

# 71<sup>st</sup> Surveyors' Institute Program Book



University of Wisconsin  
**Stevens Point**

**JANUARY 29, 30 AND 31, 2020**

MAPPEO OCT. 1966

WATER ELEV  
LAKE BOTTOM  
1. Emergent vegetation  
2. Floating vegetation

# General Information

## 1. PDHs:

A PDH verification form was included in the folder you received at registration. This document will be used to verify your attendance and is tracked by the individual participant. Please mark the sessions you attended in each time frame. Please turn your form in to the registration desk after you have attended all the sessions you are claiming. One copy will remain with you, a second will be retained by WSLs and the third will be retained by UW-Stevens Point. PDHs are endorsed by WSLs and will be banked at UW-Stevens Point. The copy of the PDH form that you retain is your official record for your license renewal.

## 2. NAME TAGS:

Please have your nametag visible for admittance into the sessions. You must wear your nametag to be served lunch on Wednesday and Thursday. Also, bartenders have been instructed NOT to serve anyone who does not have a Surveyors Institute nametag at the vendor's social and Bucky's Challenge.

## 3. BANQUET TICKETS:

For full Institute registrants and those who purchased banquet tickets, you will find them in the back of your nametag. Banquet tickets will be collected at the door at the start of the Banquet on January 30.

## 4. EVALUATION FORM:

Use the Guidebook App to evaluate the conference! Paper evaluations are available at the Africa West Registration Booth.

## 5. MEMBERSHIP:

If you are interested in becoming a member of the Wisconsin Society of Land Surveyors, see Frank Thousand, Executive Director. He will be located in the exhibit area during most of the Institute at the WSLs booth.

## 6. DOOR PRIZES:

The main drawing of vendor door prizes will be held at the Exhibitor's Wednesday reception. Exhibitors will also be conducting drawings at their booths during exhibitor hours.

## 7. EXHIBITORS HOURS:

Wednesday: 1 p.m. - 6:30 p.m., Thursday: 7 a.m. - 4 p.m.  
We encourage you to attend the exhibits in the Expo Hall.

**Absolutely NO ADMISSION prior to 1 p.m. on Wednesday, January 29.**

## 8. BANQUET TICKETS FOR SPOUSES & GUESTS:

Please check the registration table on Wednesday for availability.

# Agenda 2020

## WEDNESDAY, JANUARY 29, 2020

8:30 a.m. REGISTRATION & BREAKFAST  
AFRICA FOYER & AFRICA WEST

10 a.m. - Noon MORNING SESSIONS

Noon LUNCH  
AFRICA WEST

1 - 6:30 p.m. EXHIBITS OPEN  
AFRICA EAST

1:30 - 4:30 p.m. AFTERNOON SESSIONS

4:30 - 7 p.m. EXHIBITORS RECEPTION  
AFRICA EAST

6:30 p.m. BUCKY'S CHALLENGE CHECK-IN  
AFRICA WEST

7 - 8 p.m. BUCKY'S CHALLENGE  
AFRICA WEST

## THURSDAY, JANUARY 30, 2020

7:30 a.m. REGISTRATION & BREAKFAST  
AFRICA FOYER & AFRICA EAST

8:20 a.m. - Noon MORNING SESSIONS

7 a.m. - 4 p.m. EXHIBITS OPEN  
AFRICA EAST

Noon - 2 p.m. PAST PRESIDENTS' LUNCHEON  
AFRICA WEST

2 - 4 p.m. AFTERNOON SESSIONS

4:30 - 6 p.m. SOCIAL HOUR  
& FOUNDATION RAFFLE  
AFRICA FOYER

6 - 8 p.m. BANQUET & SCHOLARSHIPS  
AFRICA WEST

8 - 10 p.m. FOUNDATION LIVE AUCTION  
AFRICA WEST

## FRIDAY, JANUARY 31, 2020

7:30 a.m. REGISTRATION & BREAKFAST  
AFRICA FOYER & AFRICA WEST

8:20 a.m. - Noon MORNING SESSIONS

Noon ADJOURNMENT

**Wednesday, January 29**  
**10 a.m. – Noon**

**1. Africa 30-40**

**Drones A-Z: How to Survey Accurately with Drones Part 1**

Steve Zeets, CEO Whirrx, Marion, Iowa

**2.4 PDHs, Category 1 or 3**

Steve will share his background and experiences with the commercial use of drones in surveying and engineering applications. He will go over a variety of projects he has completed using drones and cover a wide range of topics on drones. The session will begin with the FAA regulations on how to legally operate drones commercially and end with how to successfully integrate drones at your company.

*Continued in Session 7*

**2. Africa 50-80**

**What Land Surveyors Need to Know About Wisconsin's Condominium Statutes**

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

**2.4 PDHs, Category 1**

What parts of Ch. 703, Wis. Statutes should surveyors be aware of? How do these sections affect surveyors and how can they be used to assist a client who is considering a condominium development?

**3. ABGH**

**FEMA and Flood Zones: Issues / Answers for the Field Surveyor**

Karol L. Grove, Professional Land Surveyor and Certified Floodplain Manager, Hartland, Mich.

**2.4 PDHs, Category 3**

This class will address the specific details concerning which data is important when dealing with a flood zone issue. We will talk about the many variables, and more specifically the procedures, which are helpful in determining the true flood zone elevations at a specific location.

**4. Guava-Tamarind**

**FDM Chapter 12 Updates and Additions**

Kevin Boyer, Survey and Platting Manager, EMCS, Inc., Wausau, Wis., and Keif Callaway, Bureau Plat Coordinator, Wisconsin Department of Transportation, Madison, Wis.

**2.4 PDHs, Category 1 or 3**

With recent discussions and updates to Chapter 12 of the WisDOT Facilities Development Manual (FDM), attendees will be introduced to the new sections within Chapter 12.

Additionally, attendees will be given the opportunity to dictate the balance of the presentation. Often, plat preparers have questions regarding certain areas of Chapter 12, decision-making process, mapping styles and procedures. Everyone is encouraged to submit questions by January 15 to [surveyinfo@emcsinc.com](mailto:surveyinfo@emcsinc.com). You will remain anonymous. Take advantage of this unique opportunity!

**5. Africa 10-20**

**LiDAR Data for the Land Surveyor**

Zachary Nienow, GISP, Ayres Associates Project Manager-Geospatial Services, Madison, Wis., and Matt Vinopal, CP, CMS, GISP, Ayres Associates Senior Professional-Geospatial Services, Madison, Wis.

**2.4 PDHs, Category 3**

The presentation will examine practical methods for using airborne LiDAR data for surveying and mapping professionals. This includes background information on lidar technology, best practices for use, and expected accuracies. Examples used from around Wisconsin will be presented.

**guidebook**

**Wisconsin Society for Land Surveyors 71st Annual Surveyors Institute has gone mobile!**

Get the app on your mobile device now, for free.

<https://guidebook.com/g/wsls-2020/>

- 1 Visit the above URL on your device
- 2 Tap the "download" button to get the free Guidebook app
- 3 Open Guidebook and look for the guide:  
Wisconsin Society for Land Surveyors 71st Annual Surveyors Institute

## 6. Portia-Wisteria

### A Roadmap to Career Development

Danielle Widmer, Recruiter, Ayres Associates, Eau Claire, Wis.

#### 2.4 PDHs, Category 3

Are you the 'Captain of the Ship' when it comes to your career development? In the increasingly demanding world of survey, what does it take to remain inspired, get things done, and control your career path? Sharing in examples and tips, participants will leave this session armed with tools, food for thought, and hopefully, a renewed sense of why you love what you do.

Joe Sass, Channel Development Manager, Spectra Geospatial, Moreno Valley, Calif.

#### 2.0 PDHs, Category 3

GNSS, or Global Navigation Satellite signals are changing the way we live our lives. Where do they come from? Is more better? An interesting look backward and forward at the impact of these systems.

## 10. Africa 50-80

### Are Ethics the Same for Professional Engineers and Professional Surveyors? Let Us Find Out!

Tim Tomlanovich, Civil Engineering Technology Instructor, P.E., Northeast Wisconsin Technical College, Green Bay, Wis.

#### 2.0 PDHs, Category 2

This ethics presentation reviews code of ethics to be followed by both professional engineers and surveyors. We will discover the similarities between the two disciplines and determine if there are any differences.

## 11. Africa 10-20

### Mapping Technology for Surveyors

Zachary Nienow, GISP, Ayres Associates Project Manager-Geospatial Services, Madison, Wis., and Matt Vinopal, CP, CMS, GISP, Ayres Associates Senior Professional-Geospatial Services, Madison, Wis.

#### 2.0 PDHs, Category 3

This presentation will compare three approaches for surveying and mapping site specific projects. Data collected from UAS will be compared and contrasted to other aerial platforms. We will distinguish between LiDAR and photogrammetry and discuss the most appropriate approach to various project types. We will cover the topics of expected accuracies and best practices for generating and using elevation datasets and planimetrics.

## 12. Portia-Wisteria

### Young Surveyors' Meeting

Jeanette Harley, PLS, Vice President, Wisconsin Young Surveyors' Network, Neillsville, Wis., and Alysen Tierney, PLS, President, Wisconsin Young Surveyors' Network, Sun Prairie, Wis.

#### 2.0 PDHs, Category 3

Come hear what has been happening within the Young Surveyors' groups on the state, national, and global levels whether you are a young surveyor or just interested in supporting our upcoming professionals. We will present on the past year's events and future opportunities. Students and those new to the institute are encouraged to attend as we will take time to answer any questions or concerns you may have. Our annual meeting will also be part of this session.

**Wednesday, January 29**  
**1:30 – 3:10 p.m.**

## 7. Africa 30-40

### Drones A-Z: Drone Regulatory, Insurance, and Airspace Issues Part 2

Steve Zeets, CEO Whirrx, Marion, Iowa

#### 2.0 PDHs, Category 1 or 3

Steve will share his background and experiences with the commercial use of drones in surveying and engineering applications. He will go over a variety of projects he has completed using drones and cover a wide range of topics on drones. The session will begin with the FAA regulations on how to legally operate drones commercially and end with how to successfully integrate drones at your company.

*Continued from Session 1*

## 8. ABGH

### The Waterfront: Dealing with the Highs, Lows, and Sometimes In-Between Part 1

Dave Wentland, Coastal Engineering Consultant, Docks & Marinas, Inc., De Pere, Wis.

#### 2.0 PDHs, Category 1 or 3

What's there not to like about a waterfront? This special interface between land and water where you can move physically, or in your mind, from one to another. Possibilities galore. Highly valued and desired, but also complex. Because of this it is very important to understand how land and water interact. What should we know, where do we find such information, and what may the interaction be like 20, 50 or even 100 years from now?

*Continued in Session 14*

## 9. Guava-Tamarind

### GNSS 101: An Overview and Update on These Systems

# Wednesday, January 29

## 3:30 – 4:30 p.m.

### 13. Africa 10-20

#### **Diggers Hotline Update**

Chad Krueger, Public Relations Manager, Diggers Hotline, New Berlin, Wis.

**1.2 PDHs, Category 3**

A look at recent changes at Diggers Hotline.

### 14. ABGH

#### **The Waterfront: Dealing with the Highs, Lows, and Sometimes In-Between Part 2**

Dave Wentland, Coastal Engineering Consultant, Docks & Marinas, Inc., De Pere, Wis.

**1.2 PDHs, Category 1 or 3**

What's there not to like about a waterfront? This special interface between land and water where you can move physically, or in your mind, from one to another. Possibilities galore. Highly valued and desired, but also complex. Because of this it is very important to understand how land and water interact. What should we know, where do we find such information, and what may the interaction be like 20, 50 or even 100 years from now?

*Continued from Session 8*

### 15. Africa 30-40

#### **Upgrading Wisconsin's Geospatial Infrastructure**

Richard Kleinmann, Professional Land Surveyor, Aerial Mapping Project Manager, Ayres Associates, Waukesha, Wis., and Howard Veregin, Wisconsin State Cartographer, University of Wisconsin-Madison, Madison, Wis.

**1.2 PDHs, Category 3**

This presentation reports on two initiatives to upgrade the state's geospatial infrastructure. The first is the creation of a statewide Public Land Survey System data layer using best-available county coordinate data, to help improve the quality of the statewide parcel map. The second initiative is the formation of the Wisconsin Spatial Reference System 2022 Task Force, to ensure the state is prepared for the introduction of a new National Geodetic Survey terrestrial reference frame in 2022. Come to this session to learn more about these efforts and how they impact you!

### 16. Africa 50-80

#### **Wisconsin's Northwest State Boundary Along the St. Louis River: An Analysis of G.L.O. 1852 River Survey**

Anthony Lueck, Land Surveyor, North Country Land Survey, Duluth, Minn.

**1.2 PDHs, Category 3**

In 1848 Wisconsin became a state. New settlers wanted to utilize timber, mineral, and fishing resources along the north shores of Lake Superior. In 1852 George R. Stuntz, U.S. Deputy Surveyor, was under contract to survey the Wisconsin State Line along the St. Louis River, from its mouth at Lake Superior to the Congressional Line at the first rapids north of the Village of Fond du lac. This presentation analyzes the 1852 G.L.O. field survey along the St. Louis River. The 1854 Treaty of La Pointe led to continuing Township Subdivisions which soon followed in the State of Wisconsin and the Territory of Minnesota.

### 17. Guava-Tamarind

#### **Overview and Status of LiDAR in Wisconsin**

Zachary Nienow, GISP, Ayres Associates Project Manager-Geospatial Services, Madison, Wis., and Matt Vinopal, CP, CMS, GISP, Ayres Associates Senior Professional-Geospatial Services, Madison, Wis.

**1.2 PDHs, Category 1 or 3**

The presentation will focus on current status of LiDAR data being produced by local government in Wisconsin. It will also include information on future LiDAR plans, trends, and new LiDAR technologies entering the market. Lastly, data availability and accessibility will be discussed.

### 18. Portia-Wisteria

#### **Vendor Session**

#### **Mapping in Motion**

Leica Geosystems

**1.0 PDH, Category 3**

This session will include live data capture with the BLK2GO, processing, viewing, and mapping in Civil3D.

# Thursday, January 30

## 8:20 – 10 a.m.

### 19. ABGH

#### **The Problem with Easements**

Jessica Shrestha, Attorney/Shareholder, Wheeler, Van Sickle and Anderson, S.C., Madison, Wis.

**2.0 PDHs, Category 1 or 3**

This session will explore the many issues that arise in evaluating easements, including interpretation, scope and the question of whether an easement exists. Shrestha will also discuss the current status of the law on easements and upcoming potential legislation.

## 20. Africa 50-80

### Professional Ethics and the Land Surveyor

Anthony Gregory, PS, Professor Emeritus of Civil Engineering Technology, Purdue University Northwest, Highland, Ind.

**2.0 PDHs, Category 2**

Holding a license as a Professional Land Surveyor is truly a privilege and an honor. However, such a distinction also carries with it obligations. One such obligation is to practice professionally and ethically. This seminar will cover professionalism and ethics from a general viewpoint, and from that of a land surveyor. In addition to reviewing and discussing published standards relative to the practice of land surveying in Wisconsin, the seminar will include discussions of various situations involving professional ethics.

## 21. Africa 30-40

### Basic FEMA Issues / Floodplains / Elevation Certificates *Part 1*

Karol L. Grove, PS, CFM, Professional Land Surveyor & Certified Floodplain Manager, Alpine Land Surveying, Inc., Hartland, Mich.

**2.0 PDHs, Category 1 or 3**

This session will cover the field procedures associated with properties and structures when located in or near FEMA Flood Zones. Additionally, we will tackle the Zone A Non-studied areas and the many ways available to establish a Base Flood Evaluation in those areas. Lastly, we will cover the specifics of the Elevation Certificate and when one is needed.

*Continued in Session 27*

## 22. Africa 10-20

### Condominium 2020

David Chrouser, Professional Land Surveyor, Mau & Associates, Green Bay, Wis. and Terry Van Hout, Professional Land Surveyor, Real Property Lister, Brown County, Green Bay, Wis.

**2.0 PDHs, Category 1 or 3**

This presentation will touch on things to consider when preparing a condominium plat, show examples and discuss some unique issue that we have experienced through the years.

## 23. Vendor Sessions

### Africa 90

#### Field to Finish Review and

Version 2020 Q & A *8:20 - 9:10 a.m.*

Carlson

**1.0 PDH, Category 3**

### Africa 90

#### Leica Captivate Inspect Surfaces App

*9:10 a.m. - 10 a.m.*

Leica Geosystems

**1.0 PDH, Category 3**

Analyze Surfaces (floors, Walls, Roads, stock pile, spillway, Tunnel) compare data in the field to design data, previous collected data (Scan), a fixed elevation, or determined plane. Identify deficiency's, safety concerns, or areas that need remediation, while in the field, with custom reporting, all within the easy to use Leica Captivate Inspect Surfaces App.

## 24. Vendor Session

### Guava-Tamarind

#### What is Possible with Surveying Drones Today?

*8:20 a.m. - 10 a.m.*

Steve Zeets, CEO Whirrx, Marion, Iowa

**2.0 PDH, Category 3**

Steve will cover what is needed to get less than 0.06 ft vertical accuracy at the 95% confidence level. Whether you already own a drone or are looking to get into surveying with drones, you don't want to miss this information!

**Thursday, January 30**  
**10:20 a.m. – Noon**

## 25. ABGH

### The Right in Right-of-Way: An in depth Look at Public Road and Utility Rights-of-Way

Jessica Shrestha, Attorney/Shareholder, Wheeler, Van Sickle and Anderson, S.C., Madison, Wis.

**2.0 PDHs, Category 1 or 3**

This session will cover the unique laws applicable to public roads and utility rights-of-way. Topics will include unrecorded rights, abandonment, interpretation and statutory protections.

## 26. Africa 50-80

### What is the Future of the Professional Surveyor? *Part 1*

Anthony Gregory, PS, Professor Emeritus of Civil Engineering Technology, Purdue University Northwest, Highland, Ind.

**2.0 PDHs, Category 3**

Many developments over the past few decades have caused significant change in the land surveying profession. These developments include major advancements in technology, increased requirements for professional licensure, and a decline in the availability of land

surveying programs at colleges and universities. As a result, the workforce entering surveying at both the professional and technician level has been declining. Other professions appear to be encroaching into what has traditionally been perceived to be the territory of the land surveying profession.

It is time for the land surveying profession to begin defining how the profession will sustain over the next couple of decades. Hopefully, this will be embraced by the profession as opportunities for growth rather than just defending turf.

**Continued in Session 32**

## 27. Africa 30-40

### **Flood Zones...LOMAs, LOMRs, and LOMR-Fs Part 2**

Karol L. Grove, PS, CFM, Professional Land Surveyor  
& Certified Floodplain Manager, Alpine Land  
Surveying, Inc., Hartland, Mich.

**2.0 PDHs, Category 1 or 3**

This session will cover the field procedures associated with properties and structures when located in or near FEMA Flood Zones. Additionally, we will tackle the Zone A Non-studied areas and the many ways available to establish a Base Flood Evaluation in those areas. Lastly, we will cover the specifics of the Elevation Certificate and when one is needed.

**Continued from Session 21**

## 28. Africa 10-20

### **Coordinate Systems: Turning Global Coordinates into Northings and Eastings**

Joe Sass, Channel Development Manager, Spectra  
Geospatial, Moreno Valley, Calif.

**2.0 PDHs, Category 3**

Wisconsin is among a handful of states utilizing "County Coordinate Systems" to manage the differences between grid and ground distances. How do other regions manage this? What will happen in 2020?

## 29. Vendor Session

### **Africa 90**

### **Topo-bathymetric LiDAR from Aerial Platforms**

Quantum Spatial

**2.0 PDHs, Category 3**

Topo-bathymetric LiDAR from aerial platforms is an emerging technology that provides rapid surveying of shallow water areas that are difficult, dangerous, or impossible to get using conventional surveying methods. Quantum Spatial's airborne topo-bathymetric sensor and processing technologies have advanced rapidly in the past few years, drastically cutting costs while improving resolution

and accuracy. This presentation will provide a basic overview of the technology and an in-depth look at the wide range of applications for topo-bathymetric LiDAR.

## 30. Vendor Sessions

### **Guava-Tamarind**

### **Break Through with Trimble: Technology Trends in Visualization, GNSS, and Terrestrial Scanning 10:20 – 11:10 a.m.**

Seiler Instrument

**1.0 PDHs, Category 3**

**Trimble R12:** Trimble ProPoint GNSS technology that empowers land surveyors to quickly measure more points in more places than ever before.

**Trimble X7:** High-speed 3D laser scanning system with new innovations to simplify adoption, increase efficiency and provide confidence in the field. Auto leveling, fast scans and automatic field registration on the fly.

**Trimble Site Vision:** Visualize in 3D. See it in the field! Place and view georeferenced 3D models from any angle at true-to-life scale, or above or below the ground.

### **Guava-Tamarind**

### **Scanning Tools: Flying, Walking, Driving, and Tripod 11:10 a.m. - Noon**

Seiler Instrument

**1.0 PDHs, Category 3**

LiDAR is no longer a tool for early adopters. The hardware and software has become essential for high efficiency surveying. With so many different tools available, we'll cover the pros and cons of each.

**Thursday, January 30  
2 – 4 p.m.**

## 31. Africa 30-40

### **Arbitrator by Agreement**

Steve Sorenson, Attorney/Shareholder, Von Briesen  
and Roper, S.C., Ripon, Wis.

**2.4 PDHs, Category 1 or 3**

Surveyors are often called upon to assist in settling boundary line and other related disputes, but they end up doing so without compensation. They also find themselves testifying in court before a judge who does not understand the role of the surveyor or the methodologies of surveying. Worse yet, there are occasions when surveyors are being sued based on an opinion they gave in an

offhand conversation. So why not turn the table and charge for the advice and counsel in the role of a neutral be it mediator or arbitrator. This program will examine how to do this in a legal, ethical and rewarding manner.

### 32. Africa 50-80

#### **What is the Future of the Professional Surveyor? Part 2**

**Anthony Gregory, PS**, Professor Emeritus of Civil Engineering Technology, Purdue University Northwest, Highland, Ind.

**2.4 PDHs, Category 3**

Many developments over the past few decades have caused significant change in the land surveying profession. These developments include major advancements in technology, increased requirements for professional licensure, and a decline in the availability of land surveying programs at colleges and universities. As a result, the workforce entering surveying at both the professional and technician level has been declining. Other professions appear to be encroaching into what has traditionally been perceived to be the territory of the land surveying profession.

It is time for the land surveying profession to begin defining how the profession will sustain over the next couple of decades. Hopefully, this will be embraced by the profession as opportunities for growth rather than just defending turf.

***Continued from Session 26***

### 33. Guava-Tamarind

#### **Wisconsin Society of Land Surveyors Annual Meeting**

**2.4 PDHs, Category 1 or 3**

### 34. ABGH

#### **Property Description Writing**

**Jim Wallen**, Professional Land Surveyor, Green Bay, Wis.

**2.4 PDHs, Category 1 or 3**

The Do's and Don'ts plus things to consider when writing that perfect legal description. How is your work product seen and judged by Courthouse Land Records Personnel?

### 35. Africa 10-20

#### **Practical Application of ALTA / NSPS Survey Standards**

**David Pemberton**, Vice President of Surveying, Sathre-Bergquist, Inc., Wayzata, Minn., and

**Marcus Hampton**, Vice President and Registered Land Surveyor, James R. Hill Inc., Burnsville, Minn.

**2.4 PDHs, Category 1 or 3**

A practical review of field/office observations for ALTA/NSPS Land Title Survey Standard focused to field and office technicians.

### 36. Vendor Sessions

#### **Portia-Wisteria**

#### **BIM & the Modern Surveyor**

**2:15 – 3:15 p.m.**

Seiler Instrument

**1.0 PDHs, Category 3**

Surveyors have opportunities to interface with BIM throughout all project stages: from initial survey, through construction, to final as-built. Geospatial data from ground and aerial sources along with new collaboration and information tools from Autodesk, they can deliver higher quality services by producing intelligent models.

#### **Portia-Wisteria**

#### **Spectra's SP20 Handheld GNSS Receiver**

**3:15 – 4:15 p.m.**

Seiler Instrument and Trimble

**1.0 PDHs, Category 3**

Combine innovative, camera-enabled data collection workflow with a high level of performance in an ergonomic, scalable solution (from meter to cm accuracy).

**Friday, January 31**  
**8:20 – 10 a.m.**

### 37. ABGH

#### **Boundary Law Case Studies Part 1**

**Steven Sorenson**, Attorney/Shareholder, Von Briesen and Roper, S.C., Ripon, Wis.

**2.0 PDHs, Category 1 or 3**

Spend some time with a series of practical discussion about recent boundary dispute cases in Wisconsin and around the country. This presentation will take actual fact situations and discuss the role of the survey and the surveyor in each of the cases. Simulations from the cases will allow with audience involvement. A discussion of how a simple change in the facts can change the court's decision. The presentation will also examine the effect of court decisions on surveying practices and boundary dispute resolution. This interactive presentation should provide an excellent opportunity to test one's knowledge of the practical aspects of boundary law.

***Continued in Session 44.***



### 38. Africa 30-40

#### **Basic Issues and Items of the Public Land Survey System**

Les Van Horn, Professional Land Surveyor, Van Horn & Van Horn, LLC, Green Bay, Wis., and Lisa Van Horn, Professional Land Surveyor, Van Horn & Van Horn, LLC, Green Bay, Wis.

**2.0 PDHs, Category 1 or 3**

A basic study of the various methods and procedures used to layout and divide the PLSS in Wisconsin starting from 1832 to present.

### 39. Africa 50-80

#### **Boundary Evidence and Technology Part 1**

Anthony Gregory, PS, Professor Emeritus of Civil Engineering Technology, Purdue University Northwest, Highland, Ind.

**2.0 PDHs, Category 3**

Many developments over the past several decades have caused significant change in the land surveying profession. These developments include major advancements in technology. Our profession has embraced and incorporated these advancements into our practices. This is evident in both the common field work and office methodologies of the typical land surveyor.

In as much as staying current with technology is both commendable and necessary, the surveyor of the 21st century needs to not lose sight of the historic charge given to every professional land surveyor, that being to sift through boundary evidence in order to follow the footsteps of the original surveyor. The purpose of this seminar is to focus on how the land surveyor can be an expert in both the use of changing technologies and in interpreting boundary evidence.

*Continued in Session 46.*

### 40. Portia-Wisteria

#### **Finding the Money**

Mark Speirs, Consultant, Small Business Development, University of Wisconsin-Stevens Point, Stevens Point, Wis.

**2.0 PDHs, Category 3**

Know what financing and funding is available for your businesses. This program will provide an overview of the many capital sources for business including traditional commercial loans, government loan programs and grants, as well as many lesser-known specialized sources of funding.

### 41. Mangrove

#### **Wisconsin County Surveyors Association (WCSA) Meeting**

**2.0 PDHs, Category 1 or 3**

This session provides a unique learning opportunity on a wide variety of land surveying topics. While this session serves as the annual meeting membership 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.

### 42. Africa 10-20

#### **Understanding the Revision to A-E7**

Tony Gromacki, Professional Land Surveyor, M Squared Engineering, LLC, Cedarburg, Wis.

**2.0 PDHs, Category 3**

This session will provide an overview of the changes to A-E7 and the reason behind those changes.

### 43. Guava-Tamarind

#### **Principles and Practice of Land Surveying (PLS) Exam Prep Part 1**

Howard Herrild, Professional Surveyor and Instructor, Northeast Wisconsin Technical College, Green Bay, Wis.

This session is for the person who is looking to take the Principles and Practices of Land Surveying exam. This land surveying refresher will focus on the public land survey system, study materials and exam format with a small focus on the licensing application process.

*Continued in Session 50.*

**Friday, January 31**  
**10:20 a.m. – Noon**

### 44. ABGH

#### **Boundary Law Case Studies Part 2**

Steven Sorenson, Attorney/Shareholder, Von Briesen and Roper, S.C., Ripon, Wis.

**2.0 PDHs, Category 1 or 3**

Spend some time with a series of practical discussion about recent boundary dispute cases in Wisconsin and around the country. This presentation will take actual fact situations and discuss the role of the survey and the surveyor in each of the cases. Simulations from the cases will allow with audience involvement. A discussion of how a simple change in the facts can change the court's decision. The presentation will also examine the effect of court decisions on surveying practices and boundary dispute resolution. This interactive presentation should provide an excellent opportunity to test one's knowledge of the practical aspects of boundary law.

*Continued from Session 37.*

#### 45. Africa 30-40

##### **Advanced Issues and Items of the Public Land Survey System**

Les Van Horn, Professional Land Surveyor, Van Horn & Van Horn, LLC, Green Bay, Wis., and Lisa Van Horn, Professional Land Surveyor, Van Horn & Van Horn, LLC, Green Bay, Wis.

**2.0 PDHs, Category 1 or 3**

Advanced look at how the various county re-monumentation programs reset these corners and issues related to “following in the footsteps.”

#### 46. Africa 50-80

##### **Boundary Evidence and Technology Part 2**

Anthony Gregory, PS, Professor Emeritus of Civil Engineering Technology, Purdue University Northwest, Highland, Ind.

**2.0 PDHs, Category 3**

Many developments over the past several decades have caused significant change in the land surveying profession. These developments include major advancements in technology. Our profession has embraced and incorporated these advancements into our practices. This is evident in both the common field work and office methodologies of the typical land surveyor.

In as much as staying current with technology is both commendable and necessary, the surveyor of the 21st century needs to not lose sight of the historic charge given to every professional land surveyor, that being to sift through boundary evidence in order to follow the footsteps of the original surveyor. The purpose of this seminar is to focus on how the land surveyor can be an expert in both the use of changing technologies and in interpreting boundary evidence.

*Continued from session 39.*

#### 47. Portia-Wisteria

##### **Grow Your Business**

Mark Speirs, Consultant, Small Business Development Center, University of Wisconsin-Stevens Point, Stevens Point, Wis.

**2.0 PDHs, Category 3**

With so many ways to reach out to potential customers, what truly is the most effective way to do so? Through networking, creating a marketing plan, and using digital and traditional marketing, learn how you can grow your customer base and increase sales.

#### 48. Africa 10-20

##### **Code of Ethics and Discrimination and Harassment Prevention Training**

Robin Waier, SPHR, Human Resources Generalist, Smith, Brookfield, Wis. **2.0 PDHs, Category 2**

This presentation discusses the basics of professional ethics, with examples specific to the Survey industry, in addition to the importance, both legally and morally, of preventing discrimination and harassment in the workplace.

#### 49. Mangrove

##### **National Association of County Surveyors (NACS) Meeting**

**2.0 PDHs, Category 3**

The National Association of County Surveyors (NACS) provides a national voice for County Surveyors. This session serves as the annual membership meeting for the organization and will provide a unique look at surveying from a national perspective, especially as it applies to County Surveyors. NACS is an affiliate organization of the National Association of Counties (NACo) and works to foster the professional growth of members. Please join us for some meaningful discussion impacting surveyors nationwide. The State of Wisconsin and WSLs are truly fortunate to be hosting the NACS annual membership meeting in Wisconsin this year.

#### 50. Guava-Tamarind

##### **Principles and Practice of Land Surveying (PLS) Exam Prep Part 2**

Howard Herrild, Professional Surveyor and Instructor, Northeast Wisconsin Technical College, Green Bay, Wis.

This session is for the person who is looking to take the Principles and Practices of Land Surveying exam. This land surveying refresher will focus on the public land survey system, study materials and exam format with a small focus on the licensing application process.

**Continued from Session 43.**

## Foundation Raffle & Auction 8 – 10 p.m.

Join us after the banquet for the Foundation Live Auction. This entertaining event offers attendees a chance to bid on great items including survey instruments, vintage surveying magazine covers, pre-season Packer tickets and many others. **The grand raffle prize winner will go home with a 4 x 4 Polaris ATV with Trailer!!!**

**VIEW THE ITEMS IN THE FOUNDATION BOOTH!**

**ALL CONFERENCE AREAS  
ARE DESIGNATED**

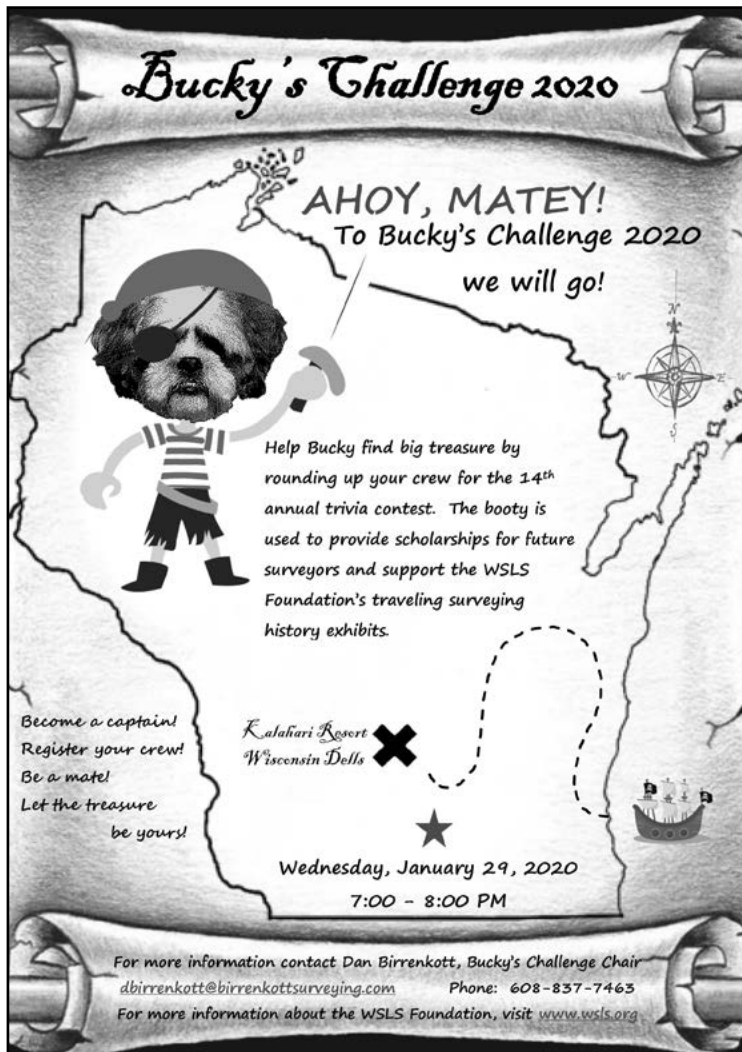
**SMOKE FREE**

SMOKING ASHTRAYS are located outside the building

## Special Event | Bucky's Challenge WSLS Foundation FUNdraiser ...

### Get set for the 14th annual big event,

Wednesday evening, January 29, 2020, in conjunction with the Annual Surveyors' Institute. **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.



To learn more about "Bucky's Challenge," contact contest chairman Dan Birrenkott at 608-837-7463, [dbirrenkott@birrenkottsurveying.com](mailto:dbirrenkott@birrenkottsurveying.com), or visit the Society's website at [WSLS.org](http://WSLS.org).

## 2020 | Exhibits

AG-AEC Technology Partners  
Air Land Surveys  
Ayres and Associates  
Berntsen International, Inc.  
Carlson Software and Field Solutions  
Carlson Software, Inc.  
Diggers Hotline  
GPI Geospatial, Inc.  
Leica Geosystems, Inc.  
MasterGraphics  
Madison Area Technical College  
Mid-State Technical School  
NOAR Technologies  
Northeast Wisconsin Technical College  
Northern Wood Products  
National Society of Professional Surveyors  
Quantum Spatial  
Seiler Instrument Company  
Stan's Industrial Woodwork, Inc.  
SubSurface Instruments  
Topcon Solutions Store  
Turning Point Systems Group  
University of Wisconsin Stevens Point  
West Allis Blueprint  
Whirrx Drone Survey System  
Wisconsin Department of Administration-Plat Review  
Wisconsin Land Information Association  
Wisconsin Real Property Listers Association  
Wisconsin Register of Deeds Association  
Wisconsin Society of Land Surveyors  
Wisconsin State Cartographer's Office  
Wisconsin Society of Land Surveyors Foundation, Inc.

## 2020 Planning Committee

Diane Arendt	Emily Pierce
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Sheila Bannister-Gross	Mike Romportl
Bob Beilfuss	Kevin Slottke
John Casucci	Lana Sommer
Terry Genske	Frank Thousand
Howard Herrild	Terry Van Hout
Don Lenz	Nathan Vaughn
Larry Miller	



**Kalahari.**

America's Waterpark Resorts.

