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Letters must be signed and include a daytime telephone number. The name of the letter's author may be withheld if requested. Letters may be edited for clarity and length.

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### KAPS 2014 Officers & Directors

President ..... Jonathan Payne, PLS
President-Elect ... Don Pedigo, PLS
Vice President,
 External Affairs ... John Schneider, PLS
Vice President,
 Internal Affairs ... Kevin Phillips, PLS
Past President ... Tom Clayborn, PLS
Secretary ... Richard Fentress, PE, PLS
Treasurer ... Bill Jones, PLS

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#### Directors

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Barren River	Shaun Foley, PLS
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Falls of the Ohio	Jason Graves, PLS
Green River	Robert Smith, PLS
Highlands	. Johnny Justice, PLS, PE
Jackson Purchase Area .	Matthew Clark, PLS
Northeast	Mike Ruggles, PLS
Northern Kentucky	Greg Barker, PLS
Southeast	John Ledington, PLS

#### **KAPS Office Staff**

Molly Forrest, Administrative Assistant

An Affiliate of the American Congress on Surveying and Mapping and The National Society of Professional Surveyors



### KAPS 2014 Standing Committee Chairs & Co-Chairs

On the Cover:
A pond thaws out after a late January snowfall.

Jonathan L. Payne, PLS
Kentucky Association of Professional Surveyors

124 Walnut Street • Frankfort, Kentucky 40601

## From the President's Desk

This is my last President's Report for the Interior Angle, as my term in office is coming to an end in less than a month. It has been a very eye opening event to serve as President of KAPS. In the past, I have "participated" in KAPS at the chapter level. I place "participated" in quotes because I showed up for meetings and paid my dues. Since becoming more involved at the state level, I have seen just how much work goes into moving our Profession forward in Kentucky. That effort is directly spearheaded by what is a very small number of Professional Land Surveyors in comparison to both the number of Professional Surveyors in Kentucky and even the number of Professional Surveyors who are registered as members of KAPS.

This small group of professionals dedicate many personal hours of their time to keeping track of potential issues that may affect surveying, polling the membership for input of opinions, organizing means of addressing those potential issues found, organizing events to create an atmosphere of comradery within our profession, raising money for scholarships in order to encourage future generations of surveyors, interacting with and developing friendly relations with other organizations within Kentucky that work directly

with Land Surveyors, and developing programs such as fall seminars and the annual conference.

To all of those individuals, I say a very heartfelt Thank You. Thank you for helping guide me through what was required of me during my term as President. Thank you for all of the fall seminars I attended. Thank you for the great conference events I have attended. Thank you for the scholarship I received many, many, many years ago. Thank you for working with the Board of Licensure on so many subjects that most of us have taken for granted. In short, thank you for taking an active interest in and caring about the future of Land Surveying.

Finally, I would be remiss if I did not extend a giant THANK YOU to Molly Forrest. Not only would I have had no clue as to where I needed to be during certain events, but even that I needed to be somewhere if not for Molly keeping everyone up to date with her excellent management skills.

Jonathan L. Payne, PLS 2014 KAPS President ilp@mchsi.com

## KAPS Welcomes New Members

**Audubon Chapter** Johnny Brinkworth James Smale

**Barren River Chapter** 

Adam Tow

Jimmy Cleveland Clav Colev **Daniel Collier** Lucas Slavey

Falls of the Ohio Chapter

Arthur Jones Guy Murdoch Tyler Pence Walter Rives

**Highlands Chapter** Terry Stallard

**Jackson Purchase Chapter** James Combs

**Northern KY Chapter** 

Stephen Crist Randall Long Chad Swearingen

**Southeast Chapter** 

Jody Dagley Larry King



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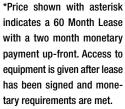


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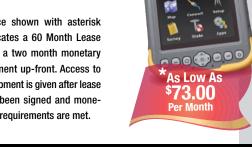
Can use FC-500 Controller or Tesla w/Rover

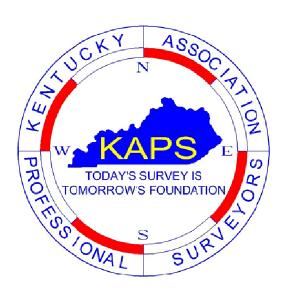
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## 2015 KAPS CONFERENCE

February 26 - 28, 2015

## Broadening Your Horizons

Holiday Inn University Plaza
Bowling Green, KY

Register online at www.kaps1.com



### **KAPS**

### **Kentucky Association of Professional Surveyors**

124 Walnut Street Frankfort, Kentucky 40601 Ph.; 800.866.3029, Fax: 502.695.2667

Email: mforrest@kaps1.com

Dear Surveyors, Vendors, and Guests:

I would like to extend an invitation for you to join KAPS at our annual conference to be held on Thursday, February 26, 2015 through Saturday, February 28, 2015. Early registration will begin on Wednesday with seminars being held on Thursday, Friday and Saturday. For 2015, we will be in Bowling Green, Kentucky at the renovated Holiday Inn University Plaza.

I encourage each of you to take advantage of this opportunity to join in fellowship with your colleagues from across the state. Attending the conference offers an excellent opportunity to discuss surveying with a group of people who understand and experience your same concerns about the profession.

Beyond the interaction with fellow surveyors, you will also have the opportunity to attend continuing professional development courses covering subjects such as: Easements, Riparian Boundaries, Drafting Property Descriptions, Relative Positional Accuracy, Boundary Disputes and more. We have a great set of presenters arranged for the year and they have really put together some useful information for those in attendance to learn from.

If you plan to attend the conference and are not currently a KAPS member, please look into joining. KAPS presents a very strong voice for the entire surveying profession within Kentucky. Your membership in KAPS also includes membership in the National Society of Professional Surveyors. With this dual membership, you can stayed informed and voice your opinion concerning issues affecting surveying locally and nationally.

I extend a huge THANK YOU to Molly Forrest and the KAPS conference committee for arranging the conference. The work performed behind the scenes in order to put on a conference is IMMENSE. I did not fully appreciate how much effort it takes to get everything lined up until I participated (in a small amount) with arrangements.

I hope you will join me at our 2015 conference themed "Broadening Your Horizons." I am confident that there is an excellent opportunity to accomplish the stated goal with the seminars we have lined up.

Professionally,

Jon Payne

2014 KAPS President



Broadening
Your Horizons

Holiday Inn University Plaza • 1021 Wilkinson Trace • Bowling Green, KY 42103

Reserve your room today by calling 270.745.0088 or 1.800.HOLIDAY

mention the Kentucky Association of Professional Surveyors to receive a discount rate

KAPS discounted rate ends Monday, January 26, 2015

## Schedule at a Glance

### Wednesday, February 25

6:00 P.M. 2014 KAPS Board of

Directors Meeting

7:00 - 9:00 P.M. Exhibitor Set-up

### Thursday, February 26

7:00 A.M. Registration Opens

7:00 A.M. - 6:00 P.M. \*EXHIBITS OPEN\*

8:00 A.M. - 12:00 P.M. Technical Sessions

12:00 P.M. - 2:00 P.M. Luncheon & Installation

of Officers

1:00 P.M. - 6:00 P.M. Technical Sessions

5:00 P.M. - 6:30 P.M. Exhibitors Reception &

Door prizes

6:30 P.M. - 7:30 P.M. 2015 KAPS Board of

**Directors Meeting** 

### Friday, February 27

7:00 A.M. Registration Opens

7:00 A.M. - 3:00 P.M. \*EXHIBITS OPEN\*

8:00 A.M. - 12:00 P.M. Technical Sessions

12:00 P.M. - 2:00 P.M. Luncheon & General

Membership Meeting

2:00 P.M. - 6:00 P.M. Technical Sessions

6:30 P.M. - 7:00 P.M. Photo Sessions

7:00 P.M. - 9:30 P.M. Awards Banquet

## Saturday, February 28

7:00 A.M. Past-President's Breakfast

8:00 A.M. - 5:00 P.M. Technical Sessions including

PS & FS Exam Review

12:00 P.M. - 1:00 P.M. Lunch Included

Register for the conference online at http://:www.kaps1.com



## 2015 KAPS CONFERENCE REGISTRATION FORM

CANCELLATION REFUNDS: 30 days prior to event: 100% • 10-29 days prior to event: 50% • 0-9 days prior to event: 0%

## \*MUST MARK THE TECHNICAL SESSIONS YOU WISH TO ATTEND ON REVERSE OR ONLINE REGISTRATION IS AVAILABLE AT www.kaps1.com

No printed handouts will be distributed. All available course material will be available at www.kaps1.com.

NAME FOR BAD	GE	
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S? Yes No	(circle one; *form w	ill be emailed)
MEMBER	NON-MEMBER	AMOUNT
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\$195.00	\$295.00	
\$170.00	\$170.00	
\$125.00	\$125.00	
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### \*CLEARLY MARK THE TECHNICAL SESSIONS YOU WISH TO ATTEND

## OR REGISTER ONLINE AT www.kaps1.com

No printed handouts will be distributed. All available course material will be available at www.kaps1.com.

<b>Thursday, February 26, 2015</b> □ 8:00 A.M 6:00 P.M.	Understanding & Resolving Conflicts in Survey Evidence 8 PDH; Course #pending; Presenter - Barry Savage
<b>Thursday, February 26, 2015</b> □ 8:00 A.M 6:00 P.M.	Easements in a 3-D World 8 PDH; Course #pending; Presenter - Kristopher M. Kline, PLS, GSI
<b>Thursday, February 26, 2015</b> □ 8:00 A.M 11:00 A.M.	Elevation Certificates & the Community Rating Systems: What to Know & Expect; 3 PDH; Course #14-07-051; Presenter - Christina Groves, CFM
Thursday, February 26, 2015 □ 8:00 A.M 10:00 A.M.	Online Mapping Data Sources Not pre-approved; Presenter - Jonathan Payne, PLS
<b>Thursday, February 26, 2015</b> □ 10:00 A.M 12:00 P.M.	A or F? Do You Earn a Passing Grade When it Comes to Risk Management for Land Surveyors?; 2 PDH; Course #14-10-060; Presenter - Holly Gill
<b>Thursday, February 26, 2015</b> □ 2:00 P.M 4:00 P.M.	Professionals Working Together in a Geomatics Sand Box 2 PDH; Course #14-10-058; Presenter - Dempsey Miracle, PLS, Brandon Lewis
<b>Thursday, February 26, 2015</b> □ 4:00 P.M 6:00 P.M.	Licensure Board Panel Discussion 2 PDH; Course #14-10-059; Presenter - various BOL members and staff
<b>Thursday, February 26, 2015</b> □ 2:00 P.M 3:00 P.M.	Poison Ivy Dangers: Preventable Occupational Health Risks 1 PDH; Course #pending; Presenter - Heidi Sisler
<b>Thursday, February 26, 2015</b> □ 3:00 P.M 6:00 P.M.	Mapping & Surveying at TVA 3 PDH; Course #pending; Presenter - Dallas Sluss
Friday, February 27, 2015 ☐ 8:00 A.M 6:00 P.M.	Relative Positional Precision Explained in Everyday Language 8 PDH; Course #14-10-056; Presenter - Todd Horton, PE, PLS
Friday, February 27, 2015 ☐ 8:00 A.M 6:00 P.M.	Know When to Hold 'Em & Other Procedural Pitfalls 8 PDH; Course #pending; Presenter - Kristopher M. Kline, PLS, GSI
Friday, February 27, 2015 ☐ 8:00 A.M 12:00 P.M.	Drafting Survey Descriptions 4 PDH; Course #14-07-047; Presenter - Andrew Kellie, PLS
Friday, February 27, 2015 ☐ 8:00 A.M 12:00 P.M.	Kentucky-Tennessee State Line, Methods and History 4 PDH; Course #pending; Presenter - Barry Savage
Friday, February 27, 2015 ☐ 2:00 P.M 6:00 P.M.	Retracing Riparian Boundaries 4 PDH; Course #14-10-054; Presenter - Andrew Kellie, PLS
Friday, February 27, 2015 ☐ 2:00 P.M 4:00 P.M.	Law of Easements: Legal Issues & Practical Considerations in Kentucky 2 PDH; Course #pending; Presenter - Christopher C. Wischer
Friday, February 27, 2015  □ 4:00 P.M 6:00 P.M.	Basic Microsoft Excel 2007 2 PDH; Course #13-10-022; Presenter - Debra Clayborn, CRCM, CFIRS
<b>Saturday, February 28, 2015</b> □ 8:00 A.M 5:00 P.M.	Ethics, Code of Conduct, & Standards of Practice 8 PDH; Course #14-07-048; Presenter - Jonathan Payne, PLS
<b>Saturday, February 28, 2015</b> □ 8:00 A.M 5:00 P.M.	PS (LS) Exam Review Presenter - George Armstrong; James Decker, PS; Carol Morman, PE, PS
<b>Saturday, February 28, 2015</b> □ 8:00 A.M 5:00 P.M.	FS (LSIT) Exam Review Presenter - George Armstrong; James Decker, PS; Carol Morman, PE, PS

## Broadening Your Horizons THURSDAY SESSIONS

No printed handouts will be distributed. All available course material will be available at www.kaps1.com.

#### Understanding & Resolving Conflicts in Survey Evidence

8:00 A.M. - 6:00 P.M.; 8 PDH; Course #pending; Presenter - Barry Savage

Instruction will include: perspectives on a surveyor's responsibilities; what courts expect from us; descriptions; evidence basics; research; verbal evidence; measurements as evidence; conflicting survey evidence; fences as evidence.

#### Easements in a 3-D World

8:00 A.M. - 6:00 P.M.; 8 PDH; Course #pending; Presenter - Kristopher M. Kline, PLS, GSI

This course considers three major topics: (a) Property rights associated with mining interests and other below-ground activities (b) natural easements and other issues relating to control of surface flow water (c) Railroad rights of way and easements. Specific issues considered include: rights that may be granted relating to mining interests; implied rights associated with subterranean estates; consideration of types of materials included by use of the term "minerals"; differences between rights to surface and subsurface water; limits placed on methods of extraction; railroad rights of way – easement vs. fee simple; legal principles applicable to control of surface water: the Common Enemy Doctrine, Civil Law Rule, and Common Sense Doctrine; later modifications applied to these original principles and recent developments in case law; surface flow versus flood waters; right of access/abutters rights; vertical extent of property rights. Knowledge of these topics may suggest new business opportunities for surveyors and will improve their ability to aid clients and attorneys when preparing for possible litigation.

#### Elevation Certificates & the Community Rating Systems: What to Know & Expect

8:00 A.M. - 11:00 A.M.; 3 PDH; Course #14-07-051; Presenter - Christina Groves, CRS Specialist

Communities participating in the Community Rating System (CRS) are subject to higher standards of review and regulation in order to receive discounts on flood insurance premiums paid into the NFIP. The 2013 CRS Coordinator's manual changed Elevation Certificate (EC) requirements considerably for CRS communities. As a result, communities and surveyors should pay special attention to ensure completed ECs comply with the new requirements. This workshop will provide an opportunity to see and discuss what is required of CRS participating communities on the Finished Construction EC.

#### Online Mapping Data Sources

8:00 A.M. - 10:00 A.M.; Not pre-approved; Presenters - Jonathan Payne, PLS

An exploration of online sources of information for aerial photography, topographic quad sheets, digital elevation models, county road maps, and other spatial data.

#### A or F? Do You Earn a Passing Grade When it Comes to Risk Management for Land Surveyors?

10:00 A.M. - 12:00 P.M.; 2 PDH; Course #14-10-060; Presenter - Holly Gill

This program strives to bring awareness of common risk factors affecting land surveyors and to review firsthand how these factors play out in actual claim case studies. The program also underscores important factors of the professional liability policy and addresses insurance requirements to achieve certificate compliance.

#### Professionals Working Together in a Geomatics Sand Box

2:00 P.M. - 4:00 P.M.; 2 PDH; Course #14-10-058; Presenters - Dempsey Miracle, PLS & Brandon Lewis

Instruction will include: what is the geomatics sandbox; different professions with often the same goals; common misconceptions; converging in the geomatics sandbox; accuracy vs. precision; real world examples; Q&A.

#### Licensure Board Panel Discussion

4:00 P.M. - 6:00 P.M.; 2 PDH; Course #14-10-059; Presenter - various BOL members and staff

Questions and answer panel with various members and staff of the Kentucky Board of Licensure for Engineers and Land Surveyors.

#### Poison Ivy Dangers: Preventable Occupational Health Risks

2:00 P.M. - 3:00 P.M.; 1 PDH; Course #pending; Presenter - Heidi Sisler

Instruction will include: plant identification; symptoms; decontamination of skin and equipment; treatment options; treatment with Zanfel Laboratories, Inc.

#### Mapping & Surveying at TVA

3:00 P.M. - 6:00 P.M.; 3 PDH; Course #pending; Presenter - Dallas Sluss

Instruction will include: The History of Surveying at TVA (general history; the early years and war effort; survey methods and project types; surveying records and computations; property maps; current project examples; contact information); Surveying in the Footsteps of TVA (GIS data and hard copy records; coordinates; vertical datum; retracement guidelines; retracement examples; transmission line easements).

## Broadening Your Horizons FRIDAY SESSIONS

No printed handouts will be distributed. All available course material will be available at www.kaps1.com.

#### Relative Positional Precision Explained in Everyday Language

#### 8:00 A.M. - 6:00 P.M.; 8 PDH; Course #14-10-056; Presenter - Todd Horton, PE, PLS

Instruction will include: ALTA/ACSM standards and Kentucky Standards of Practice; precision & accuracy (define and contrast); error types (blunder, systematic, random); error computations; impact of equipment precision specifications; strength of figure; redundancy, field methods for compliance with standards; least square adjustments (basic concepts); demonstration project; interpreting results; reporting compliance with ALTA/ASCM standards and Kentucky Standards of Practice.

#### Know When to Hold 'Em & Other Procedural Pitfalls

#### 8:00 A.M. - 6:00 P.M.; 8 PDH; Course #pending; Presenter - Kristopher M. Kline, PLS, GSI

At the core of our profession is the monument, and most of our boundary retracement decisions revolve around the choice to hold an existing monument, set a new monument, or choose between multiple existing monuments. Part one of this seminar is an in-depth discussion of principles that form the basis of the critical decision that we make every day, including the rules of construction, sufficiency of research, and tips for analysis of each type of property corner. Part two will concentrate on Adverse Possession, easements, and quasi easements (state specific), along with the characteristics associated with each principle. Knowledge of these topics will help the surveyor to improve his research, search, and analysis techniques (both office and field) so as to better serve the client in cases where disputes may arise. State specific case law will be cited where appropriate.

#### **Drafting Survey Descriptions**

#### 8:00 A.M. - 12:00 P.M.; 4 PDH; Course #14-07-047; Presenter - Andrew Kellie, PLS

Instruction will include: basic principles of a basic part of survey practice; descriptions known & loved (bring your favorite to the session); types; parts; drafting in the King's (!) English; descriptions to examine & criticize; (documents provided, discussion expected, conclusions on your own); on and beyond (the basics); highways and geometry; riparian boundaries; how I would do it—writing survey descriptions with friends.

#### Kentucky-Tennessee State Line, Methods and History

#### 8:00 A.M. - 12:00 P.M.; 4 PDH; Course #pending; Presenter - Barry Savage

Instruction will include: State Boundaries in the South in the 18th Century; Survey Methods of the 18th Century (determining declination by polaris at elongation, determining declination by amplitudes, quadrants; octants; sextant, artificial horizons); determining latitude (using the suns altitude at LAN, refraction, parallax, dip, index error; semi-diameter); spherical trigonometry (law of sines, law of cosines for sides, law of cosines for angles, spherical right triangles, examples); deflection of the vertical (theory, formulas, DE-FELC99); line history and methods (Walker line history, prior surveys and calculation methods, Jackson Purchase, Steel and Looney Line, Matthews Line, Munsell and Bright Line, Nance and Duncan Line, Cox and Peeples Line, Middleton Offset); miscellaneous state line problems.

#### Retracing Riparian Boundaries

#### 2:00 P.M. - 6:00 P.M.; 4 PDH; Course #14-10-054; Presenter - Andrew Kellie, PLS

Instruction will include: basics of riparian & littoral boundaries (precise descriptions, public & private interests; general principles, Kentucky interpretations, action at Madrid Bend in Fulton County, the 400 acres of the Adams family); locating and describing the moveable boundary (navigability, meanders, accretion, avulsion, water in the river, field location of the thread, platting & describing riparian boundaries); the trinity, the levee, and the Cadiz Corporation.

#### Law of Easements: Legal Issues & Practical Considerations in Kentucky

#### 2:00 P.M. - 4:00 P.M.; 2 PDH; Course #pending; Presenter - Christopher C. Wischer

Instruction will include: types of easements; creation of easements; termination of easements; title insurance issues; easements as exceptions to coverage; easements as insurable interests; eminent domain process.

#### Basic Microsoft Excel 2007

#### 4:00 P.M. - 6:00 P.M.; 2 PDH; Course #13-10-022; Presenter - Debra A. Clayborn

Instruction will include basic terminology; navigation of tool bar; build a basic spreadsheet; using formulas; short cuts and tricks.

## Broadening Your Horizons SATURDAY SESSIONS

No printed handouts will be distributed. All available course material will be available at www.kaps1.com.

#### Ethics, Code of Conduct, & Standards of Practice

8:00 A.M. - 5:00 P.M.; 8 PDH; Course #14-07-048; Presenter - Jonathan Payne, PLS

This course will fulfill the mandatory 4 hours CPD but give 8 total credit hours (must attend the whole 8 hours). Instruction will include concepts; ethics; code of professional practice and conduct; standards of practice for professional land surveyors; minimum standards of practice for mortgage inspections in Kentucky

#### PS (LS) Exam Review

8:00 A.M. - 5:00 P.M.; Presenter - George Armstrong; James Decker, PS; Carol Morman, PE, PS

Comprehensive review for the PS exam.

#### FS (LSIT) Exam Review

8:00 A.M. - 5:00 P.M.; Presenter - George Armstrong; James Decker, PS; Carol Morman, PE, PS

Comprehensive review for the FS exam.



#### KEYNOTE SPEAKER THURSDAY, FEBRUARY 26 LUNCHEON



Wendell Strode
Executive Director of the
National Corvette Museum

"Since 1953 the Corvette has been America's Sports Car. The National Corvette Museum was established as a 501(c)3 not-for-profit foundation with a mission of celebrating the invention of the Corvette; preserving its past, present and future; and educating the public about Corvette.

Corvette enthusiasts from all over the world kindly and lovingly refer to the NCM as their home ... Their Mecca."

-Wendell Strode, NCM Executive Director

## KAPS PRESENTS TOM MABE



## Friday evening, February 27, at the Conference Banquet

Everyone from Paul Harvey to the New York Times has proclaimed comedian Tom Mabe a 'Comic Superhero' for tackling pesky telemarketers, junk email, bad customer service, and other topics that irk us all.

## Broadening Your Horizons MEET THE SPEAKERS

George Armstrong is a licensed professional surveyor and professional engineer in Ohio and Kentucky. He has been a full-time instructor of Civil Engineering Technology at Cincinnati State Technical and Community College since 1994; and Associate Adjunct Professor of Civil Engineering at the University of Cincinnati College of Engineering since 2006. He teaches numerous courses in Surveying including Boundary, Construction and Geodetic Control. He has taught in traditional and on-line format as well as in seminars and professional development training. Additionally, George continues to own and operate a part-time surveying and engineering business to stay current in the profession. His honors and awards include: The High Score earner in Ohio for the October 1988 Professional Surveyor Exam, The Young Engineer of the Year for the 1993 Southwest Ohio Chapter of OSPS, and the House-Bruckmann excellence in Teaching award at Cincinnati State College 2001.

**Debra A. Clayborn, CRCM, CFIRS** has worked in the banking industry since 1972 and in the compliance field since 1997. She is currently the Vice President, Head of Compliance at Independence Bank of Kentucky in Owensboro, KY. Debbie graduated Magna Cum Laude in Business Administration from the University of Southern Indiana. In performing her responsibilities, Debbie has spent numerous hours building and perfecting Excel spreadsheets and is proficient in the basic functions of Microsoft Excel.

James Decker, PS is a full-time civil engineering technology and land surveying professor for Cincinnati State Technical and Community College. He is a graduate of Cincinnati State's Civil Engineering Technology Surveying program and the University of Cincinnati's Civil Engineering program. Jim is licensed as a Professional Land Surveyor in Ohio. To stay current in the profession and to remain an expert in computer technology, Jim works as a consultant on CAD projects and is a botany specialist for the State of Ohio. In addition to academics, Jim served as the Cincinnati State PLSO faculty advisor.

Holly L. Gill, Professional Liability Agent, Walker & Associates Insurance has been working with design and land survey firms for the past 13 years. Serving as an independent insurance agent, she provides the insurance products design and land survey firms need such as professional liability practice coverage, specific project or client coverage, and property & casualty coverage. She also assists her clients with detailed insurability contract review, training, and negotiation services. Holly has both developed and delivered continuing education seminars for both professional organizations, such as ISPLS, AIA Indiana and ASCE Indiana, as well as for individual design and land survey firms. Holly is a member of AJE ProNet, an international network of insurance agents specializing in professional liability and loss prevention fordesign professionals. In past years, she has served on the Professional Liability Agents Network Education Committee and the ACEC Indiana Education Committee. Holly is a graduate of Eastern Illinois University with a Bachelor's Degree in English and Secondary Education.

Christina Groves, CFM works with communities in FEMA Regions 4, 5, 6 and 7 to join, maintain and improve their participation in the Community Rating System. Specifically working with communities in the States of Arkansas, Indiana, Iowa, Kansas, Kentucky, Missouri, Nebraska and Tennessee to improve their commitment to a sound floodplain management program through participation in the CRS.

Todd W. Horton, PE, PLS is an associate professor and the director of five construction degree programs at Parkland College in Champaign, Illinois, where he has taught surveying and construction management since 1998. In 2001, in partnership with local surveying professionals, he launched a Surveying Technology associate degree program at Parkland College. In addition to teaching, he has presented continuing education seminars in 23 states. Mr. Horton has over 20 years experience in planning, design, construction, surveying and maintenance of civil engineering projects including commercial structures, residential subdivisions, airfields, utility systems and highways. He has acquired significant public sector experience with the US Air Force and the Illinois Department of Transportation as well as private sector experience with engineering and surveying firms in central Illinois. Mr. Horton is the faculty advisor of the Parkland College Student Chapter of the Illinois Professional Land Surveyors Association. He received his B.S. Civil Engineering degree from the University of Illinois at Urbana-Champaign.

Andrew C. Kellie, PLS is Professor Emeritus of Engineering Technology at Murray State University. He is licensed surveyor in Kentucky and Virginia and has worked as a surveyor in private practice. In addition to Murray State, Professor Kellie has taught surveying at the Department of Civil Engineering, Virginia Tech, Blacksburg, Virginia, and the School of Engineering, University of Southern Queensland, Australia. His research interests are in the areas of 3D mapping and modeling.

Kristopher M. Kline, PLS, GSI is president of 2Point, Inc., has a four-year degree (class of '84) in general science from Bridgewater College located in Bridgewater, Va. and he has been involved in the surveying profession since graduation. Kris became licensed in North Carolina in1991 (P.L.S. L - 3374). He is a 1999 graduate of the North Carolina Society of Surveyors (N.C.S.S.) Institute, a three-year continuing education program that for many years drew national attention for the quality of its curriculum and instructors. Kris served for 3 years as Chairman of the N.C.S.S. Education Committee. He has appeared as an expert witness in court on numerous occasions, and has spent the last several years in the hard school of boundary dispute (an informal class taught the hard way with no fixed curriculum, location, or schedule!) Kris has been presenting continuing education courses in North Carolina since 2001 on various legal aspects of land surveying, including Boundary Retracement, Standards of Practice, Adverse Possession, Easements, and Intent of the Parties. More recently, he has been invited to teach classes in Colorado, Indiana, New Jersey, Ohio, South Carolina, Vermont, Virginia, West Virginia, and Washington D.C. Kris now writes a bi-monthly column for "Point of Beginning", a professional trade journal for land surveyors. He often spends his spare time researching material for upcoming articles and classes. In August 2013, Kris pub-

## Broadening Your Horizons MEET THE SPEAKERS

lished his first book "Rooted in Stone: the Development of Adverse Possession in 20 Eastern States and the District of Columbia." This text considers adverse possession and prescriptive easements from their inception to the present day.

Brandon Lewis is the GIS Manager at Vaughn & Melton Consulting Engineers. He is a graduate of Centre College, a certified GIS Professional (GISP) and has 10 years of experience at V&M. Brandon works on various GIS and surveying projects throughout the Southeast, including Kentucky, Tennessee and the Carolinas, specializing in relational databases, spatial analysis, GIS & IT integration, and systems management. Recent projects have included storm water management, adventure tourism trail mapping and planning, asset management, and property boundaries. Brandon has been involved with the Pine Mountain State Scenic Trail, Wolf Creek Dam Mapping, FEMA Flood Map Modernization, and various work with state and local agencies. He is a member of both KAMP and LIRIS A

Dempsey Miracle, PLS joined Vaughn & Melton in 1986 and currently serves as Surveying Supervisor for V&M's Middlesboro office. Mr. Miracle has worked at all levels of the surveying field. Beginning at Rodman and worked his way to his current position as survey manager. Mr. Miracle has had specialty training in advanced GPS processing through Leica, and has processed several large projects for the corps of engineers including a county wide control densification in Knox County and Photo Control networks along Cumberland and Tennessee Rivers. He has worked with the City of Pineville KY on several projects which included correction of city boundaries and additions to the city by way of annexations His latest Project was the mapping and recovery of 76 miles of the Cheatham Lake Boundary For the Corps of Engineers, and photo control for the mapping of an additional 100 miles of contour defined boundary.

Carol Morman, PE, PS is a full-time civil engineering technology and land surveying professor for Cincinnati State Technical and Community College. She is a graduate of Cincinnati State's Civil Engineering Technology Surveying program, Purdue University's dual degree program in Civil Engineering and Land Surveying, and a graduate of the Masters of Science program in Civil Engineering - Geomatics (Land Surveying) at California State University, Fresno. Carol is licensed as a Professional Land Surveyor in Indiana and Ohio and as a Professional Engineer in Indiana, Ohio and Kentucky. To stay current in the profession, Carol also owns and operates CLM Surveying and Engineering in Lawrenceburg, Indiana. In addition to academics and industry, Carol is an active member of ISPLS and ASCE. She served as member, secretary, vice chairman and chairman of the Dearborn County Plan Commission from 1994 to 2003, was the 2004 Vice President and 2005, 2006, 2008 and 2009 President of the Greenville Treaty Chapter of ISPLS, a member of the ISPLS Board of Directors in 2009, 2010 Chairman of the ISPLS Education Committee and is currently serving as ISPLS Education Committee member. Carol is also the Faculty Advisor for the Cincinnati State ASCE Student Chapter and Program Chair for Civil Engineering Technologies.

Jonathan Payne, PLS has served as a full time lecturer at Murray State University's Jesse D. Jones College of Science, Engineering, and Technology within the recently formed Institute of Engineering since 2013. He teaches the surveying courses within the various engineering technology programs available. Courses taught by Jonathan include Plane Surveying, Geodetic Surveying, Route Surveying, Boundary Surveying, and Special Projects. In order to remain rooted in the profession, Jonathan also continues his private practice specializing in Boundary Surveying; which has been in Cadiz Kentucky since 2000. Jonathan holds a Master's of Science degree in Engineering Technology (1995) and a Bachelor of Science degree in Civil Engineering Technology (1994) from Murray State University. In past years, he has served KAPS at a chapter level as the Jackson Purchase Chapter's vice-chair and chair. At the state level, Jonathan has served as KAPS President Elect (2013) and KAPS President (2014) and has also volunteered on the conference committee and the BOL nominating committee.

Barry Savage is currently manager of the Survey Products group at the Tennessee Valley Authority (TVA) in Chattanooga, Tennessee. Prior to his service at TVA he was in private survey practice for 10 years specializing in dispute resolution and expert witness services. He has surveyed several disputed state boundaries to resolve jurisdictional conflicts. Mr. Savage served as a survey consultant for the 1996 Olympic Games held in Atlanta, Georgia. Mr. Savage is an adjunct professor at Cleveland State Community College where he developed the survey curriculum and teaches courses in boundary law, geodesy, GPS, GIS, and surveying fundamentals. Through his work at the college he served on a research team in conjunction with the Thoreau Institute at Walden Woods analyzing and retracing the historical surveys of Henry David Thoreau. He has published several articles on the subject. Some of this research and writing is in the new book "Thoreau The Land Surveyor" by Patrick Chura. Mr. Savage teaches exam review and continuing education seminars at various state and local conferences across the country. He has served as director of production for Cook and Spencer Consultants in Chattanooga. Mr. Savage was senior designer at Psi Consulting Engineers where he worked on structural and environmental design. He also was a survey supervisor at Whitfield Engineering in Dalton, Georgia. Mr. Savage received his B.S. degree, with high honors, in Civil Engineering Technology from the University of Tennessee at Martin.

Heidi Sisler, Customer Service, Zanfel Laboratories, Inc. has spent 10+ years of her professional career associated with the pharmaceutical industry. She began as a pharmacy technician in the family's independent pharmacy. This experience lead her to hold a position with a privately held pharmaceutical company, where she gleaned insights into the multiple facets of pharmacy, specializing in patient care and pharmacy program coordination and implementation.

## Broadening Your Horizons MEET THE SPEAKERS

Dallas Sluss is a 1992 graduate of Virginia Tech with a Bachelor's of Science in Civil Engineering with an emphasis in Land Surveying, Dallas joined TVA after graduation already with several years experience in land surveying thanks to the cooperative education program. After joining TVA he guided TVA into utilizing Digital Terrain Models and the GPS system. In 1995 he became the Supervisor of the Office Survey Department where he directed all surveying projects. Currently, he is the Surveying & Engineering Program Manager for the Transmission Line Engineering Department, where he oversees a staff of 42 individuals carrying out a variety of land surveying tasks to support the mission of all programs and projects conducted by TVA. Dallas has published articles and presented papers on various topics relevant to the surveying community.

Christopher C. Wischer is a partner at Bamberger, Foreman, Oswald and Hahn, LLP in Evansville, Indiana where he is the chair of the firms Commercial Real Estate Section. He graduated from Transylvania University with the B.A. in Finance and Computer Science in 1993. He graduated from the University of Kentucky College of Law in 1996. He was admitted to the Kentucky Bar Association in 1996 and the Indiana Bar Association in 1997. He is also admitted to practice in the United States Circuit Court, Seventh Circuit, and the United States Districts Courts in Kentucky and Indiana. His practice areas include commercial real estate development, land use and zoning, right of way acquisition, and municipal law. He is currently the Vice President of the Indiana Chapter of the International Right of Way Association. He has given numerous presentations and speeches on a wide variety of real estate and government topics, most recently presenting a seminar on ALTA surveys to the Evansville Bar Association.



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**B. David Cox, Executive Director**Kentucky State Board of Licensure for Professional Engineers and Land Surveyors Kentucky Engineering Center, 160 DEMOCRAT DRIVE Frankfort, Kentucky 40601

## he Board

#### **Board Members**

At the January 9, 2015 board meeting, officers were elected as follows for calendar year 2015: Chair - Sam Williams, PE, PLS Vice Chair - Ken Sperry, PE Secretary Treasurer – Bob Fentress, PLS

Chair Williams has appointed the following committee chairs for calendar year 2015: Engineering Committee – Ken Sperry, PE Surveying Committee – Jim Riney, PE, PS Continuing Professional Development Committee - Bob Fentress, PLS

#### **Engineering and Surveying Exams**

The results of the October 2014 principles & practice exams are below. The second percentage shown in each line below is the national average.

Principles & Practice of Engineering First Time Takers 63%; 68% Repeaters 34%; 33% Total 57%; 56%

Principles & Practice of Surveying First Time Takers 60%; 71% No Repeaters: 45% Total 60%; 62%

The results of the calendar year 2014 fundamentals exams administered via Computer Based Testing are below. The second percentage shown in each line below is the national average.

Fundamentals of Engineering First Time Takers 81%; 76% Repeaters 44%; 36% Total 73%; 69%

Fundamentals of Surveying First Time Takers 63%; 52% Repeaters 67%; 18% Total 64%; 42%

#### **Enforcement Statistics 2014**

Open Cases January 1, 2014 - 72 Cases Opened - 75 (43 engineering; 28 surveying; 4 both) Cases Completed - 72 Open Cases December 31, 2014 - 75 Closed with no disciplinary action - 28% Admonishments, warnings (not disciplinary actions) - 20% Other (fines, probation, etc.) - 37% Licenses inactive/retired (Continuing Education issues) - 4% Suspensions - 7%

#### **ENFORCEMENT ACTIONS SUMMARY**

For The Period October 10, 2014 – January 9, 2015

#### ERIC RAY MEADE

Revocations - 4%

In November 2014, the Board received information that in 2007 and again in 2013, Eric Ray Meade, an unlicensed person, solicited and performed land surveying services on property in Mayking, Letcher County, Kentucky. A brief investigation confirmed that in each instance, Meade had represented to his client that he was working under the supervision of a licensed land surveyor. In fact, the licensed surveyors were completely unaware of Meade's activities. Mr. Meade acknowledged that his actions constitute the unlicensed practice of professional land surveying. To resolve this matter, Mr. Meade entered into an Agreed Injunction which bars Mr. Meade from further unlicensed practice. No penalty was assessed for the current violation; however the Agreed Injunction calls for a fine of \$1000 and seven (7) days in jail for any future violation. The Agreed Injunction was entered in the Franklin Circuit Court on January 7, 2015.

ROBERT KELLY RICHARD, PLS In April 2014, Mr. Robert Kelly Richard, PLS of Georgetown entered into a Consent Decree in settlement of a disciplinary action against him.

Among other things, that agreement called for Mr. Richard to attend classes on the surveying Standards of Practice and Dendrology or Tree Identification. Mr. Richard failed to attend the classes within the time specified in the Consent Decree. In accordance with the terms of the Consent Decree and after being notified of the default, Mr. Richard's professional land surveying license was suspended. The suspension became effective October 24, 2014. Mr. Richard subsequently attended the classes and on November 17, 2014 the suspension was lifted. Mr. Richard's license was suspended again on November 24, 2014 because Mr. Richard failed to submit a quarterly projects list. Mr. Richard subsequently submitted the list and the suspension was lifted on December 1, 2014.

#### LOREN ROBERT PURDOM, PLS

In October 2013, Mr. Loren Robert Purdom, PLS of Wheelersburg, Ohio entered into a Consent Decree in settlement of a disciplinary action against him. Among other things, that agreement called for Mr. Purdom to complete a New Mexico State University online course in professional ethics within six months. Mr. Purdom failed to complete the course as agreed. On May 28, 2014, in accordance with the terms of the Consent Decree and after being notified of the default, Mr. Purdom's land surveying license was suspended. Under the terms of the agreement, Mr. Purdom had an additional six months to cure the default by completing the course. Six months elapsed and the Board did not receive confirmation that Mr. Purdom had completed the class. Therefore, in accordance with the terms of the Consent Decree and after notifying Mr. Purdom, the board revoked Mr. Purdom's land surveying license. The revocation became effective December 23, 2014.

#### RICKY DALE GORTNEY, PLS

In May 2014, Ricky Dale Gortney, a former Transportation Cabinet employee from Elkhorn City, entered into a settlement agreement with the Executive Branch Ethics Commission wherein Mr. Gortney admitted that he committed violations of the Executive Branch Code of Ethics, codified at KRS 11A.020(1)(b),(c),and (d), KRS 11A.020(2), and KRS 11A.040(2). Specifically, Mr. Gortney admitted that while employed by the Transportation Cabinet, he sold a house trailer owned by the

Cabinet, to his brother-in-law for \$2000, and kept the proceeds of the sale. Upon review, it was determined that Mr. Gortney's actions constitute violations of KRS 322.180(12) and the Code of Professional Practice and Conduct, 201 KAR 18:142(9). To resolve the matter, the Board accepted the surrender of Mr. Gortney's professional land surveyor's license, effective January 9, 2015.

#### JAMES ARTHUR CARTER, PE

Mr. James Arthur Carter, PE of Mount Washington was disciplined for providing engineering services through the business entity Housing Consultants, Inc. after the firm's business entity permit had lapsed; and for providing engineering services through the business entity James A. Carter, PE, PSC without a business entity permit. The matter was resolved through a Consent Decree wherein Mr. Carter acknowledged that the acts described above constitute violations of KRS 322.060. Mr. Carter agreed to pay a \$1000 fine and to promptly file an application for a business entity permit for James A. Carter, PE, PSC. Additionally, Mr. Carter agreed not to serve as the engineer in responsible charge at any other firm while the permit for James A. Carter, PE, PSC is in force. The Board approved the Consent Decree on January 9, 2015.

#### ALOYSIUS F. WOLCZYK, PE

Mr. Aloysius F. Wolczyk, PE of Louisville was disciplined for providing engineering services through the business entity WESC, LLC after the firm's business entity permit had lapsed, in violation of KRS 322.060, and for failing to disclose disciplinary actions taken against him in other states when renewing his Kentucky professional engineering license, in violation of KRS 322.180(1). The matter was resolved through a Consent Decree wherein Mr. Wolczyk acknowledged the violations and agreed to the following sanctions and conditions (1) written Reprimand, (2) \$2000 fine, (3) Mr. Wolczyk shall apply for reinstatement of the business entity permit for WESC, LLC, (4) Mr. Wolczyk shall complete a 60pdh online course in Engineering Ethics, and (5) Mr. Wolczyk shall provide documentation of compliance with continuing professional development regulations for calendar years 2010 through 2013. The Board approved the Consent Decree on January 9, 2015.

## 2015 Board of Directors

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#### **Beverly Smith, Board Member**

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beverly.smith@insightbb.com

#### John Walz, PhD **Board Member**

University of Kentucky Lexington, KY 40506 (859) 257-1687 john.walz@uky.edu

## 2015 Calendar of Events

April 17	PE, STR Vertical, PS Exams	Louisville KY
April 18	STR Horizontal Exam	Louisville KY
April 23	Committee Meetings	Frankfort KY
April 24	Board Meeting	Frankfort KY
May 14-16	NCEES Southern Zone Meeting	Phoenix AZ
July 23	Committee Meetings	Frankfort KY
July 24	Board Meeting	Frankfort KY
August 19-22	NCEES Annual Meeting	Williamsburg VA
October 8	Committee Meetings	Frankfort KY
October 9	Board Meeting	Frankfort KY
October 30	PE, STR Vertical, PS Exams	Louisville KY
October 31	STR Horizontal Exam	Louisville KY

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Kyle Elliott, PLS

Kyle Elliott is a licensed land surveyor employed by the Kentucky Board of Licensure for Professional Engineers and Land Surveyor in Frankfort. He can be reached at <a href="mailto:kyleelliott@bellsouth.net">kyleelliott@bellsouth.net</a>

## Meanderings

It is, as a rule, far more important how men pursue their occupation than what the occupation is which they select.<sup>1</sup>

Louis D. Brandeis

A few years ago, one of my surveying mentors, a former business partner and a friend, authored an article for the Interior Angle entitled, "Where are the Ethics?" In it he described a particularly offensive example of a design professional gone bad. The designer had fabricated a less than truthful document and then copied and pasted the signature of another professional onto the document. The author of the article described it as an example of the design professional placing his client's interests above the interests of the public. On the surface I agree, but I also think the problem goes a little deeper into the character of the designer. I believe he placed his own interests, getting the project and the fees, above the interests of the public, and other professionals.

So, where are the ethics? But first, what are ethics?

According to the *Oxford Dictionary* ethics are moral principles that govern a person's or group's behavior. Aristotle believed that ethical behavior required the good of the individual to be subordinate to the good of the city-state<sup>2</sup>. Ethics refers to well-founded standards of right and wrong that prescribe what humans ought to do<sup>3</sup>. Philosopher Michael Davis argues that "professional ethics is as much a part of what members of a profession know – and others do not – as their 'technical knowledge'". He believes that professional ethics belongs neither to common sense nor to philosophy but to the profession in question.<sup>4</sup>

Luckily, we have our own Code of Professional Practice and Conduct (201 KAR 18:142) to guide us. And it is a code that was written by members of the profession(s). I remember a dedicated group of Board of Licensure members, the Board's attorney, and members from the professional societies working together for many lengthy meetings to come up with our current Code of Conduct. A key concept in that Code is professional responsibility, which is a type of moral responsibility arising from the special knowledge we possess in our role as professionals. Moreover, that professional responsibility is stated succinctly in the paramount clause, "The engineer or land surveyor shall conduct his or her practice in order to protect the public health, safety and welfare." An identical or similar clause can be found in most professional association's oaths. KAPS has a similar clause as the first listed objective in the KAPS Bylaws.

The ethics are all around us. The Kentucky Board licenses approximately 13,000 engineers and surveyors. In my more than fifteen years with the Board, I have met many of those licensees, and overwhelmingly, engineers and surveyors want to conduct themselves in an ethical manner. Our Code of Conduct, as well as their own moral compass, guides their behavior. And that is the real purpose of the Code; it is intended to guide the behavior of licensees in their day to day practice.

However, there are those who enter the professions with a view toward enhancing their own personal interests in some manner. Those few will never be deterred by our Code of Conduct or the ideal of their own interests being subordinate to the good of the public. Their main

and only interest will be securing the job and the fees as the design professional did in the article mentioned above. Their flaw goes much deeper into their moral character; it is a flaw of personal interest above community, society and other professionals. But my own personal experiences tell me those type of individuals are the minority.

Louis Brandeis, from the opening quote, later went on to be an Associate Justice on the United States Supreme Court, serving from 1916 until 1939. He was a defender of our freedoms of speech; almost singlehandedly created our right of privacy, and was a champion for the underprivileged. His legal philosophies continue to influence the Court and our society today. Brandeis believed his own commentary; how men pursue their occupation is what is important. From what I encounter, most surveyors pursue their occupation professionally and ethically.

(Endnotes)

- 1 Brandeis, Louis D. *The Opportunity in the Law* (1905) and in *Business A Profession*. Small, Maynam & Co., 1914).
- 2 Aristotle. *Ethics* (Nicomachean).
- 3 Velasquez, Manual, et al. *What is Ethics?* Issues in Ethics, IIE, Vol. 1, No. 1 (Fall 1987).
- Davis, Michael. *Teaching Ethics Across the Engineering Curriculum*. Presentation to the International Conference on Ethics in Engineering and Computer Science (March, 1999).









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## Bud Salyer, Esq.

## A Lesson in Retracement

Some surveyors puzzle me. One cannot become licensed without knowing that monuments take precedence over bearings and distances. Yet, it is probably impossible to find a subdivision over 30 years old that doesn't have a least two pins at one corner, the notorious pincushion corner.

I believe this results from a surveyor not understanding what he knows about the practice of surveying. It takes only a brief explanation of how and why monuments are created and what significance they have in a retracement.

In 1658, the Virginia Legislature addressed the problem of boundary conflicts and enacted a statute concerning the duty of surveyors. When surveying a tract, the law directed

"... that all land surveyed shall be at the surveying thereof plainly marked and bounded for all persons to take notice of that none may by ignorance of the bounds entrench upon another's right."

In 1661, another statute required that every four years, every owner would have his land processioned so all the monuments could be replaced or freshened. In 1705, the legislature required

".....That each surveyor, when he makes a survey of any land, shall see that the land so by him surveyed, be plainly bounded, either by natural bounds, or by marking trees, or making other artificial boundaries." In an 1808 case, the Kentucky Court of Appeals stated "... the moment the marking of the lines and corners is completed, it is a survey made in fact, and in estimation of law; the plat and certificate is only evidence of making of the survey, containing a description

of its boundaries; to be recorded for the purpose of perpetuating the evidence thereof..."

There are two kinds of surveys: original surveys and retracement surveys.

Original surveys create new tracts by marking the corners/lines. Yet, the man who goes out into his field and marks off a 100-foot square and drives a tobacco stick at each corner so he can make a deed to his daughter so she can install her single-wide has performed an original survey as surely as the PLS who sets up his instrument and drives re-rod into the ground and writes a description that is accurate to 1:10,000,000. The points where the tobacco sticks were driven shall forever be the corners, even a hundred years after the sticks have disappeared.

Retracement surveys attempt to locate the marks put on the ground by whomever put them there, surveyor or layman. If the actual marks cannot be found, then the task is to determine where the marks were originally located. The ONLY purpose of bearings and distances is to facilitate finding the marks on the ground. For example, it is helpful to know that the next mark is in a northwest direction, rather than north-east, and that it is about 340 feet away. Bearings and distances can be used to replace a corner is after every other approved method has failed to determine the original location of the mark. In fact, the courts have made it clear that the "engineer's method"—intersecting bearings and distances is the last acceptable method. That will be addressed in another bed time story.

When a PLS asked to mark a line so an owner can erect a fence, why does he drive another pin when the *existing* pin (presumably the original pin) is three inches from where his instrument tells him the pin "ought to be? He

does it because he thinks there is an error in the location of the pin. After all, he has looked at the bearings and distances on the plat, they close perfectly, and when he follows those calls, he does not find the corner where it "ought to be".

Original corners are without error. I repeat: <u>original corners are without error</u>.

Consider: A surveyor and developer lay out a subdivision on paper. The closure on the calls for every lot is 1:100,000. They get it approved by planning and zoning. At this point, no survey has been performed. The actual survey is performed when the surveyor returns to the field and starts driving pins at the corners; making his marks. His aim is to drive them so precisely that a retracing surveyor will find that there is a closure of 1:100,000. We know that's never gonna happen.

Of course, if the surveyor goes out the next week, checks a measurement and sees that it does not agree with the plat, he is free to move the pin. This he can do as often as he wants until the first lot is sold. At that point, every pin in the subdivision, "right or wrong", becomes the corners for the rest of eternity and moving a pin to "correct it" probably becomes an illegal act.

Unless the retracing surveyor has some credible information suggesting that the original pin has been moved, his duty is to "accept" the pin and let his own measured bearings and distances reflect where the pins are, rather than driving pins where he thinks the bearings and distances indicate "they should have been."

If the actual original mark can be identified without doubt, there is nothing more to consider. Obviously, a question can always arise as to the authenticity of the mark. Is this the same steel rod/stone/black oak/car axle/fence post/ditch that is named in the deed? It is a question of fact that will be discussed in another article. In the meantime, I urge you to put less emphasis on the mathematics of surveying and more on the physical marks on the ground.





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#### Carlson Software Tip of the Day... Wiped Out Property Corner Symbols

#### Problem:

Problem: Lines or polylines of a boundary show up inside your open property corner symbols. See image 1 for an example:

The additional problem is that, if you trim the lines inside the symbols to make it look cleaner, you're actually modifying the length of property lines so the distances from corner-to-corner are no longer accurate.

Here's an alternative: You can download a modified set of Carlson's point symbols that include a "wipeout" entity that hides the lines behind/underneath the open symbols instead of trimming them and changing the length of the lines. Using the new set of symbols, the same property lines and symbols look like those in image 2 (notice that the distances of linework are unchanged):

Want to know how to do this? Visit www.thatcadgirl.com/news to learn more.

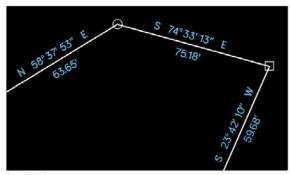


Image 1

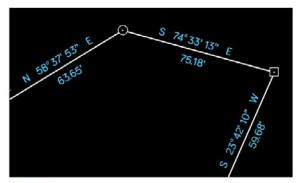


Image 2

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## Jeffery N. Lucas, PLS, Esq. A New Practice Model

This article first appeared in the April 2014 POB Magazine.

When anybody can be an expert measurer and the perception is that a GIS map is just as good as a survey, then the land surveying profession as we currently know it will cease to exist.

Even if technology doesn't put traditional land surveying out of business (and it will because there is already an app for that), we are fast approaching critical mass where our numbers will get so low we will no longer be able to support what little need there currently is for licensed land surveyors. We all know that nature abhors a vacuum and the void will be filled quickly by GIS.

Last month I discussed how the land surveying profession needs to move away from the current measurement-centric rubric and embrace our role as the stewards of the nation's property boundaries, solving people's problems as opposed to just finding them. This is what surveyors used to do before we decided that our job was to be expert measurers. This is the only reason we are licensed and regulated, to protect people's property rights vis-à-vis protection of the nation's property boundaries. It's also an exclusive niche that should be garnering reasonable if not substantial fees. 1 But society doesn't even know that this is what our job is 2 (and too many surveyors don't know it either), so how are they going to miss us when we are gone?

Again, when I talk about traditional surveying I'm talking about the only aspect of surveying that requires licensure and that is our relationship with property boundaries and the associated property rights. No other aspect of surveying requires licensure and all other aspects of surveying are currently being performed by

others. Even the location of property lines is currently being determined in paper-space by unlicensed GIS operatives. The determination of property lines in dirt-space and the rendering of a well-reasoned opinion on the only question we've got, the location question, has to be embraced before the need for such services becomes irrelevant or a new regime takes over that function as well.

Currently, nobody hires a surveyor to survey property because they are afraid of what they might get. They have already heard that no two land surveyors can ever agree on a corner or that the land surveyor might tell them that their fences are in the wrong place and that they have to move them. Moving fences will be a much more expensive proposition than the cost of the survey. Landowners know that as a result of the survey they could end up in a lawsuit with their next-door neighbor, or worse, an actual shooting war. Just tell Farmer Brown that he doesn't own what he thinks he owns or that the next-door neighbor is in possession of some of his property and the possibilities for trouble are endless.

This is one of the reasons we can't make money surveying property, nobody sees any value in it and some actually may look at a survey as a potential liability. This coupled with the fact that we allow anyone with a license to survey property, competent to do so or not. We license the minimally competent, allow them to go out and mess around with people's property rights so long as they can run a closure and measure with precision. Let's not forget they also bid the job at the lowest price because it's not too hard to slap some math on the ground. Finding where the property lines have already been established on the ground is an irrelevant consideration and, besides, who can spend that kind of time on a boundary stakeout.3

These are some of the problems with the profession, so what are some solutions? As I said last month and on other occasions in this column, we could easily regulate a fix by simply differentiating between good practice and bad. But we don't have that kind of time. We would need for about half the profession to die off to make any meaningful regulatory changes because some of the worst offenders actually sit on our regulatory boards and run our professional organizations. And the future crop of surveyors may not be any better.

From my limited review of what the schools are teaching geomatics students and from my conversations with some of these graduates and teachers from all across the country, the schools aren't teaching them anything about the boundary establishment doctrines and how to apply them, resolving boundary problems and avoiding disputes, how to be an expert evaluator of evidence as opposed to simply being expert measurers, alternative dispute resolution techniques, or drafting agreements and contracts. These are some of the tools the practitioner will need moving forward in order to change the dynamic from expert measurer to problem solver. Or, as I put it last month ensuring the American Dream.

If however, we could change the practice model, get Innovators and Early Adopters onboard with the new model, we could possibly create a tipping point that would get the Early Majority, Late Majority and even the Laggards <sup>4</sup> to eventually come over.

The practice model would look something like what I'm describing below and it doesn't matter if you are an expert measuring deed-staker or fence-line surveyor extraordinaire, you will end up with the same result and in most cases you will either have found no problem or resolved any problem you think you may have found. In the worst case you leave them no better or no worse than they were before you arrived on the scene—no harm no foul.

Our mantra moving forward as the stewards of the nation's property boundaries has to be "maintaining the status quo." In the vast majority of boundary surveying projects I have worked on over a 38-year career, there has been a status quo relative to the property boundaries when I arrived onsite. Of course there are exceptions to the general rule. Notwithstanding the exceptions, if after the surveyor has performed a survey of a piece of property to the point where the surveyor is ready to make a decision, if that decision maintains the status quo then simply complete the survey and deliver the map along with an invoice.

On the other hand, if the surveyor feels, for whatever reason, that as a result of the survey the status quo cannot be maintained, the surveyor must first consult all of the boundary establishment doctrines to see if any can be applied to maintain the status quo. If not, then the surveyor discusses the situation with his client, first, and explains to the client why a new iron needs to be driven in the ground or the status quo otherwise needs to be upset (and please don't say because your technical standard are going to make you do it, or worse, the computer told you so). Since this will necessarily involve some other landowner(s), next the surveyor must have a conference with all affected parties and explain to all of them why the status quo cannot be maintained.

There will be three possible results of this conference: (1) the parties agree with the surveyor, (2) the parties disagree and want to maintain the current status quo, or (3) the parties tell the surveyor to go away. If either (1) or (2) is chosen, the surveyor's job then becomes helping the parties memorialize their agreement no matter how much the surveyors wants to hold that fence or drive in yet another iron. If (3) is chosen, then the surveyor goes away. My suspicion is that if surveyors had to do this, no matter their stripe, nine times out of ten the status quo would be maintained by the surveyor without any need for a conference.

A ninety-percent success rate would be a phenomenal improvement over the current practice model and would go a very long way towards re-establishing our credibility with the general landowning public. They might actually trust us again with their property interests like they did in Hodgman's day.

In an old settled country, the principal work of the surveyor is to retrace old boundary lines, find old corners, and relocate them when lost. In performing this duty, he exercises, to a certain extent, judicial functions. He usually takes the place of both judge and jury, and acting as arbiter between adjoining proprietors, decides both the law and the facts in regard to their boundary lines. He does this not because of any right or authority he may possess, but because the interested parties voluntarily submit their differences to him as an expert in such matters, preferring to abide by his decisions rather than go to law about it.5

We need some tools in our hands to make this practice model work. As earlier intimated, we need mad-skills in alternative dispute resolution and negotiation techniques. How you approach your client with the information you want to share could spell the difference between successfully resolving the perceived issue and starting the war. We need to know all of the boundary establishment doctrines, and how and when they apply. We need standard contracts for performing property boundary surveys, like the architects have, with contingency and termination clauses. When they tell you to go away, that doesn't mean you don't get paid.

In addition, and maybe the most difficult tool to obtain, surveyors will need the ability to prepare a few legal documents for people like deeds and boundary line agreements. In most jurisdictions preparation of deeds, especially, is considered the practice of the law. But if we want to return to our former role as problem solvers, the role we played before we became expert measurers, we will need these tools and know how to use them.

There is only one thing that is certain in all of this, if we do nothing then nothing will happen—well—besides the inevitable. If you are happy with the direction the land surveying profession is heading in, then perhaps I haven't done a good enough job of pointing out the problems. But I doubt that. So if you don't see the problem then, in all likelihood, you are the problem. For the love of this profession you might want to reconsider your perspective before it's too late.

#### (Endnotes)

- I have discussed at length in earlier columns how we have turned a niche service into a commodity to be sold at the lowest price and the simple solution to that problem, but I don't have the space to repeat all of that now.
- 2 It is a sad reality that during my entire career in the land surveying profession (nearly 40 years), we have not been able to put together a simple message that can be articulated in a 30-second radio ad that conveys what we are all about.
- 3 If you ever find yourself "staking out" a boundary while ostensibly performing a retracement survey, then you are part of the problem.
- These are terms I referred to last month from Malcolm Gladwell's book, "The Tipping Point, How Little Things Can Make a Big Difference," 2002, Back Bay Books/Little, Brown and Company, New York.
- 5 Hodgman, F., M.S., C.E., *A Manual of Land Surveying*, The F. Hodgman Co., Climax, Mich. 1913, at Page 289.

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#### \*Descriptions taken from the KAPS By-Laws / Article III / Section 2 Classifications and Qualifications

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