





Surveyors' Institute January 25–27, 2023

Kalahari Convention Center, Wisconsin Dells, Wis.



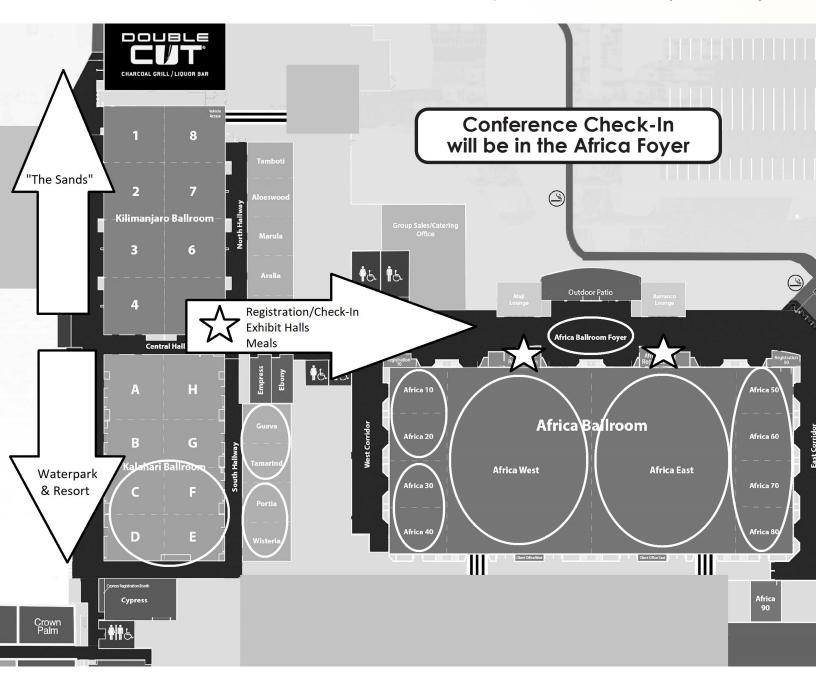




Continuing Education and Outreach University of Wisconsin-Stevens Point

Conference Map

1305 Kalahari Drive, Wisconsin Dells, WI 53965 | 1-877-KALAHARI (525-2427)



Rooms that will be used

• Guava-Tamarind

Kalahari Ballroom CDEF

Portia-Wisteria

- Africa 10-20
- Africa 30-40

- Africa 50-80
- Africa Ballroom

Mother's Room

The Kalahari has a dedicated Mother's Room located in the Africa Foyer. Ask at the check-in booth if you have additional questions.

Wednesday, January 25, 2023

8:30 a.m. - 10 a.m. **Check-In and Breakfast** Africa Foyer and Africa West 10 a.m. - 12:00 p.m. Breakout Sessions 1 - 6 Subdivision of Fractional Sections CDEF It's No Longer Needed; Can I Just Plat or Map Over It? Africa 50-80 Deeds Interpretation/Control Africa 30-40 4. Land Surveying as a Business and Mentoring Guava-Tamarind UAS LiDAR for the Survey Professional Africa 10-20 WSLS Young Surveyors' Network Meeting Portia 12:00 p.m. – 1:30 p.m. **Vendor Luncheon** - Africa West Presentation of Colors - Wisconsin Dells American Legion Post 187 1:30 p.m. - 3:10 p.m. Breakout Sessions 7 - 12 Past, Present and Future of E-recording Africa 30-40 Boundary Issues and Surveyors in Court CDEF Expert Witness & Litigation Africa 10-20 10. Ethics and the Surveyor's Role Africa 50-80 11. Vendor Session: The Civil 3D Database Portia Vendor Session: Feature Codes and Line Work Across the Board Guava-Tamarind 3:10 p.m. - 3:30 p.m. Break Breakout Sessions 13 - 18 3:30 p.m. - 4:30 p.m. The Difference Between a Survey and a Map 14. LiDAR vs. Photogrammetry and WISCORS **Network Updates** Africa 30-40 15. Buried Treasure Africa 10-20 Recent Law Changes that Affect Surveyors and WSLS's Role in Policy Making Africa 50-80 Vendor Session: 30 Billion Scan Points... Now What Do You Do? Guava-Tamarind Vendor Session: Modernizing your Field Experience with Android Operating System Portia 4:30 p.m. - 8:00 p.m. Open Bar 4:30 p.m. - 6:30 p.m. **Vendors' Social** Africa East 6:30 p.m. - 7:00 p.m. **Bucky's Challenge Check-In** 7:00 p.m. - 8:00 p.m. **Bucky's Challenge** Africa West

Thursday, January 26, 2023

7:30 a.m. – 8:20 a.m.	Check-In and Breakfast Africa Foyer and Africa West
8:20 a.m. – 10:00 a.m.	Breakout Sessions 19 – 24
19.	Ethics and Professional Courtesy Africa 30-40
20.	Existent, Obliterated and Lost PLSS Corners CDEF
21.	Wisconsin Roads Africa 50-80
22.	Aerial Mapping Targeting & Validation Africa 10-20
23.	Vendor Session: Check Whova App for Updates Guava-Tamarind
24.	Vendor Session: Check Whova App for Updates Portia
10:00 a.m. – 10:20 a.m.	Break

Schedule

Due to speaker illness, poor weather conditions, or other unforeseen circumstances, schedule may change without notification.

Thursday, January 26, 2023 (continued)

10:20 a.m. – 12:00 p.m.	Breakout Sessions 25 – 30
25.	Samuel Stinson Gannett and the WI/MN State Line Africa 10-20
26.	Datums: The Foundation of Geospatial Data Africa 30-40
27.	FEMA Related Surveys Africa 50-80
28.	Survey Research: Then and Now CDEF
29.	Vendor Session: Drone Technology Use Case Review & Best Practices for Achieving Desired Deliverables Guava-Tamarind
30.	Vendor Session: Managing Underground Assets with ESRI and RFID Portia
12:00 p.m. – 2:00 p.m.	Past Presidents' Lunch - Africa West
2:00 p.m. – 4:00 p.m.	Breakout Sessions 31 – 36
31.	The Ins and Outs of Access Easements CDEF
32.	The Center(s) of Section Africa 50-80
33.	There Has to be a Better Way! Africa 30-40
34.	Wisconsin Society of Land Surveyors Annual Meeting Africa 10-20
35.	Vendor Session: Check Whova App for Updates Guava-Tamarind
36.	Vendor Session: Check Whova App for Updates Portia
4:00 p.m.	Exhibit Hall Closes
5.00 ·· ·· · 5.45 ·· ··	
5:00 p.m. – 5:45 p.m.	Open Bar and Foundation Auction

Friday, January 27, 2023

7:30 a.m. – 8:20 a.m.	Check-In and Breakfast Africa Foyer and Africa West
8:20 a.m. – 10:00 p.m.	Breakout Sessions 37 – 42
37.	Condominiums 101: So You've Been Asked To Do a Condo Plat Africa 10-20
38.	"Following the Footsteps" Of a Different Kind Africa 30-40
39.	What Should I Do? I Can't Believe I Did Anything Wrong! CDEF
40.	The Quandary of Section 15: Just Over a Square Mile of Clues Africa 50-80
41.	Land Surveying Exam Review - Part 1 Guava – Tamarind
42.	Vendor Session: Check Whova App for Updates Portia
10:00 a.m. – 10:20 a.m.	Break
10:20 a.m. – 12:00 p.m.	Breakout Sessions 43 – 48
43.	Dealing With Coordinate "Drift" on a Multi-Year Corridor Project Africa 30-40
44.	Surveying the Past: Land Surveys, Archaeology, and Burial Sites CDEF
45.	Now What are the Courts and Legislatures Up To? Africa 50-80
46.	Wisconsin County Surveyors Association (WCSA) Annual Membership Meeting Africa 10-20
47.	Land Surveying Exam Review - Part 2 Guava – Tamarind
48.	Vendor Session: Check Whova App for Updates Portia
12:00 p.m.	Adjournment

Get **Whova** for 74th Annual Wisconsin Surveyors' Institute

Official Event App

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Professional Development Hours (PDHs)

PDHs are endorsed by the Wisconsin Society of Land Surveyors (WSLS). PDHs are earned in the workshops that you attend during the Institute, not on the workshops indicated when you registered. It is the individual's responsibility to report PDHs earned to their appropriate credential or licensing board. You will receive your official, personalized, printable PDH form via email after the Institute. Copies will be retained by UWSP and WSLS.

WSLS Membership

The Wisconsin Society of Land Surveyors wouldn't exist if it weren't for our members. Becoming a member of the WSLS will help to keep you up to date on issues, laws, and regulations that affect the profession of land surveying. Join us in our endeavors or promoting the land surveying profession, improving legislative awareness, and enhancing professionalism. We encourage our members to get involved, provide input, and be an active participant. For more information about WSLS, visit WSLS.org visit the WSLS booth in the exhibit hall.

Bucky's Challenge: WSLS Foundation FUNdraiser

Get set for the 16th annual big event, Wednesday evening, January 25, 2023. Bucky's Challenge is a trivia contest covering such topics as surveying (of course!), math, sports, television, movies, history, geography, and whatever else comes to mind. Join up to 24 teams of three to eight people, representing firms, vendors, local chapters, alumni from our technical colleges, county surveyors, and other groups that can find a sponsor. It's not too late to sign up! Please visit the WSLS Foundation Booth in the exhibit hall for more information.

Foundation Social Hour and Raffle

This entertaining event offers attendees a chance to bid on great items including cash prizes and many others. Items will be available for viewing throughout the Institute in the Foundation Booth. A cash bar will be available.

Evening Banquet and Scholarship Award Ceremony

On Thursday, join us for an evening of celebration, where we will honor exceptional surveyors. The Banquet and Awards will recognize new licenses, Map/Plat contest winners, Trig-Star winners, and other Annual Awards. Scholarship recipients will be recognized, and the 2022 President will pass the gavel to the new 2023 President. Tickets are required for entry and are included in the cost of the Full Institute. Banquet tickets will be collected at the door at the start of the Banquet on January 26, 2023. On-site banquet tickets may still be available for purchase! Please visit the UWSP Solutions Desk for more information.

WSLS YSN Annual Bowling Social

Young Surveyors, join the YSN for our annual bowling social event after the banquet on Thursday night! One game and shoe rental will be sponsored. Bowling not your thing? Come just to network with other young surveyors from around the state. See you there!



Conference Information

Exhibitors Welcome at the 74th Annual Surveyor's Institute!

Institute participants are professional land surveyors, survey technicians, and other interested persons from Wisconsin and the Midwest area. In 2022, we hosted over 1,000 registered participants and expect to have even more this year! For more information, please visit the conference website or contact Bob Beilfuss at (262) 250-8003 or flashthunder506easy@gmail. com. As we did in 2021 and 2022, we will be doing booth reservations online only. Booth reservation applications can be found on WSLS.org/Store.

Exhibit Hall Hours

Wednesday from 1 - 6:30 p.m. Thursday from 7 a.m. - 4 p.m.

ABSOLUTELY NO ADMISSION PRIOR TO 1 P.M. ON WEDNESDAY, JANUARY 25.

Exhibitors' Reception

Enjoy hors d'oeuvres while visiting with Institute exhibitors on Wednesday evening! A cash bar will be available.

Institute Handouts

Institute handouts can be accessed through a link found in the session descriptions in Whova. If you have difficulties accessing the handouts, please visit the UWSP Solutions Desk.

Name Tags

Please have your name tag visible for admittance into the sessions. You must wear your name tag to be served lunch on Wednesday and Thursday. Also, bartenders have been instructed not to serve anyone who does not have an Institute name tag at the Vendor Social or Bucky's Challenge.

Special Dietary Requests

UWSP Continuing Education works hard to communicate all special meal requests and allergies to the conference venue. Unfortunately, due to circumstances beyond our control, we cannot guarantee all special dietary needs can be met. If you have dietary needs (i.e., kosher, low salt, low carb, keto, etc.), you may wish to make alternative meal arrangements.





Check-In and Breakfast
8:30 – 10 a.m. | Africa Foyer and Africa West

Sessions 1 – 6 | 10 a.m. – Noon

Subdivision of Fractional Sections 2.4 PDHs | Category 1

CDEF

The methods for the subdivision of section can either seem simple or quite muddied when dealing with fractional, elongated, and anomalous sections. We will present examples and scenarios defining weighted mean bearings, fixed vs. not fixed, parenthetical distances, and elongated/shorten sections along with the history and laws behind those methods.

Ken Roy - Professional Land Surveyor, BLM Indian Land Surveyor, (BILS), Eastern States Office Bureau of Land Management, Bloomington, Min.

Travis Hand - Professional Land Surveyor, Eastern States Bureau of Land Management, Hayward, Wis.

Dave Radford - Chief Cadastral Surveyor and Deputy State Director for Geospatial Services, Eastern States Office Bureau of Land Management, Alexandria, Vir.

2) It's No Longer Needed; Can I Just Plat or Map Over It?

2.4 PDHs | Category 1

Africa 50-80

When plats/CSMs, lots, roads, easements, or other public dedications are no longer needed, what steps are required to get rid of them so new development can occur.

Renee Powers - Professional Land Surveyor, Supervisor, Plat Review, Department of Administration, State of Wisconsin, Madison, Wis.

3) Deeds Interpretation/Control

2.4 PDHs | Categories 1 or 3

Africa 30-40

In a re-tracement, the surveyor is frequently confronted with problems of resolving conflicts of evidence discovered when required to place a deed description on the ground. This session will address key issues with regard to Deed Interpretation and Control. Included will be the order of importance of conflicting title elements as well as important principles of Boundary Control.

John Matonich - Professional Land Surveyor, Retired President and CEO of Rowe Professional Services Company, Flint, Mich.

4) Land Surveying as a Business and Mentoring

2.4 PDHs | Category 3

Guava-Tamarind

Becoming your own boss can be very rewarding but it doesn't come without stress. When it comes to starting or operating a Land Surveying business you first need to understand the cost of doing business. This session is for the Surveying entrepreneur that is considering opening a business, new to business ownership, or the individual performing project management. We will discuss what the typical startup costs are, the importance of identifying your market niche, and the importance of developing a business plan. In addition, we will venture into the responsibilities of Professional Land Surveyors as mentors to the upcoming young surveyors.

Devon Vanden Heuvel - PLS, BS, MS, Civil Engineering Technology Instructor, Madison College, Madison, Wis.

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16th Annual Bucky's Challenge 2023 Trivia contest January 25, 2023 | 7 – 8 p.m. WSLS Surveyor's Institute

Sign up your team today! For more information contact Kevin Slottke, kevslottke@gmail.com

5) UAS LiDAR for the Survey Professional 2.4 PDHs | Category 3

Africa 10-20

This presentation will highlight a variety of applications for UAS Lidar for surveying and mapping as well as remote sensing professionals. Participants will learn to distinguish between photogrammetry and lidar, and the inherent limitations of a photogrammetry only approach to projects. Background on UAS lidar technology, best practices in data acquisition and limitations of the technology will be covered. In addition, the presenter will step through several UAS projects which utilized lidar highlighting the deliverables and expected accuracies for each of these projects.

Matt Vinopal - CP, CMS-Lidar, GISP Lidar Supervisor, Senior Professional-Geospatial Services, Ayres Associates, Madison, Wis. Ravi Soneja - CMT-Lidar

6) WSLS Young Surveyors' Network Meeting

2.4 PDHs | Categories 1 or 3

Portia

Calling all young surveyors to join us for updates on the Young Surveyors Network! This meeting is for those who are new to the institute, students of surveying, survey technicians or new to obtaining their license. Supporting Members are also encouraged to attend.

Jeanette Harley - PLS, TruMark Land Surveying, LLC, President, Wisconsin Young Surveyors' Network, Neillsville, Wis.

Connor Christopherson - PLS, Project Surveyor, Coleman Engineering Company, Green Bay, Wis.

Vendor Luncheon

Noon – 1:30 p.m. | Africa West Presentation of Colors – Wisconsin Dells American Legion Post 187

Sessions 7 – 12 | 1:30 – 3:10 p.m.

7) Past, Present and Future of E-recording

2.0 PDHs | Categories 1 or 3

Africa 30-40

During this session, Register of Deeds will examine how e-recording got started, legislation that accelerated e-recording, and what current trends are. Finally, what does the future of e-recording look like and steps to make it a reality.

Cheryl Berken - Brown County Register of Deeds, Green Bay, WI **Sharon Martin** - CPM, Washington County Register of Deeds, West Bend, WI



8) Boundary Issues and Surveyors in Court

2.0 PDHs | Categories 1 or 3

CDEF

This session will focus on a 5 year boundary dispute and expert witness testimony. At issue were existing property pins that did not match previous survey maps. Riparian rights that affected dock placements. And two neighbors that carry a great dislike for each other.

Dave Chrouser - Professional Land Surveyor, Retired, Green Bay, Wis.

9) Expert Witness & Litigation

2.0 PDHs | Categories 1 or 3

Africa 10-20

The practice of a profession often requires a practitioner be prepared to effectively communicate an opinion in court. The practitioner must be prepared to present their opinion and analysis in a clear, understandable, and concise manner. This session will focus on the duties, use, credibility, assistance, and presentation techniques employed by expert witnesses.

Please note that Dr. Hermansen will be presenting virtually. Session attendees will have the opportunity to ask questions.

Knud Hermanson - Ph.D., J.D., P.L.S., PE, Esq., Hobe Sound, Fla.



10) Ethics and the Surveyor's Role

2.0 PDHs | Category 2

Africa 50-80

As professionals, surveyors are held to a higher standard and are expected to follow a code of ethical conduct and operation. This presentation will examine the elements of this code and how they fit in the surveyor's conduct. It will also examine real ethical case situations and discuss why they were or weren't violations of an ethical code.

John Matonich - Professional Land Surveyor, Retired President and CEO of Rowe Professional Services Company, Flint, Mich.

11) Vendor Session: The Civil 3D Database

Portia

In this session we will look at how the Civil 3D survey database as a way to insert point and linework data into project design files. We will discuss methods for typical edits to data that is stored in the survey database and use of special data search tools.

Russ Nicloy - MACER Technolgies

12) Vendor Session: Feature Codes and Line Work Across the Board

Guava-Tamarind

Feature line connectivity is a great tool to increase a surveyors productivity in the field, and speed up office data processing in Civil 3D and Trimble Business Center. Trimble Access has been improved to show custom line types and blocks. We will show how to export the feature definition manager and line code set from Civil 3D and do additional customizing using Trimble Feature Definition Manager to create a feature code list for the field. We will show how to load the feature library, do field collection and then import the data into Civil 3D or Trimble Business Center.

Steve Grady and Mark Schnesk - Seiler Geospatial and Design Solutions

Break | 3:10 - 3:30 p.m.

Sessions 13 – 18 | 3:30 – 4:30 p.m.

13) The Difference Between a Survey and a Map

1.2 PDHs | Category 3

CDEF

What is the difference between a survey and a map? Which one is based on current measurements? Which one is more accurate? Why is there a difference and what ramifications does it have to the end user? We will explore the differences between surveys and tax parcel maps and dispel some common misconceptions of the accuracies of online maps.

Preston Dowell - PLS, Deputy County Surveyor, St. Louis County, Minn.

14) LiDAR vs. Photogrammetry and WISCORS Network Updates

1.2 PDHs | Category 3

Africa 30-40

LiDAR vs. Photogrammetry information and WISCORS Network updates will be presented.

Cormac McInnis - P.L.S., Survey Coordinator, Northeast Region, Wisconsin Department of Transportation, Green Bay, Wis.

Jacob Rockweiler - P.E., WISCORS Network Manager, Wisconsin Department of Transportation, Madison, Wis.

Elliot Smith - WISCORS Network Administrator, Wisconsin Department of Transportation, Madison, WI

15) Buried Treasure

1.2 PDHs | Category 3

Africa 10-20

Ground Penetrating Radar holds promise as a practical land surveying tool. A study of GPR and its application to land surveying including case studies along with an introduction to the Curb Box Charger.

Joseph Fenicle - BS, PLS, Owner of Angular By Nature, LLC., Assistant Professor of Practice, University of Akron, Hudson, OH.

16) Recent Law Changes that Affect Surveyors and WSLS's Role in Policy Making

1.2 PDHs | Category 1

Africa 50-80

Welch will discuss recent changes to WI statutes and regulations that affect surveyors and their client. He will also discuss how WSLS gets involved to make policies better. And how individual surveyors can get involved and make a difference.

Bob Welch - PLS, The Welch Group, Inc., Madison, Wis.

17) Vendor Session: 30 Billion Scan Points... Now What Do You Do?

Guava-Tamarind

Trimble Business Center (TBC) can work with point cloud data from many sources including terrestrial scanners and drones. In the session we will show TBC and how it can perform point cloud region separation to make data easier to use and demonstrate automated point extraction from a scanned point cloud data including GIS attributes. We will demonstrate simple to advanced automated line extraction tools to create feature coded linework. We will include creating surfaces and objects as well as the export options available from TBC.

Holly Urbain - Seiler Geospatial

18) Vendor Session: Modernizing your Field Experience with Android Operating System

Portia

Windows-based data collectors are hugely expensive legacy systems that will not be with us much longer and are becoming harder to find. Android-based data collectors are cheaper, come in a variety of flavors so you can pick the one you like and have only been increasing in availability over the last few years. Field software for Surveyors is becoming more and more propriety. With the Geomax Xpad Android system you can transfer the software to your phone within minutes, without having to call anyone, so you can finish your day if your data collector becomes damaged. Mariana Vilela (Geomax's North American technical Support specialist) will introduce you to Android based and modern data collection system.

Mariana Vilela - Turning Point Systems Group

Cash Bar | 4:30 – 8 p.m.

Vendor's Social 4:30 – 6:30 p.m. | Africa East

Bucky's Challenge Check-In 6:30 – 7 p.m. | Africa West

> Bucky's Challenge 6:30 – 7 p.m. | Africa West

For more information contact Kevin Slottke, **KEVSLOTTKE@GMAIL.COM**For more information about the WSLS Foundation, visit **WWW.WSLS.ORG**

Sign up your team today! 16th Annual Bucky's Challenge 2023 Trivia contest January 25, 2023 | 7 - 8 p.m. WSLS Surveyor's Institute Funds raised support scholarships for future surveyors and the WSLS Foundation traveling survey museum exhibits.





Check-In and Breakfast
7:30 – 8:20 a.m. | Africa Foyer and Africa West

Sessions 19 – 24 | 8:20 – 10 a.m.

19) Ethics and Professional Courtesy 2.0 PDHs | Category 2

Africa 30-40

Ethics and Professional Courtesy will discuss common and accepted ethical principles for surveyors. The seminar will focus on the application of ethics in practice, resolving ethical conflicts, and the interaction of ethics and professional courtesy. The objectives of the seminar will be to gain a basic understanding of practical application of ethics; recognize ethical dilemmas and their resolution; learn value based ethical analysis; and compare generally accepted ethical principles with mandated ethics.

Please note that Dr. Hermansen will be presenting virtually. Session attendees will have the opportunity to ask questions.

Knud Hermanson - Ph.D., J.D., P.L.S., PE, Esq., Hobe Sound, Fla.

20) Existent, Obliterated and Lost PLSS Corners

2.0 PDHs | Categories 1 or 3

CDEF

The understanding of the definition of the three classifications of Public Land Surveys corners is a critical aspect in the performance in any boundary survey. It provides a means of communication in the evaluation of PLSS corners utilized during any survey. We will discuss the three types of PLSS corners in depth and situations and things to consider when evaluating corner positions. We will also discuss methods for the restoration of lost corners which can also an excellent tool for the refinement of search positions during the iterative process of a corner evaluation.

Ken Roy - Professional Land Surveyor, BLM Indian Land Surveyor, (BILS), Eastern States Office Bureau of Land Management, Bloomington, Min.

Travis Hand - Professional Land Surveyor, Eastern States Bureau of Land Management, Hayward, Wis.

F. David Radford - Chief Cadastral Surveyor and Deputy State Director for Geospatial Services, Eastern States Office Bureau of Land Management, Alexandria, Vir.

21) Wisconsin Roads

2.0 PDHs | Categories 1 or 3

Africa 50-80

This session will provide attendees with information about laying out of roads throughout Wisconsin's history, where to locate those records and how to re-tracement them.

Ed Harvey - RLS/PE, Ed Harvey's Land Office, LLC, Waldo, WI

22) Aerial Mapping Targeting& Validation

2.0 PDHs | Category 3

Africa 10-20

Learn the "why" behind manned imagery and lidar aerial targeting survey requirements including WisDOT projects and USGS 3DEP lidar program missions. We will also discuss what makes "map check" points and "validation" points suitable for their intended purpose and targeting survey metadata.

Richard Kleinmann - PLS, Geospatial Transportation Leader, Ayres and Associates

Shawn Meyer - PLS, Bureau Survey Coordinator, Wisconsin Department of Transportation, Central Office, Surveying and Mapping Section

23) Vendor Session: Vendor Session TBA

Guava-Tamarind

Please refer to Whova for updated session descriptions.

24) Vendor Session: Vendor Session TBA

Portia

Please refer to Whova for updated session descriptions.

Break | 10 – 10:20 a.m.

Sessions 25 – 30 | 10:20 a.m. – Noon

25) Samuel Stinson Gannett and the WI/MN State Line

2.0 PDHs | Category 3

Africa 10-20

The surveyor of the Wisconsin/Minnesota State line and so many other State Lines will be examined.

Joseph Fenicle - BS, PLS, Owner of Angular By Nature, LLC., Assistant Professor of Practice, University of Akron, Hudson, Ohio

26) Datums: The Foundation of Geospatial Data

2.0 PDHs | Category 3

Africa 30-40

When it comes to geospatial data, it is important to use a common reference so data collected at different times by different people can be compared. Think about it as the zero line on a graph. Changing that zero line changes the values. A set of coordinates does not tell much without including what those coordinates are referenced to. A datum or reference frame enables data to be compared. I'll cover the basics of datums and reference frames, including how they are determined and how they connect at the national and global levels.

Jacob Heck - PhD, Great Lakes Regional Geodetic Advisor, National Geodetic Survey, NOAA

27) FEMA Related Surveys

2.0 PDHs | Categories 1 or 3

Africa 50-80

Session will discuss surveys related to Elevation Certificates, Elevation Forms, Conditional Letters of Map Amendment, and Flood Studies. FIRM Maps and Documents required for submitting these forms will also be discussed. Surveys required for Risk Mapping to create FIRM Maps will be discussed.

Ronald Jacobson - BS, PLS, Survey Manager, Coleman Engineering Company, Ironwood, MI.

28) Survey Research: Then and Now

2.0 PDHs | Category 3

CDEF

A discussion on how research was done historically and how technology has changed methods and sources. What to look for and where to look!

Kevin Slottke - Professional Land Surveyor, The Sigma Group, Milwaukee, Wis.

Terry Van Hout - Professional Land Surveyor, Survey Manager, Westwood Professional Services, Appleton, Wis.



29) Vendor Session: Drone Technology Use Case Review & Best Practices for Achieving Desired Deliverables

Guava-Tamarind

Join the Seiler GeoDrone team for an update on Drone tech: aircraft, new payloads and data processing options, with emphasis on the "where, when & how" to apply the best sensor for particular outcomes (LiDAR, Photogram, Thermal). A review of these options in conjunction with Surveying field practices will include GCP strategies, RTK vs. PPK options, and more.

Andrew Robb - Seiler GeoDrone
Travis LaMoine - Seiler GeoDrone

30) Vendor Session: Managing Underground Assets with ESRI and RFID

Portia

Identifying and managing underground utility assets is a challenge. We have difficulty identifying a particular underground asset (e.g. valves, splices) or point (e.g. utility conflict), managing workflows associated with that asset, and sharing that asset information across the organization or multiple organizations. An optimal solution combines the mapping power of GIS with reliable in-field asset marking verification.

This session is targeted for individuals involved with utility location and identification such as Right-of-way managers, utility locators, field operations managers, and those involved with better GIS to field operations.

Berntsen President Mike Klonsinski will share how RFID technology marks utility assets, triggers connectivity to ESRI's ArcGIS system, and enables sharing of asset data by multiple departments or organizations.

Mike Klonsinski - Berntsen International, Inc.

Past Presidents Lunch Noon – 2 p.m. | Africa West



Sessions 31 – 36 | 2 – 4 p.m.

31) The Ins and Outs of Access Easements

2.4 PDHs | Categories 1 or 3

CDEF

In this session we will cover the many ways access easements are created (written grant, CSM, prescription, etc.), Interpretation of access easements and recent changes to the law including private road maintenance and the potential expiration of access easements by operation of law. We will also discuss potential easement terms and best practices. Questions encouraged!

Jessica Shrestha - JD, Fredrikson & Byron, P.A., Madison, Wis.

32) The Center(s) of Section

2.4 PDHs | Categories 1 or 3

Africa 50-80

A discussion on the highly controversial Center of Section with Case Law, Case Studies and Interviews.

Joseph Fenicle - BS, PLS, Owner of Angular By Nature, LLC., Assistant Professor of Practice, University of Akron, Hudson, Ohio

33) There Has to be a Better Way!

2.4 PDHs | Category 3

Africa 30-40

An overview of the Swiss Cadastre and how it could be used as a model to improve our land information systems in WI. We will examine ways that we should be implementing our current technology to bolster replatting and our land information systems. The presenters will provide current examples of the differences between our land information systems and the Swiss system.

Matt O'Rourke - Vice President-LandTech Surveying, Oconomowoc. Wis.

Rich Leaver - Owner-Leaver Land Surveying, Beaver Dam, Wis.

34) Wisconsin Society of Land Surveyors Annual Meeting

2.4 PDHs | Category 3

Africa 10-20

This session focuses on the WSLS accomplishments of the past year and looks forward to 2022.

Bob Welch

35) Vendor Session: Vendor Session TBA

Guava-Tamarind

Please refer to Whova for updated session descriptions.

36) Vendor Session: Vendor Session TBA

Portia

Please refer to Whova for updated session descriptions.

Exhibit Hall Closes 4 p.m.

Cash Bar and Foundation Auction 5 – 5:45 p.m.

Cash Bar, Banquet, and Awards 6 – 8 p.m.



Check-In and Breakfast 7:30 – 8:20 a.m.

Africa Foyer and Africa West

Sessions 37 – 42 | 8:20 – 10 a.m.

37) Condominiums 101: So You've Been Asked To Do a Condo Plat

2.0 PDHs | Category 1

Africa 10-20

This session will be geared towards surveyors with limited experience dealing with condo plats. We will cover basic terms, concepts and discuss situations where a condominium may be a good fit for a project. We will also review frequently made errors and how to sync up your plat with the declaration. This session will be geared towards surveyors with limited experience dealing with condo plats. We will cover basic terms, concepts and discuss situations where a condominium may be a good fit for a project. We will also review frequently made errors and how to sync up your plat with the declaration.

Jim Wallen - Professional Land Surveyors, Retired, Green Bay, Wis.

38) "Following the Footsteps" Of a Different Kind

2.0 PDHs | Category 3

Africa 30-40

Land Surveyors recover field evidence by "following the footsteps" left by their predecessors based on available field notes and field evidence. Paleontologists are now beginning to follow the footsteps of the land surveying community and its technology solutions in their quest to find their own "monuments" and develop a deeper and clearer picture of our earth sciences.

Tom Hebert - Paleontologist, Founder, & Director, Earth Sciences Foundation, Inc.

Ladd Nelson - Director, Midwest Sales, Carlson Software, Bellevue, Iowa



39) What Should I Do? I Can't Believe I Did Anything Wrong!

2.0 PDHs | Category 2

CDEF

This program will take a realistic approach at the Ethics related to surveying. The program will take real life examples of actions or statements many believe are fine and dissect them to determine why those actions are likely a violation of the rules of ethics. We will also look at what should someone do who believes that a violation has occurred. Where does one turn when the regulators come calling or the client files a complaint. This real life examination of ethics should provide a valuable lesson for all attending.

Steve Sorenson - JD, vonBriesen & Roper S.C., Neenah, WI

40) The Quandary of Section 15: Just Over a Square Mile of Clues

2.0 PDHs | Categories 1 or 3

Africa 50-80

Drawing the lines of Section 15, Town 26 North, Range 7 West was easy in 1849. It was a square measuring 80 chains (one chain = 66 feet) on each side and the Center was drawn as a simple intersection of the East-West and North-South Quarter lines. There were eight corners set with this original survey; one at each corner of the square and one halfway in between each of those. Wood posts were set at all the corners and development occurred.

A Center 1/4 corner was established not long after the original eight.

A re-tracement survey in the 1980's treated one corner as "Lost" and reestablished it using mathematics. Current survey staff found the correct location for the corner ~120 feet away from the 1980's position. This represents one of the largest corrections needed on a monumented position in Eau Claire County. It also makes for a fascinating case study of how the surveyor, landowner (past and present) and GIS professional can retrace the history of land boundaries, improvements and law to determine the correct place to set the monuments and draw the line.

Dean Roth - PLS, County Surveyor, Eau Claire County, Eau Claire, Wis.



41) Fundamentals of Surveying and the Principles and Practices of Land Surveying Exam Review - Part I

2.0 PDHs | Category 3

Guava-Tamarind

This session will focus on the Fundamentals of Land Surveying and the Principles and Practices of Land Surveying Exam. This land surveying refresher will focus on the things you need to know about the exams, including exam format, study material, and how to apply.

Mark Kamin - Professional Land Surveyor (Wisconsin & Indiana), Civil Engineering Technology-Surveying Instructor, Northeast Wisconsin Technical College, Green Bay, Wis.

42) Vendor Session: Vendor Session TBA

Portia

Please refer to Whova for updated session descriptions.

Break | 10 - 10:20 a.m.

Sessions 43 – 48 | 10:20 a.m. – Noon

43) Dealing With Coordinate "Drift" on a Multi-Year Corridor Project

2.0 PDHs | Categories 1 or 3

Africa 30-40

We will be discussing the "Passive Control for a Multi-year Corridor Project" Use Case from the NGS "Blueprint for the Modernized NSRS - Part 3." This is a hypothetical project scenario examining the desire to keep the project referenced to the control values expressed in the initial project reference epoch and how the "drift" of the passive control will be dealt with over 10 years. How much drift can be tolerated? We hope this presentation encourages surveyors to start considering, in greater detail, how they will accommodate "drift" over time on long duration projects and further discuss the ramifications of this issue with other disciplines and organizations involved in these types of projects. We will also provide a short update on WSRS2022 Task Force Activity.

Richard Kleinmann - PLS, Geospatial Transportation Leader, Ayres and Associates

Howard Veregin - PhD, Wisconsin State Cartographer **Jacob Heck** - PhD, Great Lakes Regional Geodetic Advisor, National Geodetic Survey, NOAA

44) Surveying the Past: Land Surveys, Archaeology, and Burial Sites

2.0 PDHs | Category 3

CDEF

The presenter will provide an overview of the important role that Wisconsin's land surveyors have played in the documentation and preservation of the ancient past, and how current land surveyor can continue this remarkable legacy. An overview of the archaeology of Wisconsin will be presented, along with information regarding the types of archaeological sites that surveyors may encounter and the laws that guide preservation.

Amy Rosebrough - PhD, staff archaeologist, State Historic Preservation Office, Wisconsin Historical Society

45) Now What Are the Courts and Legislatures Up To?

2.0 PDHs | Category 1

Africa 50-80

This session will examine the latest Court decisions in Wisconsin and in Federal Courts that effect the duties and responsibilities of a surveyor. We will look at the practical applications of some of the new shoreland and water rights cases. A close look at several new boundary cases will be examined along with a discussion of the role that surveyors played in this cases. Finally, we will look into our crystal ball and predict where the government going with land information regulation.

Steve Sorenson - JD, vonBriesen & Roper S.C., Neenah, WI

46) Wisconsin County Surveyors Association (WCSA) Annual Membership Meeting

2.0 PDHs | Category 3

Africa 10-20

This session provides a unique learning opportunity on a wide variety of land surveying topics. While this session serves as the annual membership meeting for the Wisconsin County Surveyors Association, all WSLS members are invited to join in on the discussions and ask questions on the various topics. Representatives from the State Cartographers Office, National Geodetic Survey and the Wisconsin Department of Transportation will be in attendance to deliver reports and answer questions. The "Friend of Wisconsin Land Surveying Award" will be presented along with recognition of WCSA members accomplishments.

Ryan Duckart Tom Leslie

47) Fundamentals of Surveying and the Principles and Practices of Land Surveying Exam Review - Part II

2.0 PDHs | Category 3

Guava-Tamarind

This session will continue the conversation from Part I focusing on the Fundamentals of Land Surveying and the Principles and Practices of Land Surveying Exam. This land surveying refresher will focus on the things you need to know about the exams, including exam format, study material, and how to apply.

Mark Kamin - Professional Land Surveyor (Wisconsin & Indiana), Civil Engineering Technology-Surveying Instructor, Northeast Wisconsin Technical College, Green Bay, Wis.

48) Vendor Session: Vendor Session TBA

Portia

Please refer to Whova for updated session descriptions.

Adjournment | Noon

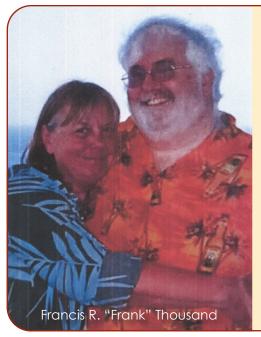
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In Memory Of, November 3, 2022 marked not only a huge loss to the Wisconsin Surveying Profession, but to the surveying profession in general. That was the day we lost our colleague, fellow professional, Executive Director, and friend, Francis R. "Frank" Thousand. Frank's passion was land surveying and he learned the trade by following his father and uncle around the woods. Some of his favorite projects included Monona Terrace, Block 89 of the Capitol Square, Hilldale Shopping Mall, and Hawk's Landing. Frank served as an expert witness on several land boundary disputes.

Frank was a proud member of WSLS and served as President in 1994, where he was highly respected for his insight and professionalism. He was also very active with the Madison Chapter of WSLS. He was a fellow member of the National Society of Professional Surveyors. He also served until earlier in 2022 as the Executive Director of the Wisconsin Society of Land Surveyors, and the editor of the award-winning "Wisconsin Professional Surveyor" since 2007. Frank also served on the Foundation board from 2005-2015 helping form the WSLS Foundation to what it is today.

Frank married the love of his life, Millie, on April 3, 1971, and rarely did you see them apart. Frank and Millie have 2 sons, John (Gina) and Charlie (Peter); and grandchildren, Adrianna and Evan.

Frank enjoyed watching football, reading his vast collection of Civil War books, working with his model trains, fishing, traveling with Millie, and spending time with his beloved dogs, Xena, Hercules, Fred, and Molly. Frank was a kind, stubborn, optimistic man, and a die-hard liberal. These were all traits that made him as special as he was. We will all miss him.

"Thank YOU!"

Conference Planning Committee

- Diane Arendt
- Aaron Ballast
- Susan Barrett
- Bob Beilfuss
- Howard Herrild
- Don Lenz
- Bryan Meyer
- Larry Miller
- Emily Pierce
- Mike Romportl
- Jim Sehloff
- Kevin Slottke
- Terry Van Hout
- Cartoon Vue
- Zia Yang

Conference Exhibitors

Exhibit Hall Hours: Wednesday from 1 – 6:30 p.m. and Thursday from 7 a.m. – 4 p.m.

- Ayres and Associates
- Berntsen International, Inc.
- Carlson Software, Inc.
- Department of Admin-Plat Review
- Ferris State University
- Leica Geosystems, Inc.
- MasterGraphics
- MATC-Madison
- Northeast Wisconsin Technical College
- NSPS
- Point of Beginning
- Rowe Professional Services

- Seiler Instrument Company
- Stan's Industrial Manufacturing LLC
- SubSurface Instruments
- Topcon Solutions Store
- Turning Point Systems Group
- UWSP Small Business Development Center
- Wisconsin Land Information Association
- Wisconsin Real Property Listers Assoc.
- Wisconsin Register of Deeds Association
- Wisconsin Society of Land Surveyors
- Wisconsin State Cartographer's Office
- WSLS Foundation, Inc.

Conference Evaluations

Evaluate each breakout session using the link found on Whova. The link to evaluate the overall Institute will be available in the app and emailed on Friday. If you have questions regarding Whova, please stop by the UWSP solutions desk.

Professional Development Hours

Professional Development Hours PDHs are endorsed by the Wisconsin Society of Land Surveyors. PDHs are earned in the workshops that you attend during the Institute, not on the workshops indicated when you registered. It is the individual's responsibility to report PDHs earned to their appropriate credential or licensing board. A link will be sent out through Whova and will also be emailed to you on Friday. Please complete the link and an official copy of your PDH form will be sent to you via email within 24 hours. <a href="https://www.uwsen.com/uwsen.

