

HOOSIER SURVEYOR



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

VOLUME 18
NUMBER 1
SUMMER 1991



AFFILIATED WITH THE
AMERICAN CONGRESS ON
SURVEYING & MAPPING



Governor Bayh Signs House Bill 1679 on May 8, 1991 The Creation of a Separate Registration Board for Land Surveyors



Seated are left to right: Jacob Hall, Governor Evan Bayh, Tom Dinwiddie (ISPLS Lobbist).
Standing left to right: Patrick Cunningham (ISPLS Government Affairs Chairman), Wesley Day, Ross
Holloway (ISPLS President).

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Articles and columns appearing in this publication do not necessarily reflect the viewpoints of ISPLS or the Hoosier Surveyors 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 misquotations or deletions as to its contents.

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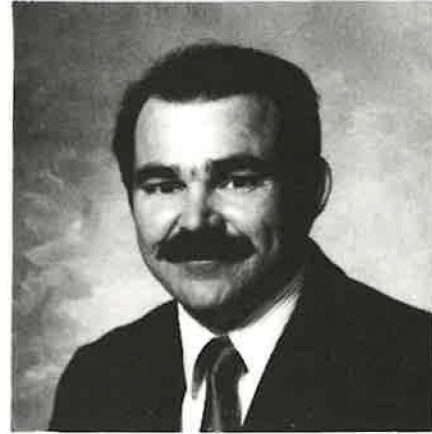
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PRESIDENT'S THOUGHTS

by Ross Holloway, ISPLS President, Martinsville, IN



As we enter late summer I know all of us are busy. Whether we are working in private practice, government or education we can get so buried by the demands of our clients or employer that it is at times difficult to remember that we are professionals first and an employee second.

The first half of this year has brought us, what I consider, the birth of Land Surveying as a profession in its own rights. No longer are we governed by members of another profession. We have reached maturity, from here on we can look to a group of our peers to determine who is suitable to enter the profession, rules of conduct and disciplinary action should those rules be violated.

By now many of you are wondering what is the subject of this writing? If I were to give it a title it would be "Professional Conduct and Ethics". Two things have prompted me to write on this subject. First, was an incident, that started back at the annual convention in Vincennes, which escalated to the point that the conduct of some of our members was an embarrassment to the Society. Second, is the reality that we will be, more than ever before, in the public eye as a result of a separate Board of Registration.

It would be foolish of me to try, in this short space, to delve into all the facets of professional conduct and ethics. I believe that the Code of Ethics adopted by NSPS in 1988 covers the basic points that all of us need to be reminded of. Following are excerpts from that code:

PROFESSIONAL SURVEYORS SHALL:

- 1) Hold paramount the safety, health, and welfare of the public in the performance of their professional duties.
- 2) Perform services only in the areas of their competence.
- 3) Issue public statements only in an objective and truthful manner.
- 4) Act in professional matters for each employer or client as faithful agents or trustees, and avoid conflicts of interest.
- 5) Build their professional reputation on the merit of their services.
- 6) Act in such a manner as to uphold and enhance the honor, integrity, and dignity of their profession.

To these I would add "Support their professional society by participation in society activities and volunteering for society offices and chairmanships".

Much of what ethics and professional conduct is about could be summed up in a few simple words which have their basis in the Bible: In your professional conduct and activities treat others as you would want to be treated.

I've said enough. I wish all of you a good summer and a happy fall.

SUSPENDED INDEFINITELY

ENGINEER CENSURED BY BOARD OF REGISTRATION

On June 6, 1991 the Indiana Board of Registration for Professional Engineers and Land Surveyors suspended indefinitely the registration of engineer #PE60015600 for permitting his seal to be affixed to plans, specifications, or drawings which were not prepared by him, or under his personal supervision by his regularly employed subordinates.

GOVERNMENTAL AFFAIRS COMMITTEE REPORT

Registration Board for Professional Land Surveyors

by Patrick N. Cunningham, Chairman Govt Affairs

In past years, as chairman of the Governmental Affairs Committee of ISPLS, I have had the unpleasant task of reporting to the membership that our legislative efforts were strong and impressive, but unsuccessful. This year I can report to you that your Governmental Affairs Committee, lobbyist and certain hard working members of the society were successful in our efforts to get legislation passed which creates a separate registration board for land surveyors in the State of Indiana.

When I was elected to the Board of Directors of ISPLS in 1980, the land surveying industry in the State of Indiana did not have minimum surveying standards, continuing education or any form of enforcement to cause surveyors to practice in a consistent and competent manner. At that time, one could observe the surveying businesses within any community or county and find a few competent surveying firms struggling to compete with two or three incompetent surveying firms and a few moonlighters, trying to provide a quality survey for the same price as the survey provided by the incompetent surveyors.

One could also observe that due to the lack of standards, continuing education and enforcement, most of the incompetent surveyors were of the opinion that they were competent and that providing accurate measurements of fence lines was the sole duty of the surveyor. During that time, many surveyors did not realize that to be considered a professional land surveyor, it was required that one have considerable knowledge of the history of the public land survey system, the legal aspects of land surveying, the accuracies of measurement and the ability to communicate this knowledge, with confidence, to attorneys, title companies, courts of law, as well as to the general public.

Because of the poor state of the profession, in 1982 the Board of Directors of ISPLS approached the Registration Board for Professional Engineers and Land Surveyors and requested that the Registration Board take some action, in the form of enforcement, to require the surveying profession to clean up its act.

To our dismay, the ISPLS Board of Directors found that the Registration Board consisted of engineers and engineers with land surveyors licences. Not one member of the Registration Board was a full time practicing professional land surveyor. Because of this, the Registration Board was unable to understand or comprehend the problems that existed within the surveying profession.

Realizing that there would be no help from the Registration Board, ISPLS took the

position that mandatory continuing education might require the practicing surveyor to at least attend an occasional seminar or workshop and become familiar with required surveying knowledge. Thus, possibly elevating the level of competency within the profession.

After several years of attempting legislation requiring continuing education and receiving resistance from the Registration Board, in 1987 ISPLS took the position that it was in the best interest of the public and the land surveying profession to have a separate registration board for land surveyors. Possible legislation for a separate board was discussed with the current Registration Board at that time. Needless to say, ISPLS was not taken seriously.

The Governmental Affairs Committee decided that ISPLS would need the support of the Registration Board, the Consulting Engineers of Indiana, the Indiana Society of Professional Engineers, the Speaker of the House, the Senate Pro Tem, the Chairman of the Governmental Affairs Committees of both the House and the Senate, several legislators with the House and Senate as well as many key officials and individuals within the government and industry. As you can see this was not an over night task.

After three years of working in the background with our lobbyist, taking the Speaker of the House, the Senate Pro Tem, the Republican Caucus Chairman, the prospective sponsors of our legislation, and the president of the Registration Board to lunch, having several meetings with the Registration Board, and making presentations to the engineering societies, the Governmental Affairs Committee decided that it was time to submit legislation for a separate registration board.

With a lot of hard work from members of the Governmental Affairs Committee, members of the Minuteman Program, the Board of Directors of ISPLS and our lobbyist, and the support and efforts of Representative Sheila Klinker of Lafayette, Indiana and Senator Harold "Potch" Wheeler of Larwill, Indiana, we were successful in getting House Bill 1679 passed in April, 1991. The law became effective July 1, 1991, and you now have your own Registration Board for Professional Land Surveyors.

It is a slow and painful process, but with your support and efforts, in years to come the Land Surveying Profession will be one of the most revered professions within the State of Indiana due to the quality of service and professionalism provided by its members.

Qualifications-Based Selection

The QBS program is well underway. Plans are being made to hire a facilitator, develop brochures and solicit support from various groups and associations. It has been determined that there are two basic goals: 1) educating the public on the benefits of QBS, and 2) educating our members. Excitement is building and there is a high degree of confidence that the program will be successful.

Thanks to all members who have made a contribution. To date, CEI members have pledged \$4450.00. For those that haven't made their contribution yet, a pledge form is attached.

QBS FACILITATOR PROGRAM

Enclosed find my firm's contribution to the QBS Coalition.

Name: _____

Firm: _____

Address: _____

City/State/Zip: _____

Phone: _____

Contribution: \$ _____

We commit _____ do not commit _____ our pledge for a period of three years.

Make checks payable to: QBS/Indiana Coalition

Return to: Consulting Engineers of Indiana, Inc.
47 S. Pennsylvania, Suite 303
Indianapolis, IN 46204

Sponsoring Organizations:

Consulting Engineers of Indiana • Indiana Society of Professional Engineers • Indiana Society of Architects
Indiana Society of Professional Land Surveyors • Professional Engineers in Private Practice • American Society of Civil Engineers - Indiana Section

BOARD OF DIRECTORS MEETINGS

April 6 & May 18, 1991
by Mike Crawford, reporter

(MINUTES CONDENSED)

On Saturday, April 6, 1991, in West Lafayette, Ross Holloway called to order a meeting of the ISPLS Board of Directors. During the next several hours the business of the Society was addressed.

Doug Herendeen reported that the 1991 convention in Vincennes produced a profit of \$14,925.39. From this amount \$1,492.54 will be given to the ISPLS Southwest Chapter as the sponsoring organization of the convention. Looking ahead to 1992, a proposed convention budget was submitted for consideration. Following discussion a motion was made and passed to accept this budget. Doug also reported that there is some interest in a joint convention between Indiana and Kentucky in 1994.

Evidence of work of a non-registered surveyor from Noble County was referred to the Ethics Committee.

Applications for membership in the Society were presented to the Board. Daniel Kovert (junior) and Joe Gillespie (member) were accepted as new members in their respective classifications.

A motion was made and passed to advance the money needed to support the Purdue scholarship so that it may be used for the 1991 summer camp fees for Ryan Wischart and Claude Quillen. The money, approximately \$800, was to come from the current unused balance in the fund.

In the area of Ad Hoc committees Ross Holloway announced that the Collegiate Committee has been combined with the IUPUI Surveying Course Study Committee. In a topic of concern to this committee; Roger Woodfill reported that an April 10th meeting was scheduled at IUPUI to explore the possibility of surveying programs at the regional campus.

Wes Day reported that in addition to the three current members of the Indiana State Board of Registration other names will be submitted to the Governor for consideration and possible appointment to the new Land Surveyors Board. Wes also mentioned that the state exam is in line for a few changes, including the addition of writing a description.

A report dealing with recognition of Surveyor Technicians was presented by Roger Woodfill and referred to an appropriate committee for action by Ross Holloway.

Following various announcements the meeting was adjourned.

Vice President Rollyn Blankenkaker presided over the May 18th meeting of the Board of Directors. A quorum being present, the gathering was called to order at the Holiday Inn of Columbus, Indiana, site of the 1992 convention. As part of the Board of Directors meeting the convention facilities were toured. Also, a contract was approved for services with Excel Decorators, Inc.

Dianne Bennett reported that the Education Committee's Spring Workshop on GIS/LIS made a profit of \$513.97.

A copy of a roster of Foresters was presented. Rollyn Blankenkaker noted that some Foresters were offering surveying and mapping services. The issue was referred to the Ethics Committee for action.

Treasurer, E.R. Gray submitted the proposed budget for '91-92. Following discussion an amended budget was passed.

The bill from our lobbyist, in the amount of \$9,247.76, was placed before the Board. Payment of the bill from the reserve revenue fund was approved.

The Scholarship and Membership Committees agreed that the voluntary scholarship contribution should be added to the membership application forms.

Wes Day reported on the overhaul of the registration act. He also asked for input on the issues of a liaison board member and professional use of the seal.

Attorney Ron Hansell submitted a letter summarizing the Harold Gibson lawsuit. Following discussion a motion was made and passed which instructs Mr. Hansell to negotiate a settlement with Mr. Gibson "in which the ISPLS is absolved of all damages and all wrongdoing." The ISPLS, in return, will no longer support an appeal of the case and will "support licensure of Mr. Gibson as a one-time anomaly."

The next meeting was set for June 29th at the state headquarters and then the Board adjourned.

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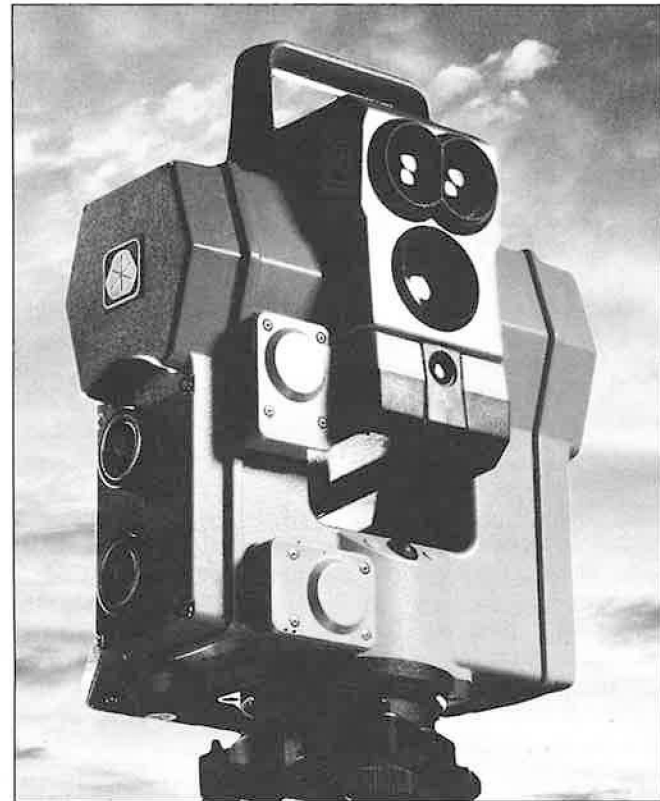
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TO: ACSM STATE AFFILIATES

DATE: JUNE 6, 1991

FROM: MICHIGAN SOCIETY OF REGISTERED LAND SURVEYORS ACSM/NSPS COMMITTEE

The Michigan Society of Registered Land Surveyors (MSRLS) is concerned with reports that some surveyors are withholding financial support from ACSM/NSPS, the only National Organization which represents our profession.

We are concerned with what we perceive to be a lack of "teamwork" between that leadership of ACSM and the leadership of NSPS. We are concerned that this dissension may very well result in disaster to the surveying profession.

Note that we did not say a disaster to ACSM, or to NSPS, or to AAGS, or to ACA. Rather, we believe this dissension may result in a disaster to the ENTIRE PROFESSION. As we can only continue to grow by having a strong national association, losing this organization would be a major setback to our profession.

NSPS has had many achievements during the past ten years. Through the Joint Government Affairs Program and COFPAES, surveying has been recognized as a member of the design professions by the Federal Government, along with Engineering and Architecture. NCEE changed its name to the National Council of Examiners of Engineers and Surveyors (NCEES). The public relations film, "A Matter of Degrees", has been completed. NSPS has played a key role in the recent Land Information Study conducted by the Department of Interior. These are only a few of the successful ACSM/NSPS accomplishments.

True, there are differences of philosophy between the leadership of ACSM and NSPS - disagreement on such issues as incorporation, board representation, etc. But can we really be so naive as to believe that by not supporting our parent organization we can better preserve NSPS? The vast majority of NSPS members do not subscribe to this theory. As of April 24, over seventy-five percent (75%) of NSPS members have paid their dues. We believe this represents a strong vote of confidence and support for ACSM/NSPS. But it may not be enough - in this time of financial crunch, we need one-hundred (100%) support. We need to urge our state society members who are not members of ACSM/NSPS to join TODAY.

We, in Michigan, are staging another ACSM/NSPS membership campaign. We urge

each Affiliate Society to do likewise. We request that you actively undertake a program to bring the NSPS membership renewals up to one hundred percent (100%) and to increase membership by promoting ACSM/NSPS. We would also request that this open letter be published in your next available newsletter or membership mailing.

"TOGETHER WE STAND, DIVIDED WE FALL"

ACSM/NSPS COMMITTEE OF MSRLS

EDWIN MORSE, L.S. Editor "The Michigan Surveyor", Director, MSRLS

DONALD GILCHRIST, L.S. Past President MSRLS and Chair of Great Lakes Regional Council

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DON'T MISS THE ISPLS
FALL WORKSHOP
"MEETING THE CHALLENGES OF
OPERATING THE LAND SURVEY CO.
IN A DYNAMIC BUSINESS ENVIRONMENT"

BROWN COUNTY
NASHVILLE, INDIANA
OCTOBER 25, 1991

PROMOTING THE PROFESSION

by
Harold S. Charlier, Chairman
NSPS Public Relations Committee

You Need a Theme

Image enhancement for the surveying profession is not a task to be left to a small committee. It is not something that can be accomplished with a periodic "shot in the arm." Image enhancement and public relations in general are the continuing responsibility and obligation of the entire profession. The way the surveyor dresses; the appearance of his office; his manners on the telephone; the conduct and appearance of his field personnel — all are important elements in maintaining a favorable image. But there are also many image enhancement activities that surveyors can undertake as a group, be it a state association or a local chapter. Let's consider just one of those activities — sponsoring an informational booth at a convention, fair, or trade show.

Like anything else that's worthwhile, sponsoring a booth requires careful planning. That planning usually begins with a determination and commitment by your board of directors to allocate funds for public relations activities. PR deserves a slice of your budget, right up there with legislation and education.

Ideally, the purchase of an attractive portable display will get you off to a good start. However, don't be shocked at the cost of these displays. You might find something minimally adequate for \$500, but expect to pay \$1,000 or more for the type of displays the exhibitors use at your annual convention.

An attractive display is nice, but it can't do the whole job. You must have a reason for being there; you must have a message to convey, and the message must catch the eye of the passerby. Obviously, you must know who your audience is. Is it a convention of county and town officials? Is it a home or realtors' show? A county fair? The general public at a shopping mall? Accordingly, your banner might read: "*Purchasing Property? You Need A Survey!*"; or "*Monumented Section Corners — The Responsibility of the County*"; or "*Monumented Section Corners — The Basis For Reliable Legal Descriptions*"; or "*Good Land Records Begin with Accurate Surveys*."

Once you have a sign prominently displayed, that attracts the passerby, you need handouts, such as pamphlets elaborating on the theme or purpose of your booth. Other attention-getters include large aerial photographs of familiar local sites; an instrument set up and focused on a distant object in the convention hall; an antique instrument; old plats and maps; or a computer and plotter in action.

A sure way to draw people to your booth is to offer a prize. They merely fill out a short form and drop it in a box. A prize that seems to go over very well is a globe mounted on a stand or pedestal; it is well worth the \$40 or \$50 cost.

Once your booth is in place, don't over look or underestimate the most important ingredient in selling your profession—yourself! It behooves us to dress like professionals. This is not the time and place to show up in field garb. A suit and tie are definitely in order.

Prior to exhibiting for the first time, you may find it helpful to discuss strategies with veteran exhibitors — those people who regularly attend and participate at your annual convention. Their coaching and advice may help you avoid the lessons some of us had to learn the hard way. Many exhibit halls have strict requirements for setting up displays. Forgetting an extension cord or ordering another table at the last minute can pretty expensive.

Share a Display

If your state association is typical, your members also belong to a local chapter. To minimize costs, your association might consider funding the cost of the display and allowing local chapters to use it when needed. Local chapters, in turn, might be responsible for purchasing the handout materials and the prize if one is to be given away.

As mentioned earlier, a display booth is a group activity — meaning that several surveyors participate. Remember, public relations and image enhancement are the obligation and responsibility of the entire profession!

VINCENNES STUDENTS RECEIVE 1990-91 SCHOLARSHIPS

MAY 22 1991

General Delivery
St. Croix, IN 47576
May 17, 1991

Scholarship Committee
Indiana Society of Professional Land Surveyors, Inc.
55 Monument Circle, Suite 1222
Indianapolis, IN 46204

Dear Scholarship Committee:

I am writing this letter to thank you for the \$1,000.00 scholarship I received from the Peggy Archer Endowment Fund. It will be used to further my education at Vincennes University where I will be a Sophomore next fall.

I was very honored to be chosen to receive this scholarship. It is greatly appreciated.

Sincerely,

David K. Lynch

David K. Lynch



LEONARD RECEIVES SCHOLARSHIP
Vincennes University Surveying Technology Professor, Art Haase, congratulates VU student Maury Leonard, Washington, the recipient of a \$300 scholarship presented by the Central Indiana Chapter of the Indiana Society of Professional Land Surveyors. Leonard has completed his freshman year at VU and will be returning in August to begin his senior year in the Surveying Technology program. He is a 1989 graduate of Washington High School.

DL/sl



LYNCH RECEIVES SCHOLARSHIP
Vincennes University Surveying Technology Professor, Art Haase, congratulates VU student David Lynch, St. Croix, the recipient of the \$1000 Peggy Archer Memorial Endowment Scholarship. The scholarship is presented by the Indiana Society of Professional Land Surveyors. Lynch has completed his freshman year at VU and will be returning in August to begin his senior year in the Surveying Technology program. Lynch is 1990 graduate of Perry Central High School.



NSPS NOTICE OF AWARDS

The National Society of Professional Surveyors sponsors four 1992 awards for excellence in the surveying profession.

SURVEYING EXCELLENCE AWARD

Chairperson: Kelly Olin ■ 925 Mission Way, Sacramento, CA 95819

Presented to a person who performed outstanding service to the surveying profession, this award includes an engraved plaque and a \$500 honorarium contributed by POB Publishing Co., Wayne, Michigan.

The person does not have to be a surveyor or a member of NSPS or ACSM, but candidates must be nominated for the award by an ACSM affiliate section or two NSPS members at large. If nominated by an ACSM section or affiliate, the nomination must be signed by two officers of the organization. If nominated by two NSPS members at large, the nomination must be signed by the sponsors and accompanied by four letters of recommendation.

Each nomination must include a narrative stating the reasons why the sponsors feel the nominee is deserving of this honor, specific accomplishments the nominee has made toward the profession and biographical data that can be used in the award presentation.

The chairperson must be notified of any nomination by December 1, 1991.

MOST INTERESTING SURVEYING PROJECT OF THE YEAR AWARD

Chairperson: Linda K. Duffy ■ P.O. Box 39, Salem, VA 24153

This award consisting of a Pentax IQZoom 105 Super 35mm camera with case, a plaque, and 1000 reprints of the resulting published article contributed by Pentax Corporation, Englewood, Colorado, is presented to individuals, companies, governmental units, or state associations having knowledge of interesting projects and the ability to provide documentation of the project—technical information, releases, photographs, and a record of the personnel and equipment involved. The project need not have occurred in the last year.

Interested candidates should submit a project by the end of October to P.O.B., Attn: Most Interesting Surveying Project, 5820 Lilley Road, #5, Canton, MI 48187. Winner will be selected by the NSPS Awards Committee.

STUDENT PROJECT OF THE YEAR AWARD

Chairperson: Allen Chelf ■ 14747 Hillside Ridge, San Antonio, Texas 78233

This award consists of a plaque and a \$150 honorarium, contributed by C&G Software Systems, Inc., Atlanta, Georgia, as well as paid travel and lodging expenses to the ACSM-ASPRS Spring Convention.

A submitted paper should describe a project in which the applicant was a participant and may involve a group of students and/or non-students. The paper must be written by one person only. Advice and constructive criticism from the applicants' instructor or supervisor is permissible and encouraged. The project need not have occurred within the preceding 12 months. All papers submitted will be considered for presentation and publication by ACSM. Specifications for the format of the manuscript can be acquired from the chairperson.

Completed papers should be submitted to the chairman by January 15, 1992.

EXCELLENCE IN PROFESSIONAL JOURNALISM

Chairperson: Kenneth S. Curtis ■ 2204 Happy Hollow Road, West Lafayette, IN 47906

An engraved plaque is presented annually to the ACSM affiliate society whose newsletter was judged to have the highest quality during the previous year. In the past, judging was made by the editors or publications chairmen of the newsletters participating in the contest. Any editor wishing to participate should contact the chairman for information.

THE LAW OF FAX

by James E. Anderson, contributing editor to
the Executive Update, February 1991

Fax machines are everywhere. Almost every business has one, executives have them at home, and some persons have them in their cars. People have accepted fax transmissions as a normal way to correspond.

Businesses often transmit legally significant documents by fax machine, which raises eyebrows in the business and legal worlds. Will faxed documents be accepted by a court of law as legally binding?

For example, if a hotel requires that an association return a contract by a certain date in order to secure meeting space, the association can sign the document and fax it to the hotel on the due date. Does the fax - virtually a copy of the contract - meet the legal requirements? Is the hotel obligated to hold the space?

Surprisingly, there are only a few legal cases that deal with issues raised by fax transmissions. These issues include whether or not fax transmissions constitute legally binding purchase orders, if signatures on faxed documents are genuine, and whether or not faxed documents meet the filing deadlines required for certain legal documents. In these cases the courts have acknowledged the popularity of faxed communication in the business world and in most instances have held the involved parties to the terms set forth in the faxed documents.

However, fax transmissions can foster problems that users must recognize in order to limit potential liability. Here are some of the issues:

Will faxed responses satisfy deadlines?
In the hotel contract example, a fax will meet the hotel's deadline if both parties understand that a faxed communication is sufficient. The parties should agree ahead of time that a faxed notice is satisfactory, and also state in the text of the fax that the faxed document satisfies the requirements.

Are faxed documents original documents?
Some courts have held that faxed documents are original documents because they are the only evidence of the transaction. In other cases, the parties want the faxed documents to be considered as originals to protect against alteration of the documents after transmission. If the parties want the faxed documents to be the originals, both parties should make this point clear.

Are the signatures on the faxed documents authentic? Parties may contend that the proper persons did not sign the documents,

or that they were forged. To avoid this problem the sender should have the signatures notarized prior to their transmission, and have the notaries send affidavits by mail that state they witnessed the signing of the fax.

Can fax transmissions be used for meeting notices? Unless the association bylaws specifically prescribe the method of notice (i.e., by mail), fax transmissions probably satisfy both the bylaws and legal requirements. To make sure of this, an association can specify in the bylaws that the notice may be sent by fax or that votes may be transmitted either by mail or by fax.

Is the confirmation message from the fax machine sufficient proof to show that a document was delivered to the recipient? A simple fax transmission probably will not be sufficient proof of delivery. In cases where receipt is important, the sender should use certified mail or some type of written acknowledgment. A fax could be used in a situation where the party acknowledges receipt by return fax, provided that the sender is satisfied that the signature of the recipient is genuine.

To make sure that the faxed documents an association sends are legally binding, the association should follow these steps:

1. When the negotiations begin the association should make sure that both parties agree that faxed documents will meet deadlines.
2. The association should send the original document immediately after faxing it, noting on the original that the document has also been faxed.
3. The association should keep a copy of the fax and the confirmation message (which states the recipient's telephone number and time and date of transmission).

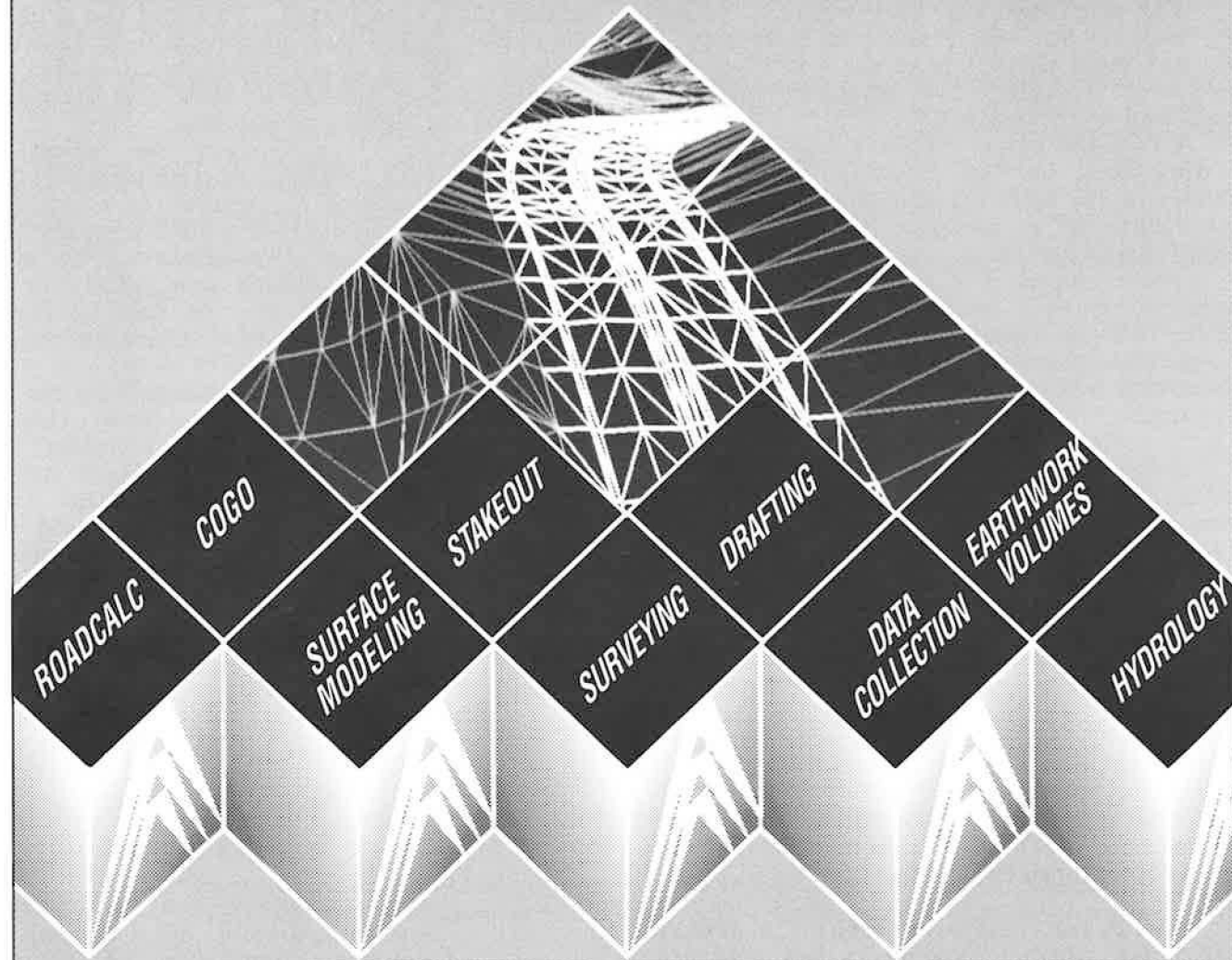
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IMAGIS PURSUES DEVELOPMENT OF DIGITAL LAYERING STANDARDS

As part of the Indianapolis Mapping and Geographic Infrastructure System (IMAGIS) project, the City of Indianapolis and the IMAGIS Consortium (DOT, DMD, DPW, CG&CU, IWC, IBT, IPL, Marion County and IUPUI) are pursuing the development of digital layering standards. This will allow development and utility design drawings to be submitted in digital format to the City Departments, County Agencies and Utility companies to update land

and facility elements contained in the IMAGIS basemap. A questionnaire was sent to local engineering and surveying companies within Marion County and the surrounding vicinity in order to determine the impact of the project on internal operations. If you would like a complete copy of the survey results, please contact: Dee A. Revnyak, Director, IMAGIS Project, 317/274-7813.

* * * * *

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When is a Fence A Monument?



An Opinion
By Kenneth Gold
RPS 1223

Texas Surveyor

The Texas Surveyor

January 1991

When is a fence a monument? Most surveyors would agree that the safe and generic answer is: When it is called for in the legal description of the tract or parcel. Although a reasonably correct answer, a host of problems are camouflaged by such generality . . . not the first of which is to decide what constitutes a fence . . . and is it the SAME fence?

A fence is construed as a barrier or tangible obstruction to bar entrance or exit from a parcel of land. This obstruction is not limited to wires or boards, but could be any line of obstacles usually installed or erected between two land parcels. It could be a hedge, a wall or even a ditch. Any of these could be encountered by the surveyor; however, the majority of fences are found to be constructed from a type of wire (barbed or chain link) or wooden plank.

Most surveyors are sensitive to the fact that the fabric or facings of a fence (and not the centers of the posts) is considered the dividing line, unless some other evidence overrides this presumption. Some land owners, when building a fence, choose to be "safe" and back away from their property line so as to avoid a conflict (and a survey) and thereby plant the seeds of a future problem.

In the land surveying profession, there are few subjects that can be defined as having more exceptions than rules. The subject of fences will be in the top two, the other is certifications.

With the passing of time, the calls for long lost or destroyed original monuments, and the LACK of calls for monuments in newer descriptions, many surveyors find cause to place more reliance on fence locations as the true position of a tract's boundaries. There are circumstances where such a reliance is justified and there are other circumstances where they are not. Surveyors must know the difference and especially, which is which.

In some parts of Texas, there are vast areas where a fence is the only monumentation that has ever existed. Ancient fences, and fences replacing ancient fences, are accepted and recognized as THE undisputed boundaries in these areas. This is not surprising since it is supported by something often called the

"Ancient Fence Doctrine." A Texas case, *James v. Hitchcock*, 309 SW 2d 909, outlines one principle of that doctrine. The court said, "Ancient fences used by the surveyor in his attempt to reproduce an old survey are strong evidence of the location of the original lines and, if they have been standing for many years, should be taken as indicating such lines as against the evidence of a survey which ignores such fences and is based upon an assumed starting point."

While surveyors must consider the rulings of the court, they must also consider the exact circumstances under which the decision was made. The above quotation established a rule that is based upon the court's finding that a surveyor was using an assumed starting point. Had there been no such assumption, and the starting point had been properly established, it would seem that the ruling could have been totally different. It certainly would have been different if the subject fences were replacements that were built in a somewhat removed and different position.

In another circumstance, if the surveyor can factually establish that a fence was built upon the surveyed line immediately after a survey, and it is now the only remaining evidence of the boundary's location, the fence will likely be accepted by the court as the best evidence. We take comfort in the 1867 landmark case, *Stafford v. King*, 30 Tex. 257, 94 AmDec 304, where the court said, "The actual identification of the survey, the footsteps of the surveyor upon the ground, should always be followed by whatever rule they may be traced."

In *Livingston Oil and Gas v. Shasta Oil Co.*, (Tex Civ App) 114 S.W.2d 378, the decision stated that the courts will follow the footsteps of the surveyor, if they can be traced.

How thoroughly the surveyor "traces" and collects the evidence of the fence history, thought to be built on the surveyor's footsteps, will be a major determining factor in the court's acceptance.

To obtain reasonable proof of a fence having been built on a property line, the surveyor must find unprejudiced witnesses who were present at the time the boundary was marked and saw the fence

Fence

being built on the line. In reality, the older the boundaries, the fewer the witnesses; so, extrinsic evidence will be necessary. This evidence could be old field notes of other surveys that show the fence location shortly after the boundary was established; it could be testimony from a descendent of a witness, who was told by the deceased witness, that the fence was built on the boundary; it could be something called "reputation," which is addressed later.

The surveyor would be wise to obtain copies of any referenced field notes and to record the location of the originals. Similarly, it would be prudent to tape-record any parole evidence, being careful to identify the witness's name and address, the date, and all particulars as to how the witness came to possess the information conveyed. Some surveyors may want to include an affirmation or "swearing in," before taking the testimony. While this is good operating procedure, if a court becomes involved, the surveyor making those original field notes, not the field notes or the copies, will need to appear, and the other witnesses will be subpoenaed for court testimony and possible cross examination. This is done in the court's quest for the best evidence. However, if the surveyor is deceased, the original field notes could be accepted and, if the witness is also deceased, the tape recordings would likely be admitted as the only corroborating evidence.

The court stated, in *Reynolds v. Bradford*, 233 S.W. 2d, 465 "... where the marks left by the original surveyor have disappeared it is permissible and necessary to resort to the best evidence of which the case is susceptible."

The question then: How many surveyors take the time to validate a fence, not called for in the deed description, as being the best evidence? Obviously, there is no way of knowing or finding out. There is a growing trend, though, to accept a long-standing fence as representing the boundary without much regard for the truth of the matter. Furthermore, there is a perceived support for such acceptance when title companies, and even some public agencies, fail to recognize a surveyor's work when a boundary line is shown beyond a fence.

In such a circumstance, there is good cause for concern, but no reason to have a blanket acceptance that a fence is always the true boundary.

When the survey is based upon sound facts and procedures that find the boundary of a parcel to be some place other than on a fence, then the fence may play some other role. Time, intention and recognition will define that role. It could be a fence of convenience, built without any intent of representing or occupying the boundary. However, if several decades elapsed, and new generations occupied the land, the recognition can change and something called "limitation title" may have started . . . although originally unintended. Limitation title is just another term for, or the results of, adverse possession. It may have started, but it cannot be complete without proving to the court that a particular statute of limitation (of which there are four) has been satisfied. This "limitation" is one main reason, and expedience is another, that so many entities shy away from accepting surveys that place tract boundaries outside or beyond fences, regardless of the fence's age.

Things do happen that confuse the record and complicate surveyors' lives. A land owner can draw up a description of his property, calling for all the fences perhaps with some locative accuracy based on a survey, and sell the land by that description to a willing buyer. Most likely, today, such a transaction would not involve title insurance, but there are exceptions here, too.

If the land were to change hands several times over a couple of decades, using the same description, a record-trail of "holding to the fences" would be established. It would appear to all, but the most astute title examiner, that all was well. However, limitation title would never have been perfected. If something extraordinary were to take place in the vicinity of that tract, causing a significant and startling increase in value, the location of the old tract lines would quickly become of major importance. Then the owner holding to the fences, almost assuredly and simultaneously, would get in gear and file for limitation title with the court, and the record own-

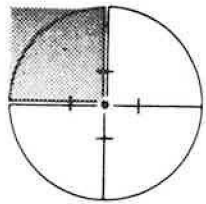
ers, upon whom the fences had encroached would find attorneys to defend their title. No matter how futile, they would be entitled to the best "law" their money could buy.

**The surveyor would
be wise to obtain
copies of any
referenced field notes
and to record the
location of the
originals.**

Because there are few chances to defeat the claim of limitation title to land held under fence for a certain time (usually 10 or more years), most agencies responsible for financing or underwriting mortgages will exclude areas outside a fence, even if the age of the fence is not known. But, that exclusion does not change the original tract line, even though it may, or may not, have changed the line of ownership. Actually, a new "deed line" may have been created, or depending on the circumstances, just an exception is made to the title policy. An over-simplified similarity is when a fraction of a lot in a subdivision is sold. The lot line has not been changed, but ownership in the lot is now DIVIDED and SHARED to a difference line.

In all cases, without exception, the surveyor should locate the position of fences in the proximity of a tract or parcel boundary. In most cases, the surveyor should locate interior fences on rural acreage tracts, especially if they are clearly "visible" and there is any probability of adverse claim against the client or record owner. There are a couple of other reasons, too. Sometimes interior fences surround cemeteries and, nowadays, there are things called "illegal toxic waste" dumps. No surveyor would want a client or employer to be surprised by either of these.

(Continued on Page 17)

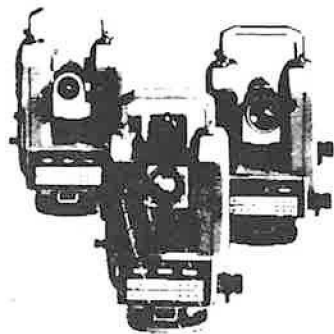


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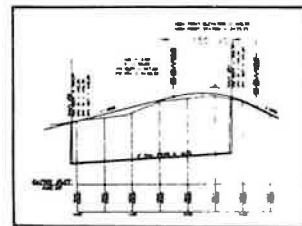
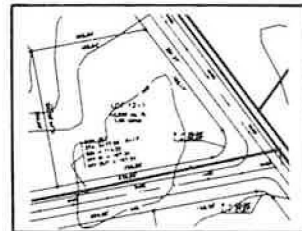
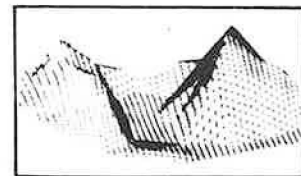
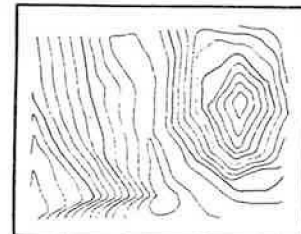
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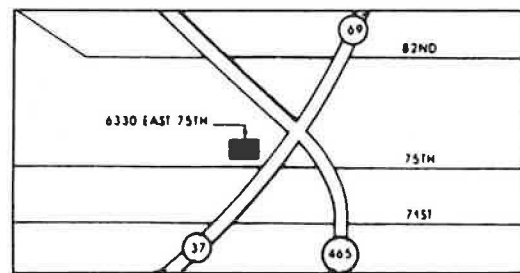
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Fence

(Continued from Page 15)

The surveyor is often asked the age of a fence. There are no guarantees that anyone, short of the builder or an involved party, could ever determine the exact age of a fence. In urban subdivisions, especially those over 25 years old, common sense dictates that most fences likely have been in place since the early days of the development. Fences not on the lot line, in all probability, could represent new "property lines" if it weren't for the expense of "proving" them in court. Some owners may wish to exercise their rights, regardless of the court expense (particularly when neighbors have had a falling out). The "principle" of a thing can be very expensive, but even the pursuit of "principle" will not change the position of a lot line. Ownership, perhaps; lot line, no!

In rural areas, there is the same problem. With some several exceptions, most rural fences are constructed with barbed wire. Trees in the fence may give some clues as to the minimum age. When faced with determining an approximate age, perhaps to decide if an old fence was built early enough to be on a newly surveyed line, the wire's date of manufacture likely can be found. There are expert collectors of wire that can be contacted and there is a good reference book on the subject. It was written by Robert T. Clinton and titled "Barbs, Prongs, Points, Prickers & Sticker," from the University of Oklahoma Press and identifies patent dates of hundreds of wires. That date would be of value to determine the earliest date a wire could have been used.

In Clinton's book, it states that the majority of early barbed wire was manufactured in the mid-to-late-1870's and 1880's. Some smooth wire was made much earlier, with one patented in 1853.

The surveyor must never advise a client to take a fence down, even though there is conflicting law as to a legitimate owner's rights on that subject. In a Texas case, *Johns v. State*, 76 Tex. Cr. 303, 174 S.W. 610, the court said that tearing down a fence on land held by another is unlawful, regardless of whether the doer has any title capable of being established in a law suit, because the courts are created to settle such differences.

Interestingly enough, in another Texas case, *Camp v. State*, 49 Tex. Cr. 396, 92 S.W. 845, the court said that if the purpose for removal is legitimate and no harm is done, no offense is committed. In *Boyd v. State*, 28 Tex. App. 524, 13 S.W. 864, there is a ruling that a person cannot be convicted for preventing the removal and relocation of a fence where right of re-

moval is doubtful and the dividing lines is uncertain. Consequently, it would appear that a fence can be safely removed only when the owners on each side, and those materially affected (such as lease holders), mutually agree. Whatever the contemplated action, the prudent surveyor will consult an attorney to check statutory law before doing anything to a fence.

***It is well documented
that the calls of a
description shall be
followed so as to
arrive at the
intention of the
parties.***

The surveyor, faced with a fence that is not exactly on the tract or parcel boundary, is obligated to locate the fence in respect to the boundary. It should be tied in sufficient segments so that the relevant description and acreage or square footage can be determined and shown on a plat, description, report or all three.

It is well documented that the calls of a description shall be followed so as to arrive at the intention of the parties. Furthermore, and normally, the course between two angle points or corners is construed to be straight. However, it is not unusual to find that long-recognized survey lines, occupied by fences, are not straight. The longer the line, the more often the fence will stray or bow a considerable distance from a line calculated between the distant corners. Thus, confronted with this, the surveyor must call upon his professional skills. Realizing that surveying is an art and science (and not an exact science), he must place himself in as close to the circumstances facing the original surveyor as possible.

If that long survey line was run with a compass, there is a much better than fifty-fifty chance the line never was straight. The courts are not inclined to take a surveyor's word on those odds, however. Therefore, it will be up to the surveyor to prove the crooks or irregularity of a line by duplicating the conditions under which it was originally run. Of course, that will be time consuming and

expensive. However, when the surveyor is challenged as to what was done in respect to such a long and bowed fence, simple acceptance of its existing position will not be sufficient defense.

In *Falls County v. Young*, 77 S.W. 2d 912, writ dis., testimony was admissible to prove that, in the early days of West Texas, it was customary to build fences "on lines of least resistance, avoiding hills and other rough places and with little or no regard for the true lines of surveys." This custom must have been a direct inheritance from East Texas predecessors.

After all, things have been considered and exhausted in determining the "dignity" of a fence and what it represents, one thing remains. It is "reputation." This involves testimony from a sufficient number of reliable witnesses to convince the court of the community's long-standing acquiescence on the fence's reputation as a boundary. According to *Stewart v. State*, 480 S.W. 2d 167, 168, the rule of reputation is one of last resort and, by necessity, based on hearsay. In the 1967 case of *Cervantes v. Ramires*, 414 S.W. 2d 233, with reference to several other cases, the court said that the long-settled law of Texas, where a boundary line was in doubt and acquiescence existed for a long period of time, the fence is entitled to great weight in determining the boundary. *Yates v. Hogstrom*, 444 S.W. 2d 851, 853, seems to limit the time of acquiescence, though, to a period beyond that for the statute of limitation for adverse possession. This could be interpreted to be something beyond our 25-year statute.

If there is any way to summarize the subject of fences in surveying, it would be closely akin to these three observations: 1) locate them in respect to the true line; 2) never assume a fence is on the true line; and 3) use a fence as the true line only after substantial proof is obtained to support that fact.

The "pure" fence-line surveyor who ignores, or is unaware of, the rules and exceptions surrounding such practice, constantly places that practice and the client's or employer's well-being directly in harm's way. The "pure" fence-line surveyor doesn't have a monopoly on that hazard. The "normally" prudent surveyor, who elected to ignore those rules and exceptions, just once, may have noticed a peculiar muted ticking, every time a certain office file cabinet is passed!

— From *The Texas Surveyor*,
January, 1991

" ALWAYS A RIVER "

by Vic McCauley, LS, Elizabeth, Indiana

Occasionally something comes down the river that kindles the old flame of wanderlust that haunts all surveyors. This time it was a river barge, a floating exhibit called "ALWAYS A RIVER, The Ohio River and the American Experience. The barge is sponsored by The Humanities Councils of the States of Indiana, Illinois, Kentucky, Ohio, Pennsylvania and West Virginia.

The specially constructed 34 foot by 152 foot barge houses the Floating Exhibition for its 981 mile, 5 month trip down the Ohio River. With 21 planned stops beginning May 22 at Pittsburgh, Pennsylvania and ending September 8 in Cairo, Illinois at the confluence of the Ohio and Mississippi Rivers.

There are 11 different exhibits on the barge, with more than 6000 pictures, maps, charts and models on board. The tour, guides you through the every changing river from the prehistoric Native Indians who relied on the

river for survival, through the European Explorers of the 17th century to the early colonization by American Settlers of the 19th century into the 20th century and the Corps of Engineers development of the river a major navigable waterway on to the present.

My wife and I visited the barge in Vevay, Sunday July 28, the exhibits are so interesting it takes a couple of hours to tour the barge. Most visitors during our tour were from central Indiana and ask me several survey related questions.

Having grown up on the river and lived on or near the river for most of my life, I've developed a deep reverence for that magical ribbon of water called the Ohio River. The exhibits awakened pleasant memories of days gone by. The barge has something of interest for the entire family. Please try to visit the barge at one of the remaining stops, take your family and friends. The one dollar admission is a nominal fee for the experience.



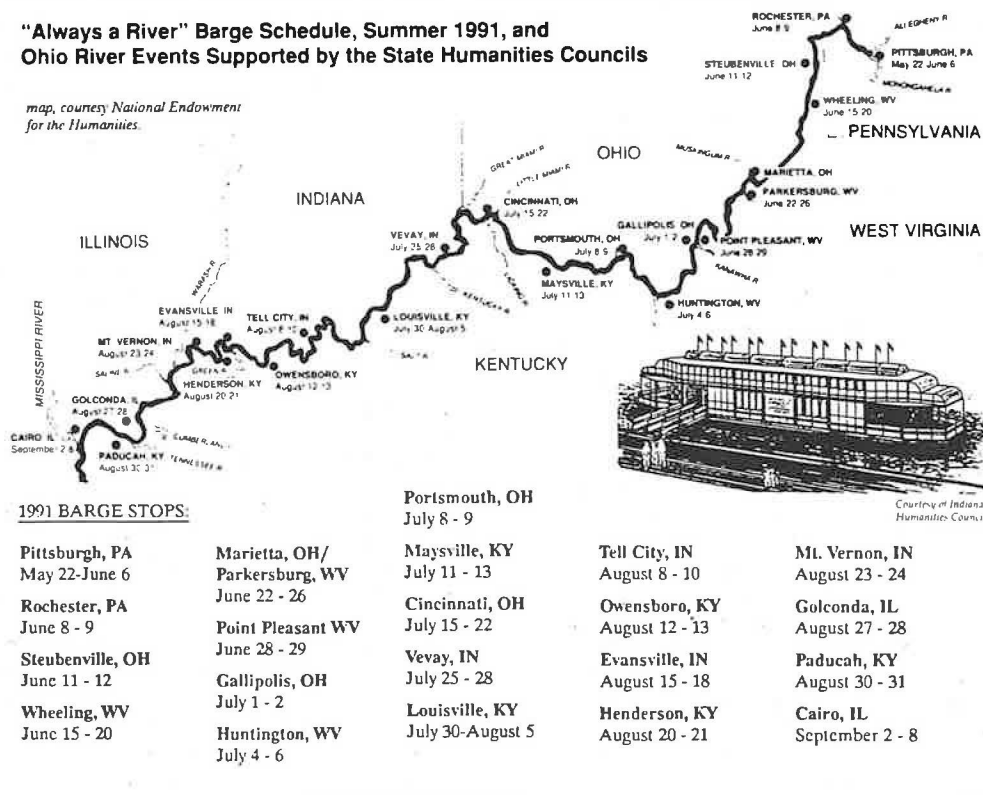
THE RIVER

The Ohio River comes alive at the Confluence of the Monongahela and Allegheny Rivers at "the Point" in Pittsburgh at elevation 680 feet. 981 miles downstream, flowing generally South-of-west, "la Belle Riviere" joins with the Mississippi at Cairo, Illinois at elevation 250 feet. The Ohio has fallen 430 feet through an ever-changing landscape.

The impact of the Ohio River in the context of the larger American story is generally unknown today, yet this waterway was the major artery of travel west of the Allegheny Mountains for the native Indian peoples, for the 17th and 18th Century Europeans, and for the 19th Century Americans. Today, the Ohio River system (including the lower Mississippi River), carries more commodities than does any other river system in the U.S., exceeding the annual tonnage passing through the Panama Canal.

"Always a River" Barge Schedule, Summer 1991, and Ohio River Events Supported by the State Humanities Councils

map, courtesy National Endowment for the Humanities.



THE ALWAYS A RIVER EXHIBITION BARGE



The survey community contributed a great deal to the exhibit, especially the mapping section. Schneider Engineering and associates were responsible for the main survey exhibit, particularly Mike Mulryan, Lynn Orrvar, and Kris Conover. Also, a number of Indiana Land Surveyors were called upon and volunteered their time to man the surveying exhibit at each of its stops along the Indiana-Kentucky border.

The Always a River floating museum is a specially outfitted barge carrying a large exhibit in which visitors will experience the story of the Ohio River.

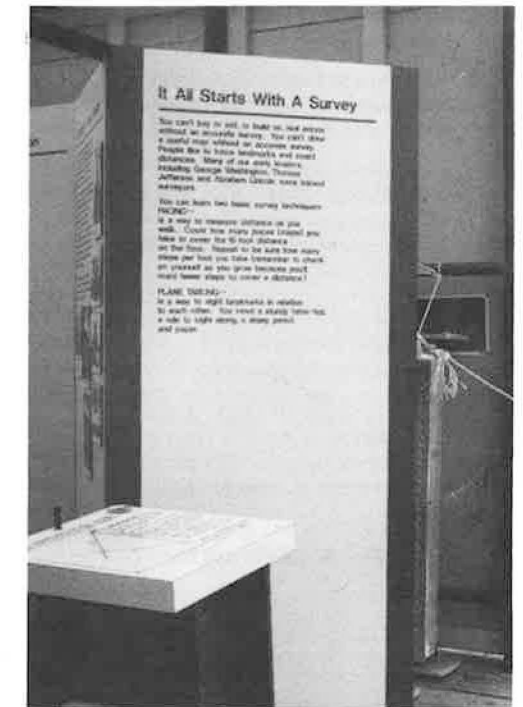
The museum-quality interactive exhibit opened in Pittsburgh May 22. From there, it has been making its way down the Ohio River, and will be open for tours in 21 communities before it closes in Cairo, IL.

The 5,000 square foot exhibit includes a 14-foot wooden model of the steamboat Robert E. Lee and a working model of a river lock. There is also a full-size model of a steamboat pilot house and a towboat pilot house, in which visitors can work the controls.

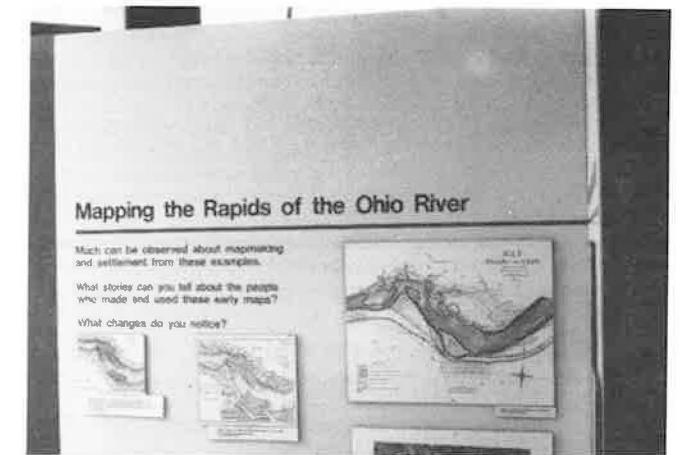
Educational videotapes will be shown in a showboat theater, and a script and costumes will be there to allow visitors to act in a showboat melodrama. A library will give visitors a taste of the books that are available which tell the Ohio River story.



The Ohio River and the American Experience is sponsored by the Humanities Councils of Indiana, Illinois, Kentucky, Ohio, Pennsylvania and West Virginia. The Indiana Humanities Council serves as the Coordinator of the project; Rita Kohn as Project Coordinator; fabrication was completed by the Exhibit House, Indianapolis. The barge structure is on loan from the Tennessee Valley Authority through the Bicentennial Volunteers, Inc.



William Kreisle, formerly chief of the survey branch of the U.S.A. Corps of Engineers, Louisville District, contributed a number of navigation maps for the exhibit.



Mortgage Loan Inspections Do You Know What They Are Used For?

by
Knud E. Hermansen, P.L.S., P.E., Esq.

Knud Hermansen is an assistant professor at the University of Maine and a consulting land surveyor, civil engineer, and counselor at law. He is a licensed land surveyor, professional engineer, and counselor at law in several states.

When asked what is the purpose for mortgage loan inspections, many surveyors will say they are to protect the buyer or, more commonly, the lending institution. These answers are partially correct. Without a doubt, properly prepared mortgage loan inspections do provide a valuable service by forewarning the lending institution or buyer of potential problems. Unknown to many surveyors is a third purpose for mortgage loan inspections.¹ For a surveyor to comprehend the third purpose, the surveyor must understand some aspects of the secondary mortgage market.

All surveyors are probably familiar with the inception of a mortgage.² Unable to purchase property using their own finances, the prospective buyer seeks a loan from a lending institution. The lending institution, in return for loaning funds, seeks both a profitable repayment plan and safe collateral for the loan. In almost all cases, the collateral is the real estate sought by the buyer.

After the bank has obtained the mortgage from the buyer, the mortgage is frequently sold on a market known as the secondary mortgage market.³ To facilitate and monitor the transactions and in part to protect the buyers who purchase residential mortgages on the market, two groups exist. They are the Federal National Mortgage Association, known as Fannie Mae,⁴ and the Federal Home Loan Mortgage Corporation, known as Freddie Mac.⁵ These groups have established requirements that lending institutions must meet in order to sell mortgages.⁶ One requirement is that the lending institutions purchase title insurance for the mortgages they sell.⁷ A further requirement is that the title insurance on the mortgage must have the survey exception⁸ removed.⁹ The surveyor exception can generally be removed by an "accurate survey and inspection,"¹⁰ which under Fannie Mae and Freddie Mac is simply referred to as a "map" or "survey." Therefore, the third purpose for mortgage loan inspections is to remove the survey exception on a title insurance policy in order to fully protect mortgages sold on the secondary mortgage market.¹¹

One question that arises from this brief overview of the situation is what is an "accurate survey and inspection?" Contrary to what many surveyors may believe the definition is not necessarily governed by licensing boards and professional societies nor can it be.¹² Title insurance companies, Freddie Mac,¹³ and Fannie Mae¹⁴ have established their own standards.¹⁵ Not surprising these standards are generally more stringent than many surveyors currently apply.¹⁷

Hopefully, this article will give surveyors more insight into the purpose behind mortgage loan inspections.¹⁶ This in turn may give surveyors a better understanding of their potential liability and stimulate better communications between attorneys, surveyors, and local lending institutions.

- 1 Many surveyors take great pains to prevent the mortgage loan inspection from reaching the buyer and used improperly. Unbeknown to many surveyors, Federal lending guidelines require the buyer receive a copy of the sketch and acknowledge the facts disclosed on the sketch. C.f. 24 C.F.R. §§ 205.142-252.502
- 2 This purpose is credited with being the original reason for mortgage loan inspections and the primary reason they continue to be sought in so many states.
- 3 Deed of Trust in some states
- 4 From a layman's simplified perspective, the buying and selling of mortgages may seem similar to the buying and selling of stock on the New York Stock Exchange. Onsrud, Harlan J. *Requirements of the Secondary Mortgage Market Relating to Mortgage Loan Surveys*, p. 1, University of Maine, 1991
- 5 Fannie Mae, 3900 Wisconsin Avenue, NW, Washington, DC 20016-2899
- 6 Freddie Mac, 1761 Business Center Drive, P.O. Box 4130, Reston, VA 22090
- 7 See e.g. *Fannie Mae Mortgage Documentation* § 105 and *Freddie Mac* § 1701
- 8 See *Fannie Mae* § 105.01 and *Freddie Mac* § 1701
- 9 Typical language is the following: "encroachments, overlaps, boundary line disputes and other matter which could be disclosed by an accurate survey and inspection of the premises." see e.g. *Walker Rogge, Inc. v. Chelsea Title & Guaranty Company*, 562 A.2d 208 (NJ: 1989)
- 10 See *Fannie Mae* § 105.05 and *Freddie Mac* § 1703
- 11 For cases that attempt to define what an "accurate survey and inspection" would comprise see e.g. *Walker Rogge, Inc. v. Chelsea Title & Guaranty Company*, 562 A.2d 208 (NJ: 1989); *RLB, Inc. v. US Life Title Insurance Company of New York*, 774 S.W.2d 607 (Tenn. App. 1989); *Krause v. Title & Guaranty Co.*, 390 So. 2d 805 (Fla. 5th Dist.: 1980); *Singer v. Wong*, 404 A.2d 124, 35 Conn. Supp. 640 (1978); and *Waterview Assoc., Inc. v. Lawyers Title Ins. Corp.*, 30 Mich. App. 687, 186 N.W.2d 803, 810 (1971)
- 12 It is interesting to note, that if this purpose were stated up front when requesting the surveyor's services, most surveyors would provide a Land Title Survey or ALTA/ACSM Title Survey, which most surveyors admit is far more detailed, time consuming, and costly than a mortgage loan inspection.
- 13 The secondary mortgage market is governed by standards set by Fannie Mae and Freddie Mac unless State standards are more stringent. In addition, the secondary mortgage market is national and frequently preempted by federal regulations. Standards prepared by State agencies and professional societies would apply for the singular purpose of protecting the buyer. Unfortunately, many surveyors apply State standards to their mortgage loan inspections then turn around and certify the survey to a lending institution whose standards are already fixed by the secondary mortgage market.
- 14 See *Freddie Mac* § 1704 and § 1808. It should be noted that *Freddie Mac* § 1808 requires "title insurance company's or attorney's standards and any community or local laws or standards relating to surveys," which would imply the more stringent source will control.
- 15 See *Fannie Mae* § 105.05
- 16 Presumably, since the surveyor is unaware which market the mortgage will be sold on, the surveyor should prepare their mortgage loan inspection to meet the most stringent standards.
- 17 Onsrud, Harlan J. *Requirements of the Secondary Mortgage Market Relating to Mortgage Loan Surveys*, University of Maine, 1991
- 18 An excellent article that goes into more detail was written by Dr. Harlan Onsrud. See Onsrud, Harlan J. *Requirements of the Secondary Mortgage Market Relating to Mortgage Loan Surveys*, University of Maine, 1991

N.S.C. & G.S. CHANGES NAME

IN REMEMBRANCE

N.S.C. & G.S. Changed Its Name
From
"Charting and Geodetic Services"
Back to
"Coast and Geodetic Survey"

by Rear Admiral J. Austin Yeager, NOAA Director,
Coast and Geodetic Survey

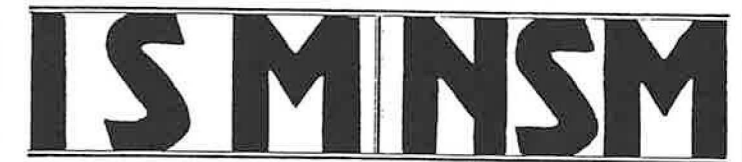
You may have noticed, a venerable name from history has been reintroduced to the mapping, charting, and surveying community. On May 6th, the Office of Charting and Geodetic Services became the Coast and Geodetic Survey, a name which was first used by this organization in the 1870's when the former Coast Survey became the Coast and Geodetic Survey after congress gave the agency the additional duty of fixing the basic lines for inland maps in 1871. It remained unchanged until the formation of NOAA in 1970, when it became the National Ocean Survey. With the addition of other NOAA elements such as the Coastal Zone Management Program in 1982, the National Ocean Survey became the National Ocean Service, and this office was renamed the Office of Charting and Geodetic Services.

The new Coast and Geodetic Survey is more highly concentrated in specific mapping, charting, and geodetic activities than its illustrious predecessor. In the late 1960's, the former Coast and Geodetic Survey employed more than 2,000 civil servants and also was responsible for tides and currents forecasting, water levels monitoring, oceanography, earthquake studies, and geomagnetism activities as well as the operation and management of the NOAA fleet and marine centers. Today's Coast and Geodetic Survey employs about 950 civil servants and is composed solely of the National Geodetic Survey Division, the Nautical Charting Division and the Aeronautical Charting Division. The other responsibilities are part of the missions of other NOAA and National Ocean Service component organizations or other Federal agencies such as the U.S. Geological Survey.

We extend our heartfelt sympathy to Ross Holloway (ISPLS President), and his family on the passing of his father, Rev. Alvin H. Holloway, 67, Martinsville. The Rev. Holloway, pastor of Bethel Wesleyan Church in Morgan County, passed away Wednesday, July 17th.

Sympathy is also extended to Carol and John Beals (ISPLS past president - 1968), in the passing of their son, Robert E. Beals, 35, on April 1, 1991. In February 1988, Robert was diagnosed with acute lymphocytic leukemia. During the last three years he had undergone aggressive chemotherapy, radiation and bone marrow transplant treatment, with very short-lived remissions. More recently, the leukemia failed to respond to any of the treatments offered. He was a graduate of Earlham College and became a talented teacher, social worker, and professional jazz musician.

* * * * *



VIII Congress,
International Society for Mine Surveying (ISM)
XII Annual,
National Symposium on Mining (NSM)
September 22-27, 1991
Hyatt Regency Hotel
Lexington, Kentucky, USA
Sponsored by the University of Kentucky, Office of Engineering Continuing Education in cooperation with Oak Ridge Associated Universities

Announcing Two Major Mining Events in Lexington, Kentucky, September 22-27, 1991
VIII Congress,
International Society for Mine Surveying (ISM)
XII Annual,
National Symposium on Mining (NSM)
During the week of September 22, 1991, major mining events will take place in Lexington, Kentucky. For the first time in its history, the International Congress on Mine Surveying (ISM) will be held in the Western Hemisphere. Concurrently, the National Symposium on Mining (NSM) will take place. The ISM will feature approximately 250 technical presentations in the Lexington Hyatt Regency Hotel, and the NSM will feature its own technical sessions in the same facility. The opening keynote session on Monday morning, September 23, 1991, as well as the exhibition, will be common to both ISM and NSM participants. Heritage Hall at the Lexington Civic Center will be the site of the exhibits for ISM/NSM. This Conference is sponsored by the University of Kentucky, Office of Engineering Continuing Education in cooperation with Oak Ridge Associated Universities.



Keynote Speaker: Bernard H. Larson, Hennepin County Surveyor, Minnesota



Bernard Larson and Roger Woodfill, Past ISPLS President



Robert Wilkinson, L.S., Head of Surveying and Mapping, Indiana Dept. of Natural Resources

Moderator: Dr. John G. McEntyre



Jim Stout, Manager of IMAGIS Project, Indianapolis



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SURVEYORS HISTORICAL SOCIETY NEWS

CHARLES MASON AND JEREMIAH DIXON - REMEMBERED SURVEYORS

In 1764, England dispatched two surveyors to set up a boundary between the colonies of Pennsylvania and Maryland to settle bloody land disputes involving settlers aiming guns at each other, claiming the land as theirs.

Mason and Dixon erected markers, made from stone used as ballast in ships from England, about every five miles for 233 miles, to within 20 miles of the west border of the states.

Recently, one of these stones marking the Mason-Dixon line, which grew in importance to become the traditional North-South border during the Civil War, was unearthed and relocated by surveyors using stars to pinpoint the marker's new resting place.

Residents and history buffs applauded as a large crane excavated the 4-foot tall carved marker. The stone sat at the intersection of two roads in the rolling farmland, buried by accumulated dirt and road paving. About 20 years ago, someone placed a 50-gallon, open-ended drum around it, and the earth had begun caving in between the stone and the steel.

What was once an impressive carved marker had become a hazard to foot traffic, joggers and horseback riders, said Susan Kogan of the Pennsylvania Historical and Museum Commission. The commission teamed up on the project with the National Geodetic Survey and the Maryland Geological Survey.

Ralph Poust of the National Geodetic Survey, said he came out on a clear March night and, using the pole star, Polaris, was able to approximate a new site for the marker. He said the location, about 20 feet from the road, was still on the line but out of harm's way.

When the stone was lifted out of the ground, a surveyor dusted it off, revealing on each side the coats of arms of the warring families.. the Calverts of Maryland and the Penns of Pennsylvania.

The stone, browned by the dirt, was chipped in places but had otherwise weathered the years well.

..taken from HI's and PI's/April 1984, Arkansas Newsletter

CHAINS

by David Garcelon, Owner of "Antiques & Otherwise", May 15, 1991

We have had several calls about chains we thought we ought to put some on this list. Over 30 years of surveying I have learned a little about chains that might be of interest; I'll pass it on. The largest majority of chains used by American surveyors were English made by the J. Chesterman Company of Sheffield, England. Several years ago Nancy and I found two invoices from the Chesterman Company to two companies in the United States (both of the U.S. companies were surveying instrument companies) in which more than 800 chains were sold. The invoices were in the 1880's. Another interesting point about the invoices was that the majority of the chains were not two pole and 4 pole chains but were 50 foot and 100 foot chains; that sure blows to smithereens the folklore that exists amongst we surveyors that chains were all 33' and 66' long!! The invoices also helped to confirm that United States instrumentmakers did not make the chains they put their name on!! We also discovered that metric chains were sold and used in America.. the Fauth Company from Washington, D.C., which made many instruments for the United States Coast and Geodetic Survey, sold only metric chains!

And now maybe the juiciest tidbit of all..Many 33 foot and 66 foot chains were made from 100 foot and twenty meter chains..think about it a minute. You can take a 100 foot chain and make 1 - 33 foot chain and 1 - 66 foot chain out of it!! You can take a 20 meter chain and by adding a few loops make a 66 foot chain out of it. We have found many chains that were obviously made this way. Anyway, here is our offering, please don't hesitate to call with your order or questions; they go fast!

To obtain Mr. Garcelon's list of instruments, tools, and books you may reach him at (508) 754-2267 or write to:

David & Nancy Garcelon
10 Hastings Avenue
Millbury, MA 01527

CALENDAR

September 12, 1991
Northwest Chapter Meeting

September 18, 1991
Hoosier Heartland & ISPLS Joint Workshop,
Topic: "Wetlands", Indianapolis

September 18, 1991
Central Indiana Chapter Meeting

September 21, 1991
ISPLS Board of Directors Meeting,
Headquarters, Indianapolis, Indiana

September 22-27, 1991
International Society for Mine Surveying
VIIIth International Congress & Exhibition,
Lexington, Kentucky

October 14-16, 1991
Effective Application of Advanced Surveying
Technology, College of Engineering,
University of Wisconsin, Fee: \$695 More
Information Call: 608-262-8592

October 25, 1991
ISPLS Workshop, "Business of Surveying", By
The Gwent Group, Brown County Inn,
Nashville, Indiana

October 27-30, 1991
GIS/LIS '91 Annual Conference & Exhibition,
Atlanta, Georgia

October 29, 1991
St Joe Chapter Meeting

November 9, 1991
ISPLS Board of Directors Meeting,
Headquarters, Indianapolis, Indiana

November 21, 1991
Central Indiana Chapter Meeting

January 15-17, 1992
40th Annual Convention, Indiana Society of
Professional Land Surveyors, Holiday Inn,
Columbus, Indiana

January 28, 1992
St Joe Chapter Meeting

February 13-15, 1992
Illinois Professional Land Surveyors
Conference, Chancellor Hotel & Convention
Center, Champaign, Illinois

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