

# 66<sup>th</sup> Annual Meeting

OF THE  
**MISSOURI SOCIETY OF  
PROFESSIONAL SURVEYORS**

**SEPTEMBER 28-30, 2023**

OASIS HOTEL & CONVENTION CENTER  
2546 N. GLENSTONE AVENUE  
SPRINGFIELD, MISSOURI

## **PRESENTERS**

David Doyle, Base 9 Geodetic Consulting Services, Chief Geodetic Surveyor, NGS (retired)

Dr. Richard L. Elgin, PS, PE, Archer-Elgin Engineering & Surveying

Scott Faenger, PLS, Missouri Department of Agriculture-Land Survey Program

Dennis J. Mouland, PLS, Witness Tree Consulting

Jess Moss, PLS, Missouri Department of Agriculture-Land Survey Program

Matt Thomas, PLS, Director of Survey, Premier Design Group

Jacque Walters, Missouri Department of Agriculture-Land Survey Program

# THURSDAY, SEPTEMBER 28, 2023

- 7:00 am Registration and Breakfast
- 8:00 – 5:00 pm Hospitality Room Open (Purchase required for spouses attending meals.)
- 8:00 – 10:00 am ***To Accept or Not to Accept...That is the Question***  
At the very heart of why the states decided to regulate, test, and license surveyors is one very key and complicated decision...”should I accept this monument or reject it?” As measuring technology has changed, we have seen many new “paradigms” introduced by professional surveyors to answer this question. This course looks at several of these illogical paradigms and points us to the proper legal analysis required for this. And it might surprise you how broad that legal solution is. If you’re expecting a formula that will answer this question, you will be disappointed. The question is one of a legal sense, but we keep trying to answer it with math. This course will expand your view of this critical analysis which appears in every boundary survey you will ever do.  
**Dennis J. Mouland, PLS, Witness Tree Consulting**
- 10:00 – 10:15 am Break
- 10:15 – 12:00 noon ***To Accept or Not to Accept...That is the Question*** continued
- 12:00 – 1:00 pm Luncheon
- 12:00 noon Golf Tournament at *Bill & Payne Stewart Golf Course*
- 1:00 – 3:00 pm ***To Accept or Not to Accept...That is the Question*** continued
- 3:00 – 3:15 pm Break
- 3:15 – 5:30 pm ***To Accept or Not to Accept...That is the Question*** continued
- 5:30 – 7:30 pm Exhibitor Set-Up

# FRIDAY, SEPTEMBER 29, 2023

- 7:00 am Registration and Breakfast with Exhibitors
- 8:00 – 5:00 pm Hospitality Room Open (Purchase required for spouses attending meals.)
- 8:00 – 10:00 am **Business Meeting and Election of Officers and Directors** (Approved for 2.0 PDU’s)
- 10:00 – 10:30 am Break with Exhibitors
- 10:30 – 12:00 noon ***Writing Boundary Descriptions***  
Many title and boundary issues can be laid at the feet of the poorly prepared boundary description crafted by the poorly prepared individual who wrote the description, those poorly prepared individuals being lawyers, realtors, engineers, those in the title industry and.....Professional Surveyors. The boundary description must succinctly, clearly, with specificity and certainty describe only one possible tract of land that neither causes nor creates gores or overlaps with its adjoiners. This high standard requires one trained in the art of crafting the boundary description...whether by metes and bounds, a “strip” description, by reference, or by some proportional part. This presentation offers rules of construction and

suggestions for preparing a boundary description. It is a look at Dick's forthcoming book "*Writing Boundary Descriptions...A Primer.*"

**Dr. Richard L. Elgin, PS, PE, Archer-Elgin Engineering & Surveying**

12:00 – 1:30 pm Awards Luncheon

1:30 – 3:30 pm ***Charm School for Professional Surveyors***

A half day course on how our appearance, attitudes, and communication skills impact our profession as a whole, and our own business success. Most surveyors got into the profession because it is dealing with evidence, math, and science; they don't necessarily like people! But people send their kids to finishing schools or something similar to help them learn to function in a civilized society. The PLS's find themselves cast into needing similar skills to relate to government officials, clients, adjoiners, professional association meetings, and even their competitors. At times humorous, at other times very pointed, this course will challenge your world view of how you impact the rest of the profession as well as yourself.

**Dennis J. Mouland, PLS, Witness Tree Consulting**

3:30 – 4:00 pm Break with Exhibitors

4:00 – 5:30 pm ***Charm School for Surveyors continued***

5:30 – 6:30 pm Reception with Exhibitors

# SATURDAY, SEPTEMBER 30, 2023

7:00 am Registration and Breakfast with Exhibitors

8:00 – 5:00 pm Hospitality Room Open (Purchase required for spouses attending meals.)

8:00 – 10:00 am **CONCURRENT SESSIONS**

## ***Osage Treaty Line***

We will be talking about the Osage Treaty Line and its significance to Missouri history as the first Western boundary of the state prior to statehood, and the men that ran it.

**Matthew (Matt) P. Thomas, PLS, Director of Survey, Premier Design Group**

## ***Missouri Standards for Property Boundary Surveys***

The Missouri Standards for Property Boundary Surveys are the rules, promulgated jointly by the Missouri Department of Agriculture Office of the State Land Surveyor and the Missouri Board for Architects, Professional Engineers, Professional Land Surveyors, and Landscape Architects, that regulate the practice of land surveying. We will discuss what has changed since the 2017 overhaul. Corner Document Registration: The corner document is the instrument used by the Land Survey Program to perpetuate the corners of the United States Public Land Survey System. We will walk you through the steps of filing a corner document start to finish. The National Geodetic Survey is replacing the existing "Missouri Coordinate System of 1983" with a new state plane coordinate system, State Plane Coordinate System of 2202 (SPCS2022). We will discuss the new coordinate system and our "next steps" in implementing the new system. The Land Survey Index and the Corner Master Index are the repositories search engines for your research. We will provide you with the tools you need for maneuvering the Indexes to your advantage. You will learn tips on the fastest way to find a plat, survey, subdivision or GLO Plats & Field Notes. There will also be training on the recently combined Land Survey & Corner Master Shopping Cart.

**Scott Faenger, PLS, Missouri Department of Agriculture-Land Survey Program; Jess Moss, PLS, Missouri Department of Agriculture-Land Survey Program; Jacquie Walters, Missouri Department of Agriculture-Land Survey Program**

10:00 – 10:30 am Break with Exhibitors

10:30 – 12:30 pm ***Practical Geodesy for Practical Surveyors***

This presentation details the historical and contemporary developments of the horizontal and vertical geodetic datums of the United States including: the North American Datum, North American Datum of 1927 (NAD 27), North American Datum of 1983 (NAD 83), the National Geodetic Vertical Datum of 1929 (NGVD 29) and the North American Vertical Datum of 1988 (NAVD 88), as well as the accepted global system, the International Terrestrial Reference Frame (ITRF). The session will highlight significant changes in measurement and positioning technologies and their impact on the development of reference ellipsoids, geoid models, and contemporary high accuracy reference frame enhancements. The presentation is designed to provide a foundation for further discussions that will focus on the rationale for national reference system changes by the National Geodetic Survey now scheduled for 2025.

**David Doyle, Base 9 Geodetic Consulting Services, Chief Geodetic Surveyor, NGS (retired)**

12:30 – 1:30 pm Luncheon

1:30 – 2:30 pm ***Practical Geodesy for Practical Surveyors continued***

2:30 – 3:30 pm ***The United States State Plane Coordinate System***

This program discusses the foundational elements of the State Plane Coordinate System (SPC) including: fundamental geodetic concepts of the National Spatial Reference System (NSRS), relationship to the North American Datum of 1927 (NAD 27) and the North American Datum of 1983 (NAD83), enhancements to NAD 83 such as the High Accuracy Reference Network (HARN), the development of Continuously Operating Reference Stations (CORS), and the 2007 and 2011 national network adjustments, as they relate to changes in both SPC and the Universal Transverse Mercator (UTM) Grid. The program highlights the relationship of geodetic and grid coordinate systems, especially as it applies to distance and azimuth determination and orientation, and discusses some of the problems inherent in ground-based coordinate systems which are commonly referenced as “grid-to-ground.”

**David Doyle, Base 9 Geodetic Consulting Services, Chief Geodetic Surveyor, NGS (retired)**

3:30 – 3:45 pm Break

3:45 – 5:45 pm ***The United States State Plane Coordinate System continued***

# SPEAKERS

**Dave Doyle** joined the National Geodetic Survey in 1972, and held the position of chief geodetic surveyor at his retirement in January, 2013. He was responsible for the development, technical design and management of plans and programs that enhance the United States National Spatial Reference System. Mr. Doyle began his career as a geodetic surveyor in the U.S. Army in 1967, and served on numerous survey campaigns until completion of his military service in 1970. From 1970 until 1972, he worked for a private surveying company near Washington D.C. where he was responsible for completing boundary, topographic and engineering surveys while he pursued undergraduate studies in geodesy, cartography and mathematics at the George Washington University. During his time at NGS his experiences included all phases of geodetic triangulation, astronomic positioning, leveling, GPS data collection, data analysis, datum transformations, network adjustments, and data publication. Mr. Doyle's activities have included extensive efforts on the development and implementation of the North American Datum of 1983, the North American Vertical Datum of 1988, the Puerto Rico Vertical Datum of 2002 and the Virgin Islands Vertical Datum of 2009. He has also provided technical support to various countries for the modernization of national and regional geodetic reference systems in Caribbean and Central America, Africa, and the Pacific. Mr. Doyle's activities include 35 articles on geodesy and geodetic surveying in national and local surveying publications and he has conducted more than 420 workshops and seminars detailing the various aspects of geodesy and the National Spatial Reference System. Mr. Doyle continues to support education in geodesy for surveyors and others interested in high accuracy geospatial positioning by providing seminars at surveying and GIS conferences. Mr. Doyle is a past president of the American Association for Geodetic Surveying, a Fellow member of the American Congress on Surveying and Mapping and a charter member of the Geographic and Land Information Society and has served on the U.S. delegation to the International Federation of Surveyors. Mr. Doyle is also an active member of the American Association for Geodetic Surveying, the District of Columbia, Maryland, and Virginia professional surveyors' associations.

**Dr. Dick Elgin, PS, PE**, a second generation surveyor, Dr. Elgin was raised in St. James, Missouri and in his late parents' surveying business located in nearby Rolla. After high school Dick joined the Army, went through helicopter flight school, was made a Warrant Officer, and spent 1969 in Vietnam flying the Hughes OH6A Light Observation helicopter "LOH" and the ubiquitous UH-1 "Huey." He flew with the Americal Division and was decorated for service. He remains active in veterans affairs. Following the Army he received the BSCE and MSCE degrees from the

Missouri University of Science and Technology (S&T) and his PhD from the University of Arkansas. Leaving Arkansas, he joined the faculty of the Department of Civil Engineering at S&T as an Assistant Professor (1980-1984) and is now Adjunct Professor (retired), having taught surveying courses for many years. From 1984 until 2008 Dick was the owner and President of Elgin Surveying & Engineering, Inc. Semi-retired, Dick currently works for Archer-Elgin Engineering, Surveying and Architecture. He is a former member of the Missouri Board for Architects, Professional Engineers, Professional Land Surveyors and Professional Landscape Architects and a Past President of the Missouri Society of Professional Surveyors. Dick is the author of *The U.S. Public Land Survey System for Missouri and Riparian Boundaries for Arkansas*. Dick was Arkansas' surveying and mapping expert in a state riparian boundary dispute with Mississippi, decided by the U.S. Supreme Court. See *Arkansas v. Mississippi*, 471 U.S. 377 (1985).

**Scott Faenger, PLS**, is the Missouri State Land Surveyor and the Director of the Department of Agriculture's Land Survey Program located in Rolla, Missouri. He was introduced to the profession in the early 1990's when he answered a laborer want ad in Houston, Texas and spent that summer locating pipeline for a surveying /engineering firm. He went on to become a party chief with that company. He has also worked for land surveying firms in Arkansas and Missouri and has been with the Land Survey Program of Missouri for the past 20 years. Scott started with the Land Survey Program in 2003 as an instrument man with the Missouri's State Parks survey crew. In 2005, he transferred into the Land Survey Program's Cadastral Section and has been a part of numerous township wide, county line and state line projects that involve restoring or reestablishing corners of the United States Public Land Survey System. In February 2022, Scott became Missouri's 5<sup>th</sup> State Land Surveyor and the Director of the Land Survey Program which is a program responsible for preserving and protecting the United States public land survey corners and state and county boundary markers; providing the framework for all geodetic positioning activities in the state; collecting, preserving, and providing copies of land survey records; and disseminating regulations designed to assist in uniform and professional surveying methods and standards for the State of Missouri. Scott is currently a member of the Missouri Society of Professional Surveyor's Board of Directors and serves on the history committee and the public relations/sales committee. He resides in Rolla with his wife, Patty.

**Dennis J. Moulard, PLS**, formed Witness Tree Consulting in 2010 to re-engage the profession with the high-quality seminars and advice for which he had become famous. He formerly owned Cadastral Consulting, Inc.

# SPEAKERS

which he was required to sell when he took employment with the Bureau of Land Management (2005). That successful business was sold to Wendy Lathrop, PLS, CFM, who continues to offer a very wide variety of speakers and subjects. In mid-2011 Dennis resigned from BLM to return to his preferred activity: teaching about this great profession. Dennis is a registered professional surveyor in Arizona and Colorado. He recently retired his PLS numbers in California and New Mexico. He has a Bachelors of Arts degree in Organizational management., and has been in the surveying profession for over 50 years. His experience is evenly split between the private sector, including his own surveying firm, and federal government employment. Dennis has been an instructor and course manager for the BLM/Forest Service "Advanced Cadastral School" and more recently served as the National Cadastral Training Coordinator for BLM in Phoenix, AZ (2005 – 2011). In that position he developed the Certified Federal Surveyors Program for the Department of the Interior. In addition to having over 300 technical articles published in the U.S. and Canada, Dennis is a contributing author to the textbook *"The Surveying Handbook,"* and authored *"Ethics for the Professional Surveyor"* in 1996, now in its updated second edition (2020). He has conducted seminars for the surveying and real estate professions since 1984. To date, Dennis has instructed over 200,000 students on boundary survey subjects. Dennis has taught boundary law subjects in higher education institutions since 1995, and is currently a Surveying Instructor at the University of Wyoming.

**Jess Moss, PLS,** is the Geodetic Section Chief at the Missouri Department of Agriculture Land Survey Program. He earned a Bachelor of Science degree in Civil Engineering from Missouri Science & Technology. He stayed at Missouri S&T until 2003, studying Geotechnical Engineering. Jess has 19 years of surveying experience mainly in the private sector. In 2004 he began working at Cochran Engineering and Surveying in Union, Missouri. In May of 2008 he began working for Archer-Elgin Surveying and Engineering (a/k/a Elgin Surveying and Engineering) out of Rolla, Missouri. He became a licensed professional surveyor in 2008. During this time, he was involved in every facet of surveying including estimating, research, fieldwork, and deliverables for cadastral, topographic, control and construction stakeout surveys. In August of 2015, Jess accepted a position as a Project Surveyor for the Land Survey Program. In 2017 he became the Geodetic Coordinator for the state of Missouri. Jess is currently a member of the Missouri Society of Professional Surveyors.

**Matthew (Matt) P. Thomas, PLS,** is a sixth-generation Missourian and a second-generation Land Surveyor. He's currently the Director of Surveying for Premier Design Group in Wentzville, Missouri. Matt has been surveying full time since 1988, and obtained his Professional Registration

in 2000. He is the second of two sons in the surveying profession of Price S. Thomas, PLS 847. He first "surveyed" working for his father at the ripe old age of 10. That first experience convinced him that this is what he wanted to do for a career. He has worked for Boone County, the City of Columbia, Brush & Associates, Miller Associates, Crockett Engineering Consultants, and A Civil Group. He has also volunteered his professional services traveling to Africa with Engineering Ministries International on three separate occasions, visiting 8 different countries including Sierra Leone, Tanzania, Zambia, Zimbabwe, and South Africa. He has been a member of the Missouri Society of Professional Surveyors for over 20 years and is currently the chairperson of the History and Archives Committee and on the MSPS Board of Directors. Matt lives in Chamois, Missouri with his better-half, Carrie Hammond. He is also an active Mason and spends most of his time, away from work, trying to improve his property or helping around his community. In his spare time, which he admits is limited, Matt enjoys hunting, fishing, camping, floating, photography, geocaching, genealogy research, and spending time with his family.

**Jacque Walters** is the Repository Manager for the Missouri Department of Agriculture's Weights, Measures and Consumer Protection/Land Survey Program. After working at the HD Lee Factory in Lebanon, Mo. for over 20 years, she attended Rolla Technical Institute (RTI), studying Drafting and Design. While attending classes at RTI, she took an internship position for the Land Survey Program Repository Section. After graduating in May 2005, she continued her education at East Central College graduating in December 2005 with an Associate Degree in Drafting and Design. Jacque then furthered her education by taking surveying classes from State Technical College of Missouri and the University of Wyoming. In 2021, she assumed duties as the Repository Manager.

# REGISTRATION

Name \_\_\_\_\_ RLS # \_\_\_\_\_

Firm \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

## MSPS Member Convention Fees

<b>Member Registration - ALL 3 Days</b>	<b>\$375.00</b>	<b>\$ _____</b>
<b>Thursday Only (ALL DAY)</b>	<b>\$130.00</b>	<b>\$ _____</b>
Thursday AM/PM Only (circle one)	\$70.00	\$ _____
<b>Friday Only (ALL DAY)</b>	<b>\$130.00</b>	<b>\$ _____</b>
Friday AM/PM Only (circle one)	\$70.00	\$ _____
<b>Saturday Only (ALL DAY)</b>	<b>\$130.00</b>	<b>\$ _____</b>

## Non-Member

<b>Non Member Registration - ALL 3 Days</b>	<b>\$600.00</b>	<b>\$ _____</b>
<b>Thursday Only (ALL DAY)</b>	<b>\$220.00</b>	<b>\$ _____</b>
Thursday AM/PM Only (circle one)	\$120.00	\$ _____
<b>Friday Only (ALL DAY)</b>	<b>\$220.00</b>	<b>\$ _____</b>
Friday AM/PM Only (circle one)	\$120.00	\$ _____
<b>Saturday Only (ALL DAY)</b>	<b>\$220.00</b>	<b>\$ _____</b>

## Optional Activities

<b>Golf</b> (Includes Cart & Two Mulligans)	<b>\$85.00</b>	<b>\$ _____</b>
<b>Golf Sponsor</b>	\$100.00	\$ _____
<b>Hospitality Room</b> <input type="checkbox"/> Thursday <input type="checkbox"/> Friday <input type="checkbox"/> Saturday	FREE	
10% Surcharge for Late Registration (After 9/7/23)		\$ _____

**Grand Total \$ \_\_\_\_\_**

## Payment Information

Charge my Credit Card     Check Enclosed     Invoice my Organization

Credit Card # \_\_\_\_\_ Exp. Date \_\_\_\_\_ CVV Code \_\_\_\_\_

Send Registration Form with Payment to: MSPS, 722 E. Capitol Avenue, Jefferson City, MO 65101

Fax: 573-635-7823 \* Email: msp@missourisurveyor.org

Registration Deadline: September 7, 2022

## REGISTRATION INFORMATION

Registration fee is \$375 for Members and \$600 for Non-Members.

**The deadline for registrations is September 7, 2023.** After this date, a 10% processing fee will be added to all registration fees. The registration fee includes instructional materials, refreshment breaks, a luncheon and breakfast each day(3), and a cocktail reception.

To register, complete the attached registration form and mail, fax or email it with your payment to MSPS.

MSPS  
722 E. Capitol Avenue  
Jefferson City, MO 65101  
573-635-9446  
Fax: 573-635-7823  
mmps@missourisurveyor.org

## GOLF TOURNAMENT

The Golf Tournament benefitting the MSPS PAC Fund will be held at the Bill & Payne Stewart Golf Course.

You may pick your partner or a foursome, If you do not have a partner, one will be provided to you. Tee-time starts will begin at 12:00 noon in 10-minute intervals.

The cost is \$85 per person and includes 18 holes, a cart and two mulligans.

**Bill & Payne Stewart Golf Course**  
1825 E. Norton Road  
Springfield, MO 65803

## LOCATION & LODGING

Oasis Hotel & Convention Center in Springfield, Missouri, is the site for the 2023 Annual Meeting of MSPS.

A special room rate of \$114.00 has been extended until **August 28, 2023**. Reservations can be made by calling 417-866-5253 or 888-532-4338.

Parking is complimentary for all guests and attendees. Ask for the conference special rate and identify yourself with MSPS when making reservations.

**Oasis Hotel & Convention Center**  
2546 North Glenstone Avenue  
Springfield, MO 65803

## HOSPITALITY ROOM

A hospitality room will be provided on Thursday, Friday and Saturday from 8:00 am to 5:00 pm.

**Hospitality room registration is required if you are NOT registered as an attendee but will be attending meal functions.**

Please see the registration desk for hospitality room location. A map of the area will be available at the registration desk.

## CANCELLATION POLICY

MSPS reserves the right to cancel the program and return all fees in the event of insufficient registration. A participant may cancel a registration at any time, however **ALL REFUNDS are subject to a \$25 processing fee.**

**NO REFUNDS WILL BE GIVEN AFTER September 7, 2023.**

## CONTINUING EDUCATION

This course has been approved for 23 Professional Development Units (PDUs) by the Missouri Board of Architects, Professional Engineers, Professional Land Surveyors and Professional Landscape Architects (2.0 hours of Standards).

**PDU breakdown on days is as follows:**

**Thursday - 8.0 PDUs**

**Friday - 7.0 PDUs**

**Saturday - 8.0 PDUs**

## CONTACT INFORMATION

Contact Sandra Boeckman, MSPS Executive Director, at 573-635-9446 should you have any questions.

**Send all registration with payment to MSPS.**

MSPS  
722 E. Capitol Avenue  
Jefferson City, MO 65101  
Fax: 573-635-7823  
mmps@missourisurveyor.org

**Register is open online at [www.missourisurveyor.org](http://www.missourisurveyor.org).**