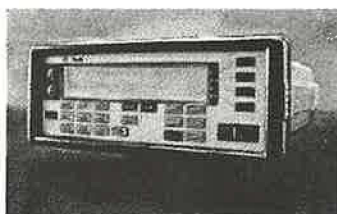
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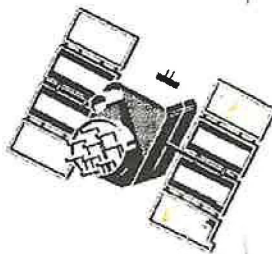
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Articles and columns appearing in this publication do not necessarily reflect the viewpoints of ISPLS or the Hoosier Surveyor staff, but are published as a service to its members, the general public and for the betterment of the surveying profession.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

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HOOSIER SURVEYOR

VOLUME 23 NUMBER 4 SPRING 1997

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PRESIDENT'S THOUGHTS

by Perry D. Cloyd, PLS, Edinburgh, IN

Again I write to tell you of my thoughts and activities. As I reflect on where we are as surveyors, I remember a conversation at our annual conference in South Bend describing surveyors as honest people. As I think about this statement, I begin to wonder

what makes people become surveyors. I have heard many negative comments about lack of respect and income, yet we continue to practice and others continue to strive to become surveyors. I believe we are people who are strongly connected to the land and it's history. We take satisfaction in what we achieve

as well as our contribution to the development and progress of our respective communities. Once an idea or concept is conceived, the surveyor is hired to tie that idea to physical reality, to relate present day conditions to those recorded in history, to uncover discrepancies which would otherwise be unknown. We have been the eyes on the project site for all who follow. Ultimately, it seems it is the historical contribution of our forefathers as well as our own that seems to be the strongest bond between us as individuals and our profession.

Since we last spoke, I have attended the annual conference of PLSO in Columbus, Ohio and the KAPS/MARLS conference in Paducah, Kentucky. Each conference held it's own educational benefits, from Dr. John Reilly lecturing on GPS in Ohio to a lunch presentation of aerial mapping of the Valley of the Kings, Egypt at the Kentucky Conference. There were many ideas gained from these experiences which will hopefully benefit our society. MARLS had an extensive display of logo items, from pens to pins. T-shirt to sweat shirts, books, license plate holders, stickers, coasters and other misc. items. Our society should look seriously at developing a similar line of products to promote surveying as well as to show our pride in society membership. NSPS was present at the KAPS/MARLS conference and I had the pleasure of meeting Wendy Lathrop, NSPS President and Curtis Sumner, NSPS President Elect. We as surveyors should be extremely proud to have elected representatives with such high professional qualifications and personal qualities.

Three months have now passed since I became president. I must say I am extremely proud of the response of our membership to the challenge of committee charges. The volunteers in this society are remarkable people. The time, thought and heart dedicated to the advancement of this society are inspiring to observe. Our membership is blessed and should be proud of the effort being exerted.

Two changes which have taken place relative to standing committees has been the creation of the Publications Committee (a

combination of Library/Publications Committees) and the Business Management Committee (a combination of Headquarters/Finance Committees). These consolidations are an effort to streamline similar tasks into more effective committees. Most all committees have met, have scheduled a meeting and/or are actively pursuing organization. In particular, the GIS/LIS Committee is doing yeoman's work to assist the Office of State Geodetic Advisor (OSGA) in implementation of the FBN/CBN (or HARN), the Public Relations Committee has worked long and hard to place surveyor's activities and accomplishments in the hands of local newspapers and the Scholarship Committee continues to make strides professionally in our student evaluation process. In addition, the new Publications Committee has gotten off to a strong start organizing, establishing goals, assigning duties and setting a timetable to accomplish tasks. The Membership Committee is working toward increasing our association benefits which will be an asset to us all and we now have an active Web Page on the Internet to advertise, inform and promote surveying. I do not wish to single these committees out at the expense of the other committees who are working equally as hard. Each committee is well represented and we should all be pleased with the progress being made.

One difficulty faced this year while assigning committee volunteers had to do with long time committee participants who did not indicate an interest in continuing their efforts when they renewed their membership. Please understand, if you did not indicate a desire to serve, I did not feel I could volunteer your services on a committee. Members in the future will need to be specific about their wishes to serve on committees.

After recently attending a meeting of the Hoosier Hills Chapter, ISPLS, I have come to believe all of our local chapters to be one of our greatest untapped resources. As the society grows, educational demands increase and our efforts to keep up increase, it will be our local chapters which will be most able to assist local surveyors in their efforts to maintain their position in the marketplace. I would like to encourage each chapter to become more involved, participate in state society activities, assign representatives to board meetings and hold regular seminars for the benefit of local and state membership. Each chapter which has activities planned should continue with their efforts and we should each do what we can to support their efforts. I would particularly like to thank the Initial Point Chapter for organizing a picnic in Brown County State Park in September. This is a standard practice of other state societies and I believe a welcome addition to our agenda. Remember to use the ISPLS Web Page to announce your upcoming events and milestones.

From time to time, I have been approached concerning ideas for programs, funding and expenditures relative to the assets held by ISPLS. It is the current philosophy of the Board of Directors, as well as my own, to invest these assets and provide funding for projects from the proceeds derived from these investments. I believe with some patience, this dream can become a reality. Many

members can easily remember the hard times experienced by this society. With sound fiscal responsibility, the hard times of the past can be avoided in the future and we can continue to benefit the current group of surveyors as well as those who will join our ranks in the years to come. This society must stand strong and prosper. Many programs are in place and others are being considered to implement this philosophy. A money manager has been hired and is performing as planned; the creation of a surveyor's foundation is being researched to aide the development and education of our surveyors; and the display of our survey history at museums and libraries is now a reality.

To all the membership, remember to judge fairly and mercifully with out prejudice; always keep in mind the finest things are a result of constant effort; and that we are rich only through what we give. To these remarks I believe each of us should strive and that our efforts should always be for the purpose of continued personal and professional improvement. Remember I have been elected to serve, I therefore encourage all of your thoughts and comments.

Professionally,
Perry D. Cloyd, PLS
ISPLS President

1997 ISPLS BOARD OF DIRECTORS SCHEDULED MEETING DATES

| DAY | DATE | TIME | LOCATION |
|-----------|---------|------------|--------------------------------|
| SATURDAY | JUNE 21 | 10:00 A.M. | HEADQUARTERS |
| SATURDAY | AUG 2 | 10:00 A.M. | HEADQUARTERS |
| SATURDAY | SEPT 13 | 9:00 A.M. | BROWN CO. INN NASHVILLE, IN |
| FRIDAY | OCT 24 | 4:00 P.M. | HOLIDAY INN S.E., INDPLS |
| SATURDAY | DEC 6 | 10:00 A.M. | HEADQUARTERS |
| WEDNESDAY | JAN 14 | TBA | LAFAYETTE |

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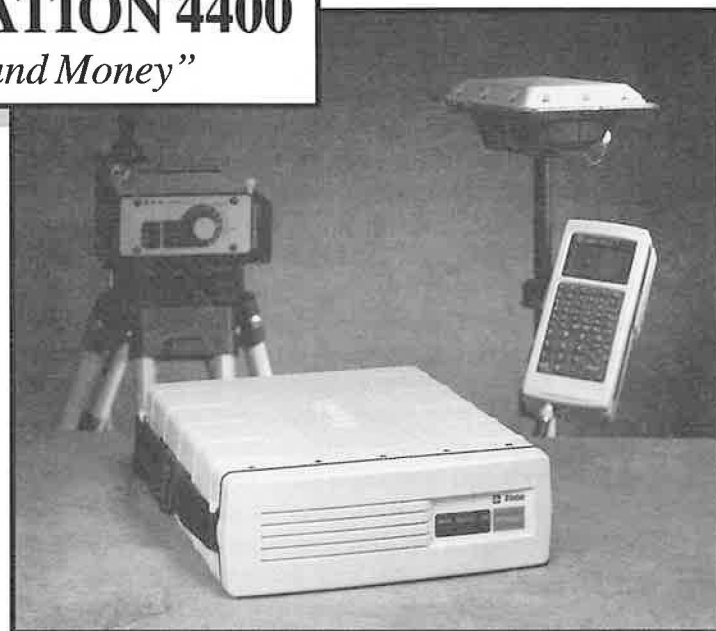
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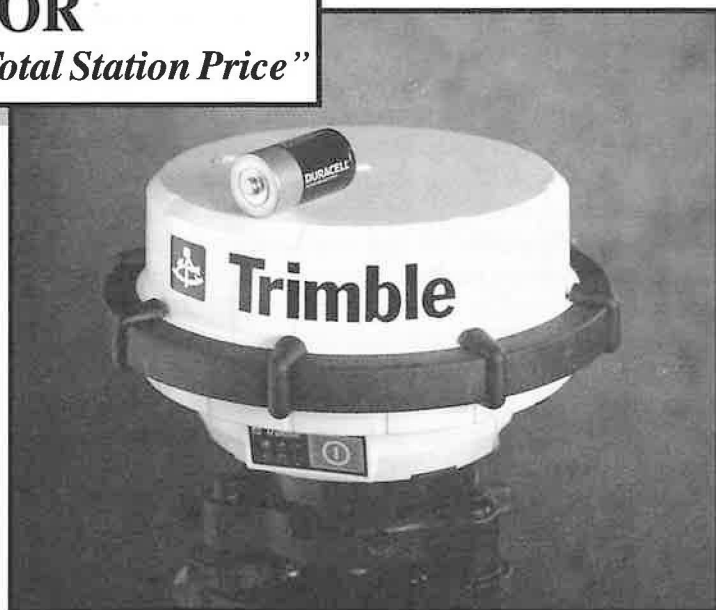


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ISPLS BOARD OF DIRECTORS MEETING HIGHLIGHTS

by Dianne Bennett, Executive Director

January 15, 1997

The ISPLS Board of Directors held a meeting on Wednesday, at the ISPLS Convention in South Bend. President Hudson called the meeting to order at 1:00 p.m. Guests present were John Bauer, Jeffrey Souder and Ron Wharry. The minutes and treasurer's report were reviewed and approved.

Staff Activity Report - A written report was submitted and reviewed. The report is stated under individual topics listed below.

Chapters - The Northwest chapter had their Christmas meeting December 12th. Approximately 30 attended. Their next meeting will be February 13, 1997.

Initial Point Chapter - They are planning the annual picnic for September 13th, at the Brown County State Park.

Central Indiana Chapter - They are currently having elections for new officers. CIC voted and accepted the Model By-laws. The only change being that to vote on any chapter business a chapter member must be a member of ISPLS.

No chapter reports were received from St. Joseph, Northeast, Southwest, Tecumseh, Wabash Valley, and Hoosier Hills Chapter.

Convention Coordinating - The 1997 convention had 187 full time and 32 students signed up. The proposal from the University Inn & Convention Center in Lafayette for the 1998 convention has been received and will be taken under consideration at the next meeting.

Education - The committee asked approval for the PDH's for the 1997 convention and for the Hoosier Hills Chapter, August 28, 1996 workshop on "Indiana Boundary law 1995 Updates". A motion was made and accepted to accept the recommended PDH's as presented by the Education committee.

Ethics - The committee is discussing a mentor program to assist members. Also, having an alternate member in case a current member has to excuse himself from committee business and maybe having someone from every local chapter on the Ethics Committee.

Membership - The following membership applications were reviewed and approved: Student to Junior - Timothy D. Higbie; Junior - Douglas F. Homeier; Associate - Dwain J. Thomas; Student - Mark Ober, Nathan D. Gray; Member (Reinstate) - William W. Bassett.

Nominations & Elections - E.R. Gray, III, Jeff Souder and John Bauer were elected to the Board of Directors. A motion was made and approved to dispose of the ballots.

Public Relations - The committee has a list of the media sites around the state to send information to.

Scholarships - The awards will be given at the convention banquet.

Indiana Historical Landmarks - They held a meeting at the Washington County Surveyors office and discussed the Initial Point.

NSPS Governor - E.R. Gray was asked at the National Convention about ISPLS hosting a future national convention.

There has been a draft of the new GIS/LIS classifications and

standards.

The teacher of a trig-star winner would receive the same monetary award as the student.

GIS/LIS - The committee has continued to meet monthly and everything is on schedule for the reference network to be put in place by spring or early summer.

February 15, 1997

The ISPLS Board of Directors met on Saturday, February 15th, at ISPLS headquarters at 10:02 a.m. President Cloyd called the meeting to order. Guests present were Mark Gardner, Ron Wharry, Randy Miller and Jason Miller. The minutes and treasurer's report were reviewed and approved.

Change in Agenda - Robert Hutt, Agency Associates discussed with the board the Medical Savings Account. This is an alternative to traditional group health insurance. This plan is basically a medical savings account that allows the owner to save tax free money for employee medical expenses. The plan would also carry an insurance plan that would take over and pay medical expenses if the medical savings account was depleted. This plan is more toward the self-employed or small business. The plan could be setup to have no deductible. The program enrollment is scheduled to end by September 1, 1997 or after 750,000 enrollees.

Mr. Huff also discussed other insurance programs offered by his firm. These other programs were group rates on commercial insurance, workers compensation and E & O coverage. A motion was made and passed to have Agency Associates furnish the board with the survey form necessary to obtain the required information from the membership, have a mailing to the membership and to contact other state societies about participating in the program.

The meeting was then returned to the agenda.

Staff Activity Report - A written report was submitted and reviewed. The report is stated under individual topics listed below.

Officers Activity Reports - Rich Hudson attended the Illinois convention. Perry Cloyd attended the Ohio convention.

Chapters - The Northwest Chapter held a meeting on February 13th. There are plans to sponsor a workshop this year.

Hoosier Hills Chapter - Will meet in two weeks. This will be a dinner meeting at the hotel in Nashville.

Wabash Valley Chapter - Will be meeting February 19th. They will be discussing Rule 12.

Central Indiana Chapter - The chapter had an organizational meeting February 13th. The new officers are: Kris Conover, President; John Bauer, Vice President; Brian Catlin, Secretary; Dan Kovert, Treasurer. There were six (6) dates set for meeting this year. The chapter may want to sponsor a workshop this year.

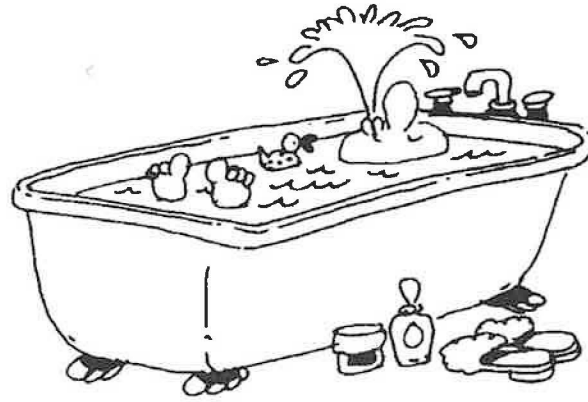
St. Joseph Chapter - The chapter plans to meet in a couple of weeks.

Tecumseh Chapter - They will meet in two weeks.

No chapter reports were received from Initial Point, Northeast,

...continued Page 7

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MINUTES

...continued from Page 5

and Southwest.

Convention Coordinating - Some of the convention registrants wanted refunds because they were unable to attend the convention. A motion was made and passed not to return any registration fee to individuals who didn't attend the convention but to send them the convention handouts.

In a letter from Roger Woodfill it was mentioned that Prof. Kenneth Curtis was made a "Honorary Past-President" by the ISPLS Board in 1982, and that he should be included on the list of "Past-Presidents" and asked to attend the "Past Presidents Breakfast" at the annual convention. A motion was made and passed to invite Prof. Curtis and his wife to all future "Past Presidents Breakfasts" at the annual conventions and to include Prof. Curtis's name in the membership roster as a "Honorary Past-President."

1998 Convention - The committees are being put together and meetings being planned. A floor plan of the hotel was submitted to the board for review. A motion was made and passed to sign the contract with University Inn in W. Lafayette and to pay the deposit.

Education - The workshop on "Analysis of Measurement Errors & Survey Adjustments" has been approved by Kentucky for 6 P.H.'s.

The Tecumseh Chapter is planning to have a workshop on "Theory of Location" in May. Pat Cunningham will be the speaker.

Ethics - The Ethics committee has been broken into a north and south region. A chairman has been selected for each region. Dave Blankenbeker - Chairman South Region, Rich Hudson - Chairman North Region. US 40 will be the dividing line of the 2 regions. Complaints will be handled in the region they come in from.

Finance - An end of year report was submitted from Wallington Asset Management on the ISPLS Investment Portfolio.

Government Affairs - A letter from Frank Ballintyn along with the Indiana Forest Classification Act was submitted for the boards review. This deals with surveys performed from aerial photos. This information has been sent to the Government Affairs Committee.

S.B. 182 was introduced and passed the committee reading 10-0 and is waiting for the second reading.

Headquarters - President Cloyd stated that the Headquarters Committee and the Finance Committee is staffed mainly by the same people and the work of the two committees may be best handled if the two committees were combined. A motion was made and passed to combine the Headquarter Committee and the Finance Committee and name it the Business Management Committee.

Hoosier Surveyor - The Winter issue is at the printer.

Nominations & Elections - Don Bengel volunteered to chair the committee this year.

Public Relations - Ron Wharry announced that a press release form has been prepared and was used for individuals attending the convention.

Publications - President Cloyd wants to combine the Library and Publications Committees into one committee with Ryan Wisheart as chairman. A motion was made and passed to dissolve the Library Committee and place the library under the jurisdiction

of the Publications Committee.

Scholarship - Because of the mix-up at the convention on who was to receive the Initial Point Scholarship, only the ISPLS Scholarships will be announced at future conventions.

County Surveyors - The next meeting of the County Surveyors is March 25th through the 27th at the Purdue Road School.

Indiana State Board of Registration - Mary Franklin is the new secretary for the board of registration.

Indiana Historical Landmarks - Ken Anderson is going to give a presentation on the Initial Point sometime in the future.

New Business - A motion was made and passed to give \$1000 to sponsor two Purdue Students attending the ACSM Convention.
March 22, 1997

The ISPLS Board of Directors held a meeting on Saturday, March 22nd at ISPLS headquarters. President Cloyd called the meeting to order at 10:04 a.m. The minutes and treasurer's report were reviewed and approved.

Staff Activity Report - A written report was submitted and reviewed. The report is stated under individual topics listed below.

Officers Activity Report - President Cloyd attended the KAPS Conference in Paducah, KY.

Chapters - The Northwest Chapter held a meeting on March 21st. Thomas Mahon was the guest speaker and discussed the HARN.

The Hoosier Hills Chapter had a guest from the Jennings County Library discuss genealogy at their last meeting.

The Initial Point Chapter has a meeting scheduled for March 26th. They will discuss the HARN and the ISPLS picnic.

The Central Indiana Chapter had Dr. van Gelder, Purdue University, address the March meeting about the HARN. There was also discussion on having a workshop on Road Safety, OSHA and CPR.

The Northeast Chapter has four meetings scheduled for this year.

The Southwest Chapter will be meeting March 25th. They will be discussing the HARN and the 1999 Convention.

No chapter reports were received from Wabash Valley, St. Joseph or Tecumseh Chapter.

President Cloyd reported that he has been talking with several surveyors in the southeastern part of the state about organizing a local chapter.

Business Management - The committee will hold a meeting on April 18th to prepare the 1997/1998 budget.

Membership - The following membership application was reviewed and approved: Junior (Reinstated) - Aaron E. Springer.

A survey form has been prepared to determine the insurance needs of the societies membership.

The committee would like to expand the directory to include more information (firm names, firm addresses, fax numbers, e-mail address, etc.). They will be looking into other services like reduced motel rates, rental car rates, etc. They will also look into preparing logo items.

Public Relations - Ron Wharry and the committee were acknowledged for doing a very good job in getting news release

...continued Page 14

A SUMMARY OF PROGRESS AND PARTICIPATION IN DEVELOPING THE INDIANA HARN

Report Presented to the HERPICC Advisory Board by the State Geodetic Advisor

April 3, 1997

The Indiana High Accuracy Reference Network is taking shape quite nicely thanks to the efforts of various counties, state agencies, and private surveyors from around the state. Two thirds of Indiana counties have agreed to sponsor a total of 102 points. Three state agencies have collectively agreed to sponsor a total of 29 points, provide manpower and equipment during the GPS campaign, and provide surveying services for points in need of vertical control. And the surveying community, through the Indiana Society of Professional Land Surveyors, is providing a support network of volunteers to the Office of the State Geodetic Advisor and HARN sponsors. These volunteers are providing assistance with point selection and recovery efforts as well as manpower and equipment during the GPS campaign. This is truly a cooperative effort whose participants deserve recognition.

In order to gauge the level of support the Indiana HARN might receive from various organizations and agencies within the state, HERPICC contacted as many such groups as they could. During the summer of 1995, potential support groups were identified. The highest ranking representative from within each group, which HERPICC had access to, was also identified. These individuals were then asked to pledge the support of their organizations, in writing, for the Indiana HARN. Those names, along with their respective organizations or agencies, are included on the attached list of HARN supporters. Without this initial show of support, the Indiana HARN may never have had a local component.

During the past two years, OSGA has been working closely with GIS/LIS Committee of ISPLS planning the Indiana HARN. The committee has provided oversight to OSGA, advice on various issues, and access to an army of volunteers needed for such an undertaking. Members of the committee are some of the HARN's biggest proponents. They tirelessly met with other surveyors, representatives of state agencies, and members of local government to plead the case for the HARN. Without them, the upcoming HARN would not be as large as it is. Rosters are attached.

Indiana counties, spearheaded by their surveyors, have been the biggest financial backers of the HARN. Sometimes funded through their general funds, but more often through their corner perpetuation funds, counties have seen fit to sponsor the majority of HARN points. With an average of 1.6 points per sponsoring county, these counties are prepared to spend an average of almost \$5,000 in support of the HARN. Congratulations go out to those counties for having the foresight to help protect future investments of tax dollars in geodetically or geographically referenced information systems.

A number of professional state associations have also been hard at work getting the word out concerning the HARN. Between the Association of Indiana Counties and the Association of County Surveyors, they have sponsored talks at Road School each of the past four years and at the AIC conference each of the past two years. Both organizations have also carried articles discussing the HARN

in their respective periodicals. Without the support of both organizations, we would not have been able to elicit the support of so many counties.

ISPLS chapters have been active supports of the Indiana HARN. All eight chapters have hosted speakers from OSGA over the past four years. The Central Chapter was first to demonstrate support for the Indiana HARN. The Initial Point Chapter hosted the 1994 Annual ISPLS Conference where work on the Indiana HARN first began. The Central Chapter hosted the 1996 Annual Conference where National Geodetic Survey personnel were scheduled to speak but were unable to attend due to the federal government's budget woes. The St. Joseph Chapter hosted the most recent conference where NGS personnel were finally brought in to discuss HARNs in general as well as technical details. The Initial Point Chapter should be recognized for attempting to establish one HARN point for each and every county within their regional who were financially unable to sponsor a point themselves.

ISPLS chapters have provided support for the HARN in another important manner. The network of volunteers who assist and advise county surveyors is composed predominantly of ISPLS members. Without these volunteers calling on county sponsors, many points might not be sufficiently documented to be useful in the HARN network.

Spearheading the network of volunteers are a very specific group of individuals again consisting predominantly of ISPLS members. This group has taken on the responsibility of coordinating the selection and recovery of perspective HARN points within each of six districts corresponding to INDOT's maintenance districts. These coordinators are contacting each county surveyor sponsoring a HARN point and offering assistance with the selection and recovery of county sponsored HARN points. They are also contacting a subset of all county surveyors within their district in an effort to coordinate the selection and recovery of prospective HARN points which might be used by HARN sponsors other than the counties themselves. Such sponsors might include the federal government as well as various state agencies. The names of the eleven individuals comprising the group of HARN coordinators are shown on the attached list of HARN coordinators.

Again, potential non-county HARN sponsors include the federal government, in the form of NGS, the Indiana Department of Transportation and the Indiana Department of Environmental Management. NGS clearly sees the need for a high accuracy reference network and will establish between 15 and 20 HARN points throughout the state. INDOT and IDEM also see the benefit of such a network and will fund the establishment of a number of points as well as provide manpower and equipment during the GPS campaign.

Not to be left off the list of state agencies supporting the Indiana HARN is the Indiana Department of Natural Resources, Division of Water. The Division of Water may not rely so much on the horizontal accuracy to be provided by the HARN as they will

INDIANA HARN

...continued

the possibilities of establishing vertical control. Consequently, they have agreed to provide manpower whenever possible to assure the accurate estimation of elevations of prospective HARN points.

The Highway Extension and Research Project for Indiana Counties and Cities (HERPICC) advisory board has supported the continued efforts to develop the HARN. Initially they supported the establishment of the Office of the State Geodetic Advisor and subsequently the project provided a home and support for coordinating all involved in this ongoing effort.

Without the effort of these organizations, agencies, and individuals, the Indiana HARN would not be coming together as well as it is. And this effort amounts to hundreds of thousands of dollars as well as an untold number of man-hours of voluntary effort. Thanks to all involved and apologies to anyone inadvertently not mentioned.

Charles F. Scholer, Director Highway Extension & Research Project for Indiana Counties and Cities and Professor of Civil Engineering

B.H.W. van Gelder, Indiana State Geodetic Advisor & Associate Professor of Civil Engineering

Thomas A. Mahon, Graduate Research Assistant, Office of the State Geodetic Advisor/Highway Extension & Research Project for Indiana Counties and Cities.

INDIANA HIGH ACCURACY REFERENCE NETWORK COORDINATORS

| NAME | MAINTENANCE DISTRICT | COMPASS DIRECTION | PHONE |
|------------------|----------------------|-------------------|---------------|
| E. Donald Bengel | Laporte NW | NW | (219)462-0690 |
| Larry Fisher | Laporte SE | NW | (219)935-8530 |
| Don Mason | Fort Wayne | NE | (219)484-9541 |
| Dale Grimes | Crawfordsville | CW | (765)423-9228 |
| David Smoll | Greenfield | CE | (317)462-1150 |
| Art Haase | Vincennes NW | SW | (812)888-4185 |
| Bill Clark | Vincennes SE | SW | (812)888-5865 |
| Vic McCauley | Seymour | SE | (812)282-4183 |
| Hershel Manhart | At-Large | | (317)689-0168 |
| John Bauer | At-Large | | (317)321-0631 |

SUPPORTERS OF THE INDIANA HIGH ACCURACY REFERENCE NETWORK - 1995

Mr. Donald W. Lucas,
Chief Engineer, Indiana Department of Transportation
Mr. John N. Simpson,
Director, Div. of Water, Ind. Department of Natural Resources
Ms. Karyl Schmidt,
Chief, Hazardous Waste Geology Section, OSHWM
Mr. Skip Powers,
Chief, Technical Support Branch - both IN Dept. of Env. Mgmt.
Mr. John Hill,
Assistant Director, Indiana Geological Survey
Lloyd R. Jennings,
Superintendent, Indiana State Police

...continued Page 11...

HARN VOLUNTEERS NEEDED NOW!!!

Dear Friends of the Future of Indiana Surveying:

As you may know, The Office of the Indiana State Geodetic Advisor, the Association of Indiana Counties and the Indiana Society of Professional Land Surveyors have been cooperating for the past few years to help plan, support and finance the upcoming upgrade of the Indiana geodetic network. The GPS survey which will be overseen by the National Geodetic Survey is planned to begin July 14th and to last approximately six (6) weeks.

Now is your chance to participate in this survey, which we believe compares with the US Public Land Surveys and the national geodetic surveys from early in this century. As surveyors, we recognize that not everyone who expresses an interest will be free to help when a firm schedule is set due to business or personal conflicts. However, with summer rapidly approaching we need to inventory the possible assets that we as a state can provide to defray the costs of the HARN beyond the minimal information that the NGS will collect for their own needs. This is the Cooperative Base Network which is established by local demand, as opposed to the Federal Base Network, which is the portion of the HARN that NGS funds. We are therefore asking anyone who may be able to donate time, personnel or equipment to let us know now so that we can coordinate volunteers with the NGS crews. Examples of the types of help that we can use include: personnel, vehicles (with cellular telephone if possible), third order leveling to NGS standards, single frequency GPS receivers for ties to new points, dual frequency GPS receivers for HARN observations, and any logistical or moral support that you can provide (for example, the opportunity to get a cup of coffee or send a fax from your office during the survey).

Please provide details (make and model of equipment, when personnel might be available, etc.) of the help you would like to provide within the next two weeks to our volunteer coordinator:

Bryan Catlin (317) 634-1000 Office
MSE Corporation (317) 539-2285 Home
941 North Meridian Street (317) 634-3576 Fax
Indianapolis, IN 46204 bcatlin@msecorp.com E-mail

This information will be added to our planning database. Volunteers will be publicly recognized at the conclusion of the project. Personnel who participate in the GPS phase of the HARN will receive training in the use of the equipment by NGS personnel. And all who help will be leaving a lasting legacy for future surveyors and users of geodetic information.

Please feel free to call if you have any questions.

Sincerely,

Office of the Indiana State Geodetic Advisor
GIS/LIS Committee - Indiana Society of Prof. Land Surveyors

ISPLS Discounted Long Distance Telephone Program takes the guesswork out of selecting "the best for less"

The phone rings. The mail arrives. And what you find on the other end of the line and inside the envelope is another solicitation for another discounted long distance service. "The biggest." "The best." "Reduced cost per minute." "Savings, savings, savings."

With so many offers coming your way, it's nearly impossible in terms of your valuable time and money to analyze each one and then to determine which will give you the best service at the least possible price.

As a benefit to our members, ISPLS has invested the time, delving into an in-depth investigation to provide our membership with the most superior program on the market today. Enter the ISPLS Discounted Long Distance Telephone Program.

We believe the ISPLS program to be the best because your company can select the exceptional quality and reliability of a major carrier--including AT&T and MCI--and still cut your long distance phone bill by up to 48 %.

Through the clout of group buying power, ISPLS has enlisted the services of UWI, the program administrator for the ISPLS Discounted Long Distance Telephone Program. Because UWI doesn't represent a single carrier or isn't itself a carrier, their service representatives can give you an honest, unbiased evaluation of your current system and calling patterns, make recommendations and point out potential cost savings based on using one of the top carriers in the world.

UWI representatives can also counsel you about whether severing a term contract to which your company has already committed to a long distance carrier will ultimately save you money.

If you haven't signed such a contract, UWI advises very strongly that you don't. These agreements, while purporting to save you a given percentage based on committing to using the service for a specific length of time, usually do not save you a dime because it's likely that the rate they quote you and then reduce is much higher than the bare bones base rate.

If your company is using a major carrier such as AT&T and you are satisfied with the service, you may typically choose to stay with that network. However, through the ISPLS program, you may well

see your long distance rates decrease due to the group volume rates now available to you as a member benefit without leaving your current carrier. Your company will also see a similar savings on your 800 number services.

Remember, your company is guaranteed to receive the lowest price on the top quality network of your choice. Also offered are these "no strings" benefits: no term commitment or minimum usage fees, no membership fees and no switching fees.

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FAX for the details 1-800-611-5698

My Name _____

Company Name _____

Fax Number _____

Phone Number _____

Fax UWI, your Program Administrator, today...or Call 1-800-342-9287.



INDIANA HARN
...continued from Page 9

Mr. Daniel C. Orcutt,
Executive Director, Indianapolis Airport Authority
Mr. John Catey,
Director, Indiana Sheriff's Association
Mr. E.R. Gray, III,
President, Indiana Society of Professional Land Surveyors
Mr. Robert N. Stewart,
President, Indiana Association of Cities and Towns
Mr. Gregory Deeds,
President, Indiana County Surveyors Association
Ms. Sue Paris,
President, Association of Indiana Counties, Inc.
Mr. Graham Toft,
President, Indiana Economic Development Council, Inc.
Mr. Elias G. Samaan,
Chairman, Metropolitan Planning Organization of Indiana
Mr. Kenneth G. Day,
Forest Supervisor, Hoosier National Forest
Mr. Alan R. Hanks,
Indiana State Chemist and Seed Commissioner
GIS/LIS COMMITTEE OF THE INDIANA SOCIETY OF PROFESSIONAL LAND SURVEYORS

| 1995 | 1996 | 1997 |
|---------------------|--------------------|----------------------|
| Perry Cloyd - Chair | Perry Cloyd- Chair | Daniel Pusey - Chair |
| Bryan Catlin | Bryan Catlin | Bryan Catlin |
| Kevin Chaffee | Kevin Chaffee | John Bauer |
| Daniel Pusey | Daniel Pusey | Don Plumb |
| E.R. Gray, III | E.R. Gray, III | Art Haase |
| | Ken Anderson | Ken Anderson |
| Hershel Manhart | Hershel Manhart | Hershel Manhart |
| Larry Manning | Larry Manning | Larry Manning |
| Gordon Martin | Gordon Martin | Bill Clark |
| Vic McCauley | Vic McCauley | Vic McCauley |
| B.H.W. van Gelder | B.H.W. van Gelder | B.H.W. van Gelder |
| John McNamara | John McNamara | Greg Eveslage |
| Gordon Richardson | Gordon Richardson | |
| | Greg Eveslage | |
| | Mark Rosenberger | |

CONTINUING PROFESSIONAL DEVELOPMENT COURSES

Kentucky PDH Approval January 16-17, 1997 - ISPLS Convention

| | |
|---|------------|
| "Construction Surveying in the 90's" | 2.5 P.D.H. |
| "Writing Survey Reports" | .5P.D.H. |
| "Indiana HARN Blue Booking" (each) | 1 P.D.H. |
| "OSHA and Confined Spaces" | 1 P.D.H. |
| "Surfing the Internet" | 1 P.D.H. |
| "Positioning the Survey Firm" | 3 P.D.H. |
| "Management & Marketing the Survey Firm" | 3 P.D.H. |
| "Practical Applications for GPS" | 3 P.D.H. |
| "Surveying in the 17th-19th Centuries" | 1.5P.D.H. |
| "Update on Environment & Land Use Issues" | 1 P.D.H. |
| "Early Court Decisions Re: Land Disputes" | 1.5P.D.H. |
| "Innovative Wetland Mgmt in Subdivisions" | 1 P.D.H. |

INDIANA COUNTY SURVEYORS ASSOCIATION ELECTS NEW OFFICERS



As part of the County Surveyors sessions at the recent (March 26, 1997) Purdue Road School held in West Lafayette, the following new officers were elected for two-year terms: left to right: Dave Smoll (Hancock County) Central Vice-President; Doug Lechner (Johnson County) Secretary-Treasurer; Jay Poe (Huntington County) President; John Stephens (Wabash County) Northern Vice-President; and Jeff French (Ripley County) Southern Vice-President.

John McNamara, St. Joseph County Surveyor, was presented this year's Presidents Award for service to the Association and achievements as County Surveyor by outgoing president Greg Deeds (Miami County). Drainage and Detention Facilities was the subject of one session, as was an Update on HARN, the High Accuracy Reference Network. It was also voted to increase County Surveyor Association yearly dues from \$20 to \$25. The Association keeps a close watch on legislative bills which might have some impact on the county surveyors office.

AL WHITE'S NEW BOOK

The Colorado Professional Land Surveyors Educational Foundation Inc. has published retired BLM cadastral surveyor Albert White's new book, *Initial Points of the Rectangular Survey System*, 1996, 576 pages, which is a companion to *A History of the Rectangular Survey System*, 1983, 786 pages, BLM, Supt. of Documents.

Traveling around the United States, Al and his wife have personally visited and photographed all 37 initial points. For copies of his new book, contact The Publishing House, P.O. Box 215, Westminster, Colo. 80030. (303) 428-9529

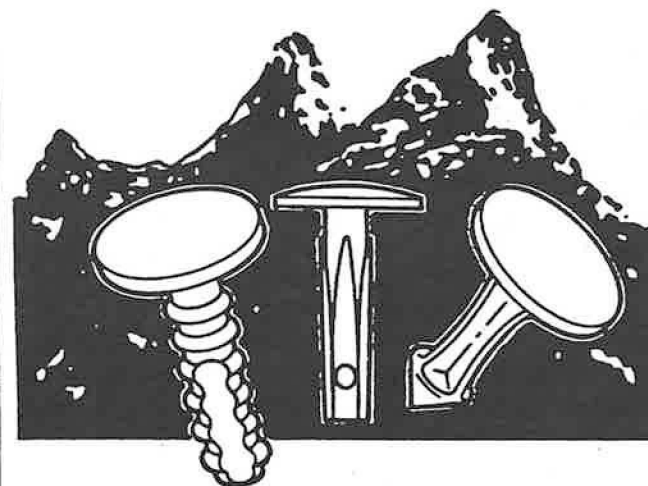
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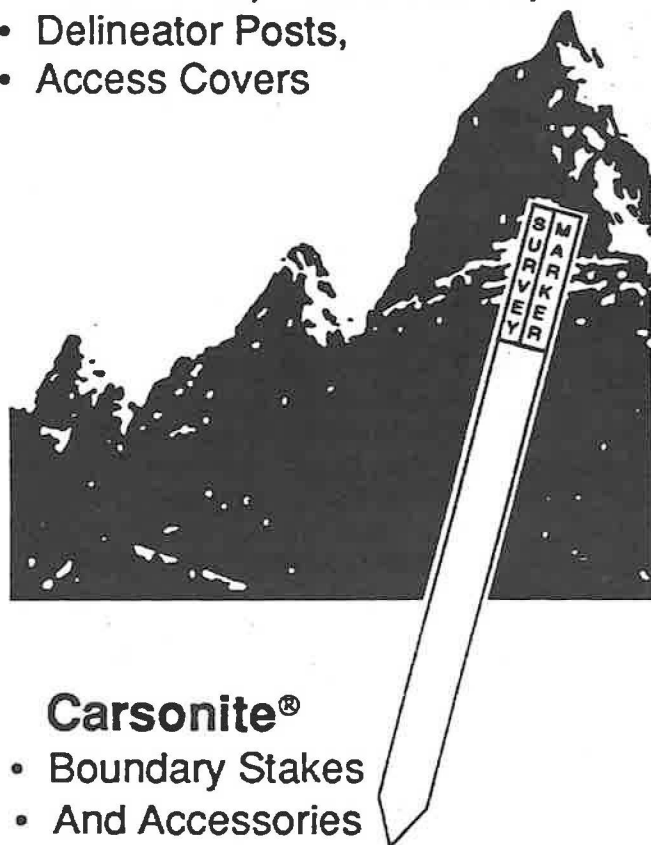
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IMAGINATION STATION OPENS IN LAFAYETTE

The Imagination Station, a museum featuring exhibits and workshops, has opened its doors in order to help the Lafayette community learn more about the world of space, science, engineering and technology. The Imagination Station was started by the Association of Space, Science, Engineering and Technology Incorporated (ASSET, Inc.). President of the board Ed Frickey said, "Lafayette is the ideal community for the museum because of the resources such as Purdue, Caterpillar and Isuzu that we have here."

Barb Bowman, executive director of Imagination Station said, "It started out 4 1/2 years ago when a number of individuals in the community wanted to create a facility that would allow children to learn more about aerospace." The idea of a hands-on museum became a possibility when the Indiana Gas Company, 600 N. Fourth St., donated its empty building. "Initially it was just workshops and the making of paper airplanes, but we wanted to have a walk-in facility," said Bowman.

The interior of the building went through a total renovation process with the help of six labor unions and contributions from numerous individuals. Bowman said, "Everyone is excited with open arms and pockets. There have been so many donations that different organizations have given us to exhibit."

The American Society of Civil Engineers donated a 21-ft steel bridge that will be exhibited at the museum temporarily. Other donations included a 1928 Boyer antique firetruck that children can climb on and a 1910 Maxwell Jack Benny Model T car. There will also be two simulators, four cut-away engines and a butterfly house to enable hands-on experience.

The Indiana Gas Company will have an exhibit explaining about natural gas and energy. A rotating plant display provided by Bennet's Greenhouse will also be part of different exhibits.

Frickey said, "It is an opportunity for people to learn about the technologies of the past, present and the 21st century. It's an interactive museum. It allows people to learn by doing things."

Frickey, who headed the education program for the Purdue 4-H Club Youth Department, said one of the main reasons he wanted to build the Imagination Station was to develop growth in young people. One of the exhibits that Frickey hopes to have in the future is a cargo airplane that is not in use anymore. He wanted to convert the cargo area into a classroom, allowing a learning environment that was educational and fun at the same time.

Through the efforts of Ken Curtis, a locked glass display case houses ten historical antique surveying instruments (courtesy of Purdue's Surveying Engineering Area). These loaned instruments consists of a transit, steel tape, compass, chain, dumpy level, builders transit-level, plane-table alidade, optical-reading theodolite, Fischer precise level, and Parkhurst first-order direction theodolite. In addition, an early model automatic level is mounted on a tripod, outside the case, (with a set of wooden observing steps) to permit the hands-on sighting of a level rod setting in a distant corner. "So that's what a surveyor sees through his telescope!"

Bowman said, "There is nothing like this in the immediate

ISPLS SPINS A WEB SITE

by Chris Marbach, PLS, Elkhart, Indiana

It seems that you can't pick up a magazine or newspaper today without reading about the World Wide Web. Walk into a bookstore and you're likely to trip over stacks of new titles on the subject.

ISPLS recognized the growing importance of the Web last year. We conferred with an outside consultant to develop a pilot site for us at his company's Web site and maintain it on a limited basis. Soon, however, it became apparent that we needed a more flexible arrangement.

After studying several options, ISPLS decided to join Land Surveyors Online (LSO), a Web site dedicated to land surveyors. It provided ISPLS with an opportunity to demonstrate our commitment to helping land surveyors, who constitute the majority of our membership. Our new Web site is open and ready - the URL is www.ispls.org/ispls.

CURRENT HIGHLIGHTS

Visitors to our site will find information about all of our programs and upcoming events. Here are some of the highlights of our current pages:

- * Excerpts from the Hoosier Surveyor
- * Details of upcoming conventions and conferences.
- * A directory of ISPLS officers, directors, and committees.
- * A catalog of books available in the ISPLS library.
- * Membership Roster
- * Publications.
- * Web Site Sponsors.
- * We will soon add a discussion group area.

SPREAD THE WORD

If you believe in the value of an ISPLS presence on the Web, we would encourage you not only to visit our site often but also to spread the word about it to others. If you manage a Web site for another organization, feel free to add a link to ours. If you would like us to do the same for your page, send us an E-mail message with the necessary information. Above all, please give us feedback, because we want to make our site an essential tool for the ISPLS membership. Contact: Chris Marbach,

E-mail: Surveyace@skynet.net

...IMAGINATION STATION CONTINUED

area. This is something new for the Lafayette area. No other museum has the same focus as we have. We are not strictly a science or children museum, but are trying to blend the best of both."

The Imagination Station, at the corner of North Fourth and Cincinnati Streets in downtown Lafayette, is open from 1 to 5 p.m. on Friday, Saturday and Sunday. Admission charges are \$3 for adults, \$2 for children 3-12 and free for children under 2. For further information, call (765) 420-7780.

ISPLS MINUTES

...continued from Page 7

information to the local media on society events and society members. The board is very pleased with the fine job this committee is doing in promoting the surveying profession.

Publications/Library - Ryan Wisheart, chairman, has sent his committee's charges to all the members of his committee and asked them to review for the meeting planned in mid April.

Prof. van Gelder stated at the last CIC chapter meeting that the HARN data will probably be adjusted by Tom Mahon and the Indiana HARN Committee before it goes to NGS. It is assumed that it will take NGS a year to publish the results. The reports and adjustment by the HARN committee should go into a publication and a copy kept in the library and made available to the membership.

Scholarship - Vincennes University scholarship interviews will be held April 18th at ISPLS headquarters.

Purdue University Awards Banquet will be at the Ramada Inn, Lafayette, April 26th at Damon's.

University Cooperation - Bill Clark said that an agreement to transfer the two year Vincennes University degree program into the junior year of the new four year survey degree program at IUPUI has been made. This information will be given to the Public Relations Committee for media release. Bill Clark will make an outline of the details for the board.

Technicians - A discussion was held concerning the application fee charged to students taking the NSPS Technician Certification Exams. A motion was made and passed to prepare a letter from ISPLS asking NSPS Board of Governors to consider a motion to wave the \$30.00 application fee of the Technicians Certification Exams if taken by students at approved university sites.

County Surveyors - The next meeting of the County Surveyors is March 25th through 27th at Purdue Road School.

GIS/LIS - A meeting was held March 20. The recovery effort is on-going with a meeting on April 3rd, with the coordinators from the six highway districts to see what progress has been made to meet the April 17th deadline to have all points recovered. This would give some time to help those areas that have not recovered all their points. A database will be started soon to see who can help with time or equipment.

Old Business - The board will meet at 9:00 a.m. September 13th at the Brown County Inn, Nashville. This is before the ISPLS Picnic.

New Business - An invoice was received from CEI for the Joint Society Government Affairs Committee. Dan Woo is going to check into this and report back to the board at the next meeting.

A proxy voting and mailing preference authorization form for each account that is held at Charles Schwab & Co., Inc. was received by mail from Wallington Asset Management for signature. A motion was made and passed to sign and return these cards.

Since the board of directors supported the survey students from Purdue University, going to the national conference with a gift of \$1000.00, there was discussion to do the same for Vincennes University. A motion was made and passed to contribute \$1000.00

INPUT SOUGHT AGAIN FOR ISPLS CONSTITUTION AND BY-LAWS

The Constitution and By-Laws Committee -- Ron Hansell, chair, and Jeff Myers, would appreciate hearing from members of ISPLS and the Chapters. The Society has operated for many years under the mantle of the American Congress of Surveying & Mapping with a Code of By-laws for the Society. The code of By-Laws is published in the annual Membership Roster -- usually near the back of the Roster. We have not adopted a separate Constitution for the Society.

The Chapters of the Society are organizations ranging from formal Business Corporations to loose knit associations. Some of the Chapters have adopted both Constitution and By-Laws, while some petitioned the Board of Directors of ISPLS to establish a Chapter but have never adopted any form of business organization.

Because of the liability and tax consequences of the Society's and the Chapters' operations, the By-Laws Committee is considering whether the present Code of By-Laws of the Society adequately serves our needs, and whether the relationship created..actually or legally..by various organizational arrangements and operations are adequately served by ACSM structure, ISPLS's Code of By-Laws, and the governing instruments, if any, for the various Chapters.

The Committee requests that the Chapter Secretaries, or whomever has documents and/or an exceptionally good memory in each Chapter, forward a copy of their Chapter's Constitution, By-Laws, Rules of Order, Articles of Incorporation, and other such relevant organizational documents to one of the Committee members or to Dianne Bennett. Phone calls indicating the appropriate contact person(s) also would be appreciated, together with questions or comments about problems, solutions, etc. for your Chapter's structure.

Sincerely,
R. Stephen Hansell, Phone (317) 253-9624, Fax (317) 253-9776
E-mail ronhansell@lquest.net

IF YOUR AREA CODE IS
DIFFERENT THAN WHAT'S
PRINTED IN THE 1997 ISPLS
ROSTER
PLEASE LET US KNOW!

to the Vincennes Student Chapter of ISPLS to be used to help cover expenses of student members attending workshops, conventions, seminars, or other educational type programs.

President Cloyd is going to have Ron Hansell, ISPLS attorney, check into establishing an ISPLS Foundation.

HISTORICAL SURVEYING EQUIPMENT DISPLAY

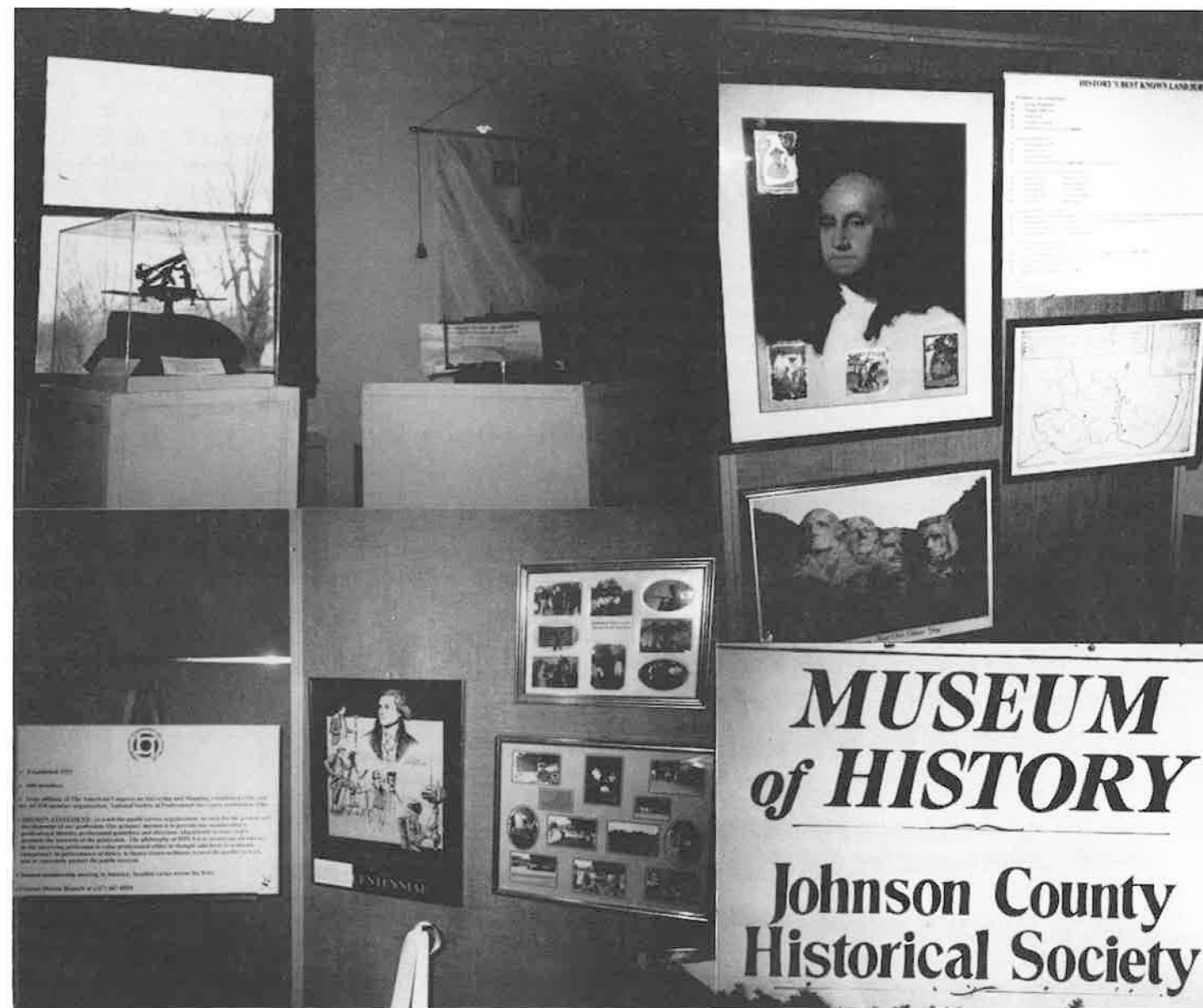
by Bradley Ott, PLS, Franklin, Indiana

* Over two dozen items from ISPLS, Surveyors Historical Society (SHS) and private collections are currently on display on a semi-permanent basis until April, 1997 at the Johnson County Museum of History, 135 North Main Street, Franklin, Indiana, (317) 736-4655.

* The Display will then be part of exhibits from April 1 to November 2, 1997, in historic New Harmony. The exhibits are entitled "The Lay of the Land: New Harmony and Indiana Maps, 1805-1880" and "Layers of the Land: New Harmony's Geology and Oil Exploration, 1835-1935".

* The Display is currently a traveling exhibit touring Indiana, promoting the public relations of our profession and looking for an eventual permanent home (and, in the meantime, for temporary display locations).

Please take time to visit these exhibits. Comments, questions or suggestions regarding the display can be made to Brad Ott at (317) 736-0264 or (317) 574-3797.



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 9, 1997. The ceremonies were held at the Government Center South Auditorium, Indianapolis. The following land surveyors were awarded certificates:

| | | |
|------------------|------------------|----------|
| Mark Chamness | Richland, IN | 29600020 |
| Jeffrey Douglass | Shelbyville, IN | 29700000 |
| Randall Gann | Lansing, IL | 29600023 |
| Michael Hartman | Fort Wayne, IN | 29700003 |
| Mark Heidecke | Portland, OR | 29600025 |
| Darren Helms | Cannelburg, IN | 29600022 |
| Willard Johnson | Brownsville, IN | 29600017 |
| Mark R. Isaacs | Brownstown, IN | 29600018 |
| Timothy Kiste | Indianapolis, IN | 29700004 |
| Carol Morman | Lawrenceburg, IN | 29700001 |
| Hans Musser | Middlebury, IN | 29700002 |
| Trent Newport | Indianapolis, IN | 29600021 |
| Joseph Pietrzak | South Bend, IN | 29600024 |
| Edward Schwegman | Lawrenceburg, IN | 29600019 |



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ANDREW ELLICOTT HIS LIFE AND LETTERS AMERICA'S GEOGRAPHER-GENERAL

Andrew Ellicott was a scientist, philosopher, inventor, town planner, diplomat, mathematician, legislator, surveyor, teacher, soldier, author, astronomer, and family man. Perhaps more than any other single person in our history, he helped define exactly what this country was to become by precisely setting the boundaries between the states, and precisely defining the actual national borders.

Among many other accomplishments, Andrew Ellicott finished the job Mason and Dixon started, was the first to measure the height of Niagara Falls, and helped avert a war over disputed territory between North Carolina and Georgia. And these were only a few of his many adventures!

Many people became acquainted with the name of Andrew Ellicott during the celebration of the Bicentennial of the District of Columbia. While the survey of our nation's capital may have been his most widely publicized survey, many states are deeply indebted to him. He surveyed parts of the boundaries of more states than any other individual; displaying honesty of purpose and excellence of work in settling many vexing boundary issues.

Andrew Ellicott preserved against huge obstacles and defined the very boundaries of America. His story is an exciting and informative tale of true derring-do and technical excellence.

This book is an excellent addition to any surveyor's historic collection. In 1908 The Grafton Press published a limited edition (1000 copies) biography in recognition of the useful and enduring nature of most of his public work. The book was taken from the extensive trove of interesting papers, letters, diaries, and other documents in the possession of Ellicott's descendants. Much of this material had not been previously published.

A new foreword has been added by Pat Hutchinson, a surveyor in private practice registered in North Carolina, Tennessee, Georgia, and Virginia. Ms. Hutchison is a past president of the North Carolina Society of Surveyors and currently serves on the Survey Technician Certification Board for the National Society of Professional Surveyors.

This reprint is published by **WorldComm of Alexander, N.C.** and is currently available for \$14.99. Order through your local bookstore or call the publisher toll-free at 1-800-472-0438 or mail \$17.99 (NC residents, \$18.89) to WorldComm, Department S, 65 Macedonia Road, Alexander, NC 28701. Visa and MasterCard accepted.

Title: Andrew Ellicott - His Life and Letters

America's Geographer - General

Author: Catharine VanCortlandt Mathews

with foreword by Pat Hutchison Roberts

Category: History, Surveying, Mapping, reference

Paper ISBN: 1-5664-111-X, 6x9, illustrated

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ALTERNATE DISPUTE RESOLUTION HANDBOOK

Compiled by the Maine Society of Land Surveyors

Draft Edition - April 1996

"I suffered only two financial disasters: Once when I lost a lawsuit, and once when I won one" - Benjamin Franklin

Discourage litigation. Persuade your neighbors to compromise whenever you can. Point out to them how the nominal winner is often a real loser - in fees, expenses, and waste of time. Abraham Lincoln as recited by Chief Justice Warren E. Burger on 24 January 1982 at the midyear meeting of the American Bar Association in Chicago. See Warren E. Burger, *Isn't There a Better Way?*, 68 A.B.A.J. 274, 275.

As a Litigant, I should dread a lawsuit beyond almost anything else short of sickness and short of death. Judge Learned Hand in *Sauderer v. Office of Disciplinary Counsel*, 471 U.S. 626, 642-643 (1985) quoted by Geller, Paul J., "When the Walls Come Crumbling Down: A Call for ADR in the CIC," *The Construction Lawyer*, Vol. 10, No. 1, p.7, January 1993

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I. INTRODUCTION

Surveyors share a trust and responsibility that few other professions can claim. Regardless of the surveyor's client, the surveyor is expected to make unbiased measurements and render an impartial decision. Where there is a dispute over the location of improvements or boundaries, the surveyor is the professional that is called. The surveyor's judgment for the most part is respected not only by the client but the neighbor as well. The surveyor's demeanor, words, and actions often go far in preventing disputes and resolving many disputes that have already occurred.

Despite the best efforts of the surveyor, boundary disputes often result in extended periods of litigation. Inexperienced in litigation and tempers inflamed, neighbor fighting neighbor

often look toward the courts to provide justice. For too many individuals, the road to justice by way of litigation becomes time consuming, expensive, and seldom gives the satisfaction so often believed certain at the start of litigation. Too often the cost of litigation far exceeds the actual value of the land in dispute. In many cases, the litigation only addresses the boundary issue and not the underlying problems which created the hostility.

Land line cases usually generate a lot of heat and sometimes violence. These disputes involve the ownership of strips of land often only a few inches wide. For one reason or another, the narrower the strip of land in dispute, the more intense the feeling between the parties. Also, the less the property in dispute is worth, the greater the hostility. Before the case reaches the lawyers, angry words have usually passed between the parties. Sometimes a gun has been drawn, and before the case is over, a fight is not unusual. Now and then a party takes a 'pot-shot' at his adversary; homicides are not unknown. Brother has slain brother; kin have fought kin; and neighbor has killed neighbor. It sometimes happens that the best and most reasonable citizens become involved in a land line suit...Justice Robert G. Gillespie, "Some Animadversions on Land Line Cases," 33 Mississippi Law Journal 151 (March 1962)

When the long awaited trial occurs, it is guided by attorneys who - while skilled at trial tactics - often lack a complete understanding of the complexities of boundary issues. Compounding the confusion is the trial judge who has less background on boundary issues than the attorneys or experts presenting the case. Regardless of the results, the costs usually exceed the gain. Certain is the fact that a neighborly relationship is gone forever.

Often present at the start of the controversy, the surveyor is in an excellent position to prevent disputes or channel disputes to less expensive, time consuming, and emotional draining alternatives to litigation. Alternate dispute resolution, also known as ADR, has always been an option to settle disputes and controversy. Some forms of ADR such as negotiation or mediation have always enjoyed a wide range of popularity, especially where courts have been inaccessible, absent, or the alternative has been warfare. Recently, ADR's popularity has increased because of the long delay awaiting trial and the escalating cost of litigation. Some situations use ADR predominantly to settle disputes such as the case of labor unrest or construction disputes.

This handbook has been prepared to aid the surveyor in utilizing ADR. ADR should not be used to discourage the client from seeking legal advice or prevent the client from pursuing their grievances by litigation if the client so desires. Rather, this handbook is an effort to educate surveyors and through the surveyor, the client on the topic of alternate dispute resolution. In time, it is hoped, surveyors will not only be respected for their unbiased opinions on boundaries but also their ability to settle disputes and controversy.

II. FORMS OF ALTERNATE DISPUTE RESOLUTION

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ALTERNATE DISPUTE RESOLUTION

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There are several forms of ADR. Each has advantages and disadvantages which may make one form better for a certain situation than another form. The following are some of the more common forms of ADR.

2.1 Negotiation

Negotiation is one of the most common forms of ADR. It occurs in daily practice so often it is seldom thought of as a process, let alone an alternative to litigation. Negotiation is an adversarial process where each party is committed to gaining some advantage for themselves while solving a problem among themselves. The negotiation process generally involves the presentation of a position, an analysis and evaluation of the opposing party's position, adjustment of positions, and agreement. Most surveyors would recognize that a basic form of negotiation occurs prior to every agreement for surveying services.

There are different forms of negotiation. For example there is a form of negotiation known as step-negotiation. Step negotiation resolves a dispute by taking the dispute through channels. Step negotiation is ordinarily confined to parties and situations that have a corporate or hierarchy above the disputing parties - such as construction disputes between owner's field representative and the construction manager for the general contractor. Step negotiation requires the party where the dispute originated prepare a recommendation that, if accepted, resolves the matter and, if rejected, is referred to the next higher level of authority. The next higher level prepares a recommendation that, if accepted, resolves the matter and, if rejected, is referred to the next higher level of authority and so on with each party wanting to resolve the problem at the lowest possible level.

2.2 Mediation

Mediation is often thought of as negotiation where a neutral third party (mediator) helps the negotiating parties work toward an agreement. The neutral third party helps the negotiation process by offering compromises, suggestions, or unbiased opinions. The neutral third party balances listening to each party's position or actively encouraging the parties toward a compromise settlement. The mediation process ordinarily involves the parties presenting their position in summary fashion to the mediator, the mediator discusses the weaknesses and inequities of a position with each party, and when the parties meet to negotiate, the mediator offers compromises or alternative positions to start or facilitate negotiation. In trying to convince parties to negotiate, the mediator will frequently address how a trial decision would go or the difficulty of proving one or more claims in litigation. Often, the mediator will remind the parties of the costs in litigation and the resulting unfavorable public relations. In the end though, the mediator is powerless to force a decision on the parties. Success depends entirely on the parties arriving at a voluntary agreement.

2.3 Arbitration

Arbitration differs from mediation in that one or more persons designated as arbitrators (or arbiters) makes a decision after listening to the parties and other witnesses. In effect, the arbitrator(s) sits as a judge and jury. Arbitration differs from litigation in that trials are public and arbitration is private; judges are required to

follow the law while arbitrators can disregard it (barring a contract to the contrary); court decisions carry much weight while arbitration decisions carry no weight outside the immediate decision; arbitration cannot determine the rights of any party not a party to the contract; discovery is often unavailable in arbitration; joinder and consolidation are easier in litigation; attorneys are not required for arbitration (ordinarily no rules of evidence); arbitration hearings can be held at the site of controversy; arbitrators can be chosen for their expertise and ability to understand and resolve technical or complicated issue; and arbitration tends to end the dispute upon publication of the decision since errors of law or evidence do not carry weight in appeal.

The authority for settling a dispute by arbitration is normally derived from a contract or agreement between the disputing parties. As a result, arbitration may be limited to certain questions expressed in the contract and must follow the rules set forth in the contract. The parties can either designate arbitration as binding or non-binding. Non-binding arbitration is often used to show weaknesses in each party's position so negotiation or compromise can proceed.

Generally, there are either three arbitrators or one arbitrator. A single arbitrator operates if a neutral third party can be agreed upon by each side. Three arbitrators arise where there is little chance for agreement on a neutral third party. To arrive at three arbitrators, each party picks one arbitrator. The two arbitrators then get together and pick a third arbitrator. Together, the three arbitrators make a decision by majority vote to settle the controversy.

The rules for arbitration are normally determined as part of the agreement to arbitrate a decision. Associations such as the American Arbitration Association have a list of rules that can be adopted by agreement or be modified so the rules fit the situation. Ordinarily, an arbitration hearing is much less formal than a trial. For example, the rules of evidence are not strictly adhered to, decisions do not have to adhere to stare decisis (decision may be based entirely on equity), and the arbitrators ask questions along with the attorneys representing the parties. However, the rules governing the arbitration may structure the arbitration so there is little difference between a trial and arbitration hearing.

Arbitration is generally favored by the courts. An arbitrator's mistake as to law, facts, etc. does not invalidate an award unless it can be shown the arbitrator made a gross mistake, committed fraud, or unreasonable bias was involved. In other words, an arbitrator's award will not be vacated unless it is totally irrational, violates strong public policy, or exceeds a specifically enumerated limitation of their power.

Factors influencing the use of arbitration include the parties wish to maintain an ongoing business relationship, a desire for privacy and confidentiality, disputes need to be resolved quickly, or there is a need to keep costs to a minimum. Arbitration is not without its weaknesses and is not preferred where the dispute turns on novel questions of law, the credibility of witnesses is in doubt, the opposing party or its counsel is considered untrustworthy or unlikely to compromise, and discovery is required.

There are forms of arbitration that have certain advantages

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ALTERNATE DISPUTE RESOLUTION

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particular situations. One form is known as "standing neutral" (single individual) or contract review board or dispute resolution board (more than one individual). Rather than wait for a dispute to arise before agreeing on arbitrators, one or more arbitrators are agreed upon at the outset. As disputes arise, the disputes can quickly be submitted for a decision because there is a standing arbitrator(s) and pre-agreed rules. This form of arbitration is popular in construction where disputes are more likely than not to occur. The advantage of this form is that arbitration occurs quickly when the facts are fresh, delay is avoided in settling claims, arbitrators are familiar with the work, and the quick decision removes fostering grievances that could effect the ongoing project. Another modified version of arbitration occurs in sporting disputes where each side makes a summary argument and the arbitrator picks the most reasonable argument.

The popularity of arbitration has increased as a result of the overburdening of the courts. Both the Federal government and Maine have adopted statutes encouraging arbitration.

2.4 Mini-Trial

A mini-trial is an unofficial but binding trial ordinarily handled by a "hired" judge with adversarial parties splitting the cost. A mini-trial has all the formalities of a regular trial. The advantage of a mini-trial is the speed of litigation. Avoiding the docket waiting list and the delays of trial allows the trial to occur at a convenient time for the parties. In some areas of the country where a party can wait years for trial, the mini-trial is very popular. In these areas there are often lists of rent-a-judges for potential litigants to choose from. While retired jurists are often preferred, any neutral individual familiar with court formalities can be used. One form of mini-trial that often decides on disputes between corporations uses superiors within the corporation to compose a panel of judges.

2.5 Referee

A referee can be thought of as an arbitrator sanctioned by the court. A referee investigates the facts, hears the evidence, researches the law, and presents a decision. The decision is then endorsed, reversed, modified, or sent back pending further fact-finding by the judge. A referee can be designated by the court or by motion of one or both litigants. While a referee is not an alternative to litigation, it is an alternative to formal litigation.

The use of a referee during litigation has several advantages. First, the referee often has considerable experience in the area of controversy and as a result the referee can quickly focus on the gist of the underlying dispute and come to a well-reasoned and informed decision. Second, the use of a referee frees the judge from hearing the facts, sifting through the law, and making a decision. The referee operates outside of the trial docket and as a result, hearings and a decision are arrived at much sooner than if the dispute were to go to trial. The review of the referee's decision by the judge is often handled during motion day.

III. STEPPING TOWARD ALTERNATE DISPUTE RESOLUTION

There are numerous techniques or procedures that the surveyor can adopt that will help avoid litigation. It should be noted at this point that the surveyor should not attempt to dissuade

disputing landowners from seeking legal counsel or prevent the client and neighbor from proceeding toward formal litigation when one party or both desire redress in the courts. Litigation often provides certain tactical or procedural advantages that are not available in alternate dispute resolution. As a result, barring an express contract to the contrary, any person should have redress using the court system. In other cases where the dispute can be handled in small claims court, there is little to be gained by alternate dispute resolution. (Small claims court has the advantage of mediation services, expedient hearing, waiver of the rules of evidence, and relatively low costs).

Outside of these rather broad circumstances, the surveyor can play an important part in encouraging alternate dispute resolution.

3.1 Identify Potential Disputes Early

A primary step in resolving problems using alternate dispute resolution is to identify the client's problems before becoming entangled in them. It is not unusual for surveyors to discover clients that are not altogether forthcoming about the problems they have with their boundaries and neighbors. There are certain posturing that can be employed by the surveyor, if the surveyor is made aware of a dispute or problem before beginning to provide surveying services. First, the surveyor may wish to take steps to avoid becoming part of the dispute. It is not uncommon for surveyors to find the neighbor has called the sheriff or opted for self-help using some weapon against the surveyor or the field crew. Second, before embarking on services for one landowner, the surveyor may want to try and convince both landowners, to cooperate in employing and later recognizing the results of common surveying services.

Identifying problems can be done by carefully questioning the prospective client and seeking information from the adjoining landowners. When questioning the prospective landowner, the surveyor should proceed cautiously in cases where the landowner has preconceived opinions on the boundary location. As so often happens in this case, the landowner is usually very displeased when the surveyor shows a boundary in a location that differs from the pre-conceived location. When the surveyor locates the boundary in a location that supports the neighbor's assertions, the client will often refuse payment and take other retaliatory action against the surveyor.

Much can be gained by simply sending a letter to the adjoining landowner before beginning services for a client. Not only can important information be exchanged and a basis for trust and courtesy with the neighbor be started, but the letter will often reveal a smoldering dispute or potentially troublesome neighbor. Much better progress can be made by the surveyor handling the situation in a separate visit rather than a field crew being surprised at the site by an irate neighbor and having to handle the situation while trying to gather field information.

3.2 Avoid Starting Disputes

Once on the site, the surveyor and the employees through their acts, words, and demeanor can avoid starting or exasperating a dispute. Prior to and during the field work, the client and neighbor are often very tense and apprehension - similar to someone going to a doctor for a physical. There are numerous scenarios that no doubt come to their mind - does the fence encroach, is the driveway

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ALTERNATE DISPUTE RESOLUTION

...continued from Page 19

crossing the neighbor's land, are the structures within the building set-back lines, and, last but not least, how much will surveying services cost.

Problems generally take two forms. One form is when the surveyor discovers the neighbor or third party is using the client's property in some manner adverse to the client's interests. The other form is when the client is informed they are trespassing upon their neighbor. When the client falls within the first scenario, the client often wants to take immediate action to prevent further trespass. Unfortunately, the action the client wants to take is usually precipitous, inflammatory, and over-reaching.

Under the second scenario, clients often have mixed reactions - from embarrassment in using what is not theirs, to greed, demanding to retain what is not theirs. When confronted by the angry neighbor demanding removal of encroachments, the client will often retaliate by demanding to retain what is not covered in their deed.

While the surveyor may be justified and ethical in marking their opinion on the location of the boundary, the surveyor is seldom wise in doing so where a problem will be revealed to the people in the neighborhood. It is far easier to inform the client of a problem and potential remedies before the neighbor becomes aware and irritated before tempers are inflamed. Consequently, the surveyor should counsel the client about the problem and have the client investigate possible actions before proceeding to mark the boundaries in the field.

3.3. Encourage Communication

Alternate dispute resolution requires some communication between the disputing parties. Establishing communications early during the surveying services and keeping communications open while the services are performed goes far in fostering ADR techniques once a problem develops. Communication between the client and neighbor is important. Communications between the surveyor and client should not be overlooked as well. Encouraging communications between the client and neighbor does not mean the surveyor is required to share information equally or divulge information that the client would want kept secret. Unfortunately, many surveyors opt not to communicate at all in a potentially hostile situation or think nothing of setting monuments that will inflame the situation. Marking the boundaries is potentially the most harmful communication that can occur.

3.4 Inform or Educate the Client About ADR

One of the options that should always be considered whenever a potential conflict between parties arise is ADR. All too often the surveyor reports the problem and recommends the client seek legal counsel in order to resolve it. While recommending the client contact legal counsel whenever a problem arises is safe and generally good advice, it is incomplete advice.

The surveyor, upon discovering a problem or disagreement, should make an effort to educate the client about ADR - especially where litigation is also suggested or discussed. The surveyor should take the opportunity to discuss ADR in letters and reports. Also, there are several handouts available for distribution to clients that explain and recommend ADR. The surveyor should make the

effort to include these with any controversial or problematic opinion given to the landowner.

3.5 Discourage litigation

In some cases the surveyor should actively take steps to discourage litigation. Generally the surveyor may ethically and responsibly discourage litigation in favor of ADR in two ways. Within the overall context of educating the client about the benefits of ADR over litigation, the surveyor can contractually demand differential fees that discourage litigation. Often this is done by making it clear in the agreement with the client that the surveyor's time and effort required to prepare for litigation is not included in a fix fee for surveying services. Consequently, should the client decide to litigate and require the services of the surveyor, the surveyor will expect and demand extra compensation. Ordinarily surveyors involved in litigation find the litigation process very stressful, intense, and time consuming. As a consequence, many surveyors charge fees by the hour at a level that will compensate the surveyor for the additional aggravation and time requirements.

Another step the surveyor can take that will discourage or even prevent litigation in certain cases is to require ADR in their contract with the client. Accordingly, should any dispute occur with the client, the surveyor can demand resolution of the dispute by ADR.

3.6 Take An Active Role In ADR

While not appropriate for some surveyors or necessarily sought by many surveyors, surveyors can take an active role in ADR between third parties. Appendix _ lists several education institutions that offer training courses or programs in ADR. These courses are generally open to any person with the desire and time to learn ADR techniques. Surveyors that desire to supplement their survey practice or improve their current survey practice should consider taking one or more of these programs.

Another option is for surveyor to act as an arbitrator or referee. Certain professions such as architecture have several members who act as arbitrators in numerous situations. Many of the persons listed by the American Arbitration Association are members of the engineering or architecture profession and serve as arbitrators in construction disputes.

A more passive role is for surveyors to encourage other surveyors and professions to consider arbitration. Sharing ADR handbooks, forms, and pamphlets is often enlightening.

IV. CONCLUSION

The surveyor should take active steps to begin encouraging and incorporating ADR within their survey practice. Begin by reviewing the procedures and documents employed in current practice. Read the examples and incorporate some of the suggestions in practice. Take part in ADR seminars and borrow heavily from pamphlets and those individuals familiar with ADR. If the opportunity arises, sit in on an arbitration hearing or mediation session. If unsure whether ADR is appropriate or how to incorporate ADR into a particular surveying practice or situation, feel free to contact one or more of the committee members. Do not miss the opportunity to improve your surveying services on behalf of the client.

...To Be Continued Next Issue

IOSHA'S TOP 25 FOR 1996

by Ron Koons, RoSaKo Enterprises
Safety Consultants, Middletown, Indiana

Maybe it's time for a quick trip to Las Vegas for Sandee and me. Why? Because I am on a great streak. When reviewing the IOSHA Top 25 for 1994 and then for 1995 I made predictions. In 1994 I said that the PPE (Personal Protection Equipment) Hazard Assessment would make the list for 1995...and it did. Last year I predicted the Hazard Assessment would not only rapidly climb the chart, but would increase in the citation amount...both predictions came true! This year's overall IOSHA list found the assessment as the sixth most frequently cited items.

As we review some of the items on the 1996 list I again want to remind all of you that making the list only relates to the number of times an item is cited. Any regulation could generate a citation, the items we will discuss are mathematically the most frequently cited. When any dollar amounts are given they are just the average amount of the individual citation. IOSHA publishes 4 complete lists; General Industry, Industrial Hygiene, Construction, and a Combined Summary. Employees of surveying/engineering companies have the potential to be covered under either the Construction or General Industry standards, depending on the work being performed and where it is located. Let's look at items that may effect ISPLS members.

HAZ-COM continues as a major item on all lists

HAZ-COM continues as a major item on all lists. One thing I did note this year was that HAZ-COM has slipped from its position on the overall list. HAZ-COM still is a major push for IOSHA, but I just believe there are other items that are now being emphasized a little more...or Indiana's businesses are getting better at Hazard Communications.

PPE (Personal Protective Equipment), as I mentioned, has taken a tremendous jump in position and citation amount. In the Industrial Hygiene category there are four separate citations under the PPE section; No Certification of hazard assessment, No certification of employee training on PPE, No PPE hazard assessment, and PPE training. The highest average citation on PPE was in the Hazard Assessment area and jumped over 400% from last year to an average of almost \$1,100.00!

Electrical violations continue as prominent on all lists. Proposed live electrical parts, permanent path to ground, markings electrical equipment missing/illegible, flexible cord used as a

substitute for permanent wiring, and covers & canopies on electrical boxes are just some of the electrical violations. The highest average for electrical items cited was over \$1,100.00. With all of the battery powered equipment you have, make certain your charging area is checked carefully.

Off the list for the first time that I can remember is the OSHA Poster being "conspicuously posted". This appears to go along with the federal OSHA plans to waive a citation if the poster is immediately posted. (I have been told in some cases the compliance officer is even keeping the posters in their vehicle and presenting them to the business.)

Log 200 Form not provided/maintained is still on three of the lists. There are a lot of people who think this form doesn't have to be done until the end of the year. In fact, the form 200 must be kept current to within six days of any recordable injury or illness.

The General Duty Clause is on two of the lists this year, All IOSHA and Construction. This is the area you can be cited if no other particular regulation applies, but IOSHA feels an obvious hazard exists. I have been told in my training classes at the OSHA Training Institute that the General Duty Clause is legally extremely difficult to cite. If a citation is issued in this category it probably indicates the compliance officer feels a very serious problem is present. This bears true in the fact that the construction average was \$1,836.00 and the overall IOSHA average was \$4,189.00.

Other high citation amounts were found in all lists. Just under \$1,000.00 was the average for No Lockout/tagout program. Under construction "Hard Hats not worn where required" was just over \$1,000.00. Also on construction was no overall safety/health program at \$906.00, no fall protection system at \$1,622.00, and failure to instruct employee in recognition of hazards at \$771.00.

Remember that if you get a citation there will probably be several different regulations cited. If you happen to get caught on some of the high cost items it doesn't take long to add up without even considering the hundreds of other potential items.

Mega (over \$100,000.00) and egregious (very serious) citations increased throughout the United States last year over 30%. Be proactive and start or increase your compliance efforts today!

WELCOME NEW ISPLS MEMBERS

as of January 15, 1997

William W. Bassett - Member (Reinstate)

Timothy D. Higbie - Junior

Douglas F. Homeier - Junior

Dwain J. Thomas - Associate

Nathan D. Gray - Student

Mark Ober - Student

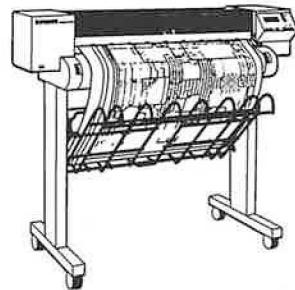
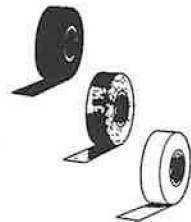
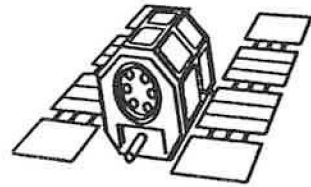
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Aaron Springer - Junior (Reinstate)



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FEDERAL POLICY DEVELOPMENTS

Panel examines structure and performance of federal mapping and surveying by Ted Koch, Wisconsin Mapping Bulletin

A comprehensive study of government and private sector surveying and mapping is now underway by a panel of experts convened through the National Academy of Public Administration (NAPA). Recent technological advances in surveying, mapping and geographic information technologies, the downsizing of federal programs and transfer of activities toward state and local government, and the impact of U.S. budget deficits on economic growth drove the need for a look at current federal geographic information functions and how these functions are structured and performed.

Ultimately, this study is intended to give Congress an up-to-date analysis of the appropriate roles in surveying and mapping functions performed by federal civilian agencies. Specific areas of investigation include an assessment of the effectiveness and economic impact if some functions are privatized or transferred to non-federal governments, and a determination if there are opportunities to consolidate or restructure federal activities to achieve greater economy and performance. The most recent objective analysis of government and private sector roles in these areas dates back to the 1970s and early 1980s.

The American Congress on Surveying and Mapping (ACSM) coordinated the request for the study, with support funds being supplied by four federal agencies with major roles in government surveying and mapping: the U.S. Geological Survey, the National Ocean Service, the U.S. Forest Service, and the Bureau of Land Management which is serving as the contracting agency with NAPA. NAPA is an independent, nonprofit, nonpartisan membership organization of 400 Fellows chartered by Congress to identify emerging issues of governance and to provide practical assistance to federal, state, and local governments on how to improve their performance.

Serving on the nine member NAPA study panel are executives from public agencies and private companies, including Jack Dangermond, President and CEO, Environmental Systems Research Institute, Inc., Lawrence Ayers, Executive Vice President, Intergraph Corporation, and Wendy Lathrop, President, National Society of Professional Surveyors.

A preliminary report may be issued as early as this summer with final recommendations following in the fall.

Geographic information services describe a broad field of activities, technologies and science, including geodesy, land and cadastral surveying, land records, cartography, charting, remote sensing, photogrammetry, image processing, and geospatial data.

Accuracy standards out for review by Ted Koch, Wisconsin Mapping Bulletin

New draft standards proposed to replace both the long enduring *National Map Accuracy Standard* (NMAS) and the current geodetic control standards have been released by the Federal Geographic Data Committee (FGDC). The new set of standards, called the *Geospatial Positioning Accuracy Standards*, are out for a period of public review and comment closing on May 15, 1997.

The newly proposed set of national standards contain sections on geodetic networks, spatial data accuracy, and reporting methods. The proposed *Standards for Geodetic Networks* will replace previous accuracy standards issued by the Federal Geodetic Control Subcommittee (FGCS), and the proposed *Standard for Spatial Data Accuracy* will replace NMAS which was adopted by the former U.S. Bureau of the Budget 50 years ago.

The new standards are an attempt to provide a common methodology for testing and reporting the horizontal and vertical accuracy of clearly defined features represented by a single point coordinate. The intent is to provide a consistent means for directly comparing the positional accuracies obtained for the same point using different methods. This integration can potentially provide better methods for testing the accuracy of data derived from aerial photographs, satellite imagery, maps, and other sources. This is the first attempt by the FGDC to integrate standards for different applications.

Major funding for orthophotos announced

At a recent meeting of the Steering Committee of the National Digital Orthophoto Program (NDOP), the USDA Farm Service Agency (FSA) announced that it had authorized \$22 million to be spent nationwide over the next several years toward the production of digital orthophoto quarter-quadrangles. This amount will be added to the \$10 to \$15 million already committed to the NDOP this year by the U.S. Geological Survey (USGS) and the Natural Resources Conservation Service (NRCS).

The NDOP, which oversees federal/state contracting for the production of digital orthophotos in a quarter-quadrangle (one-quarter of a standard 7.5 minute quadrangle) format, has completed nearly 41,000 quarter-quads nationally, with another 47,000 currently in-work. Approximately 220,000 quarter-quads cover the lower 48 states.

At the same meeting, a proposal was made by the USGS to have the three federal (USGS, FSA and NRCS) agencies create a funding pool. From this pool, all future NDOP projects would be funded either at 100%, or if there is a state cooperator at 75%, with the state contributing the other 25%. This would be in contrast to the current funding formula which looks for a 50% funding contribution from a state. The Steering Committee deferred action on the funding pool proposal to its next meeting in April, 1997.

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CALENDAR

May 16, 1997

Tecumseh Chapter Seminar, Topic - "Rule 12 Theory of Location" Speaker-Pat Cunningham, Contact Ted Darnall 765-742-6479

May 22, 1997

Central Indiana Chapter Meeting

June 6, 1997

ISPLS Workshop, Plymouth, Indiana, Topic: "How Does GPS Help A Surveyor", Speaker - Dr. Boudewijn van Gelder, Contact Dianne Bennett 317-687-8859

June 21, 1997

ISPLS Board of Directors Meeting, Indianapolis

July 22, 1997

Central Indiana Chapter Meeting

August 2, 1997

ISPLS Board of Directors Meeting, Indianapolis

September 13, 1997

ISPLS Picnic, Brown County State Park, Nashville, Indiana

September 13, 1997

ISPLS Board of Directors Meeting, Brown County Inn, Nashville

September 26, 1997

ISPLS Workshop, Pokagon State Park, Angola, IN, Topic TBA

October 24, 1997

ISPLS Board of Directors Meeting, Holiday Inn S.E., Indianapolis

October 28-30, 1997

GIS/LIS '97 Conference, Cincinnati Ohio

December 6, 1997

ISPLS Board of Directors Meeting, Indianapolis

January 14, 15, 16, 1998

ISPLS Annual Conference, W. Lafayette, IN

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