



# 2026 SPRING TECHNICAL CONFERENCE

MARCH 6, 2026 | MARITIME CONFERENCE CENTER

7:30 AM.....BREAKFAST

8:00 AM – 5:00 PM.....SESSION

## • FUNDAMENTALS OF SURVEYING PREPARATION - A303

- Speakers: Dave Moyle, JMT; Dave Comer, Messick and Assoc.; and Nick Wheeler, GPI
- Description: This session will cover different areas of knowledge needed to help prepare for the Fundamentals of Surveying (FS) Exam. Areas of focus will be the following: Calculator basics, Surveying processes and methods, Mapping processes and methods, Boundary law and real property principles, Surveying principles, Survey Computations, Business concepts, and Applied Mathematics. You will need for the class a NCEES approved calculator, paper and pencils, and a thumb drive.
- Credits: 8
- Handout: FS Handout 2-5 *\*Attendees can get this from the NCEES website*

8:00 AM – 12:00 PM.....CONCURRENT SESSIONS

## • MD LAW REVIEW - A304

- Speaker: Kevin Norris, Kevin Scott Norris Law, LLC
- Description: This session is to prepare you for the Maryland Law Component of your surveyor's exam. The material will cover laws pertaining to surveying from the Annotated Code of Maryland, Code of Maryland Regulations, and Maryland case law. While this class is not intended to be all-inclusive law course, it is intended to help you better prepare for the surveyor's exam.
- Credits: 2

## • ROAD RESEARCH: THE GOOD, THE BAD, AND THE UGLY - AUDITORIUM

- Speaker: Joel Leininger, S.J. Martenet & Co, Inc.
- Description: In this seminar Leininger follows up on his recent book on the subject of roads, and specifically explores the kinds of research challenges presented by these old title elements, the duty of the surveyor in addressing them, and suggested solutions to the difficulties presented. Some road histories are clean and their status can be uncovered with little difficulty. Others have obscure pasts, and the difficulties in discovering them can only be described as, well, ugly. But there are ways forward out of this situation, and local solutions are the most likely answer to the dilemmas. The discussion will cover the various record sources where these documents may be found, the evidentiary impact of them, and the surveyor's obligations in finding and incorporating them into their work. Also in the discussion will be the potential role of MSS chapters and other ad-hoc groups in locating, cataloging and otherwise making available these (mostly unrecorded) records.
- Credits: 4

## • UTILIZING TITLE ELEMENTS IN BOUNDARY SURVEY DETERMINATIONS - A111/113

- Speaker: Jeff Elkins, VanMar Associates
- Description: As licensed surveyors, we practice daily the works of defining boundaries of land, utilizing our skills, knowledge, and experience to solve the matters of where and how to define the position of boundary corners and boundary lines on the ground. Each survey is its own enigma, with unique idiosyncrasies and challenges; some surveys are well monumented or established, others more difficult to resolve; and knowing how to recognize which title elements to utilize in making our best determination is great knowledge for all surveyors to share and learn. Together, we will look at some real-world boundary surveys and their determinations: for those surveyors who are well experienced, your discussion, debate, and knowledge to impart are welcome; for those surveyors in training that are beginning to learn how to determine boundaries, this will be a valuable resource to enhance your knowledge, and for future reference. For all who attend, this class will enhance our understanding of how best we can all follow in the footsteps of the surveyors who went before us.
- Credits: 4
- Speaker bringing handouts

8:00 AM – 10:00 AM.....CONCURRENT SESSIONS

## • PRACTICAL AI: WHAT EVERY SURVEYOR NEEDS TO KNOW NOW - BRIDGE

- Moderator: James Shaw, JMT; Panelists: Clayton Hayes, JMT; Rob Kundrick, GPI
- Description: AI isn't coming to surveying - it's already here! The question isn't whether to pay attention, but how to get started without wasting time or money. This interactive session delivers a foundation in AI concepts, introduces the platforms gaining traction, and walks through prompt engineering techniques you can use immediately. Panelists actively using AI in their practices will discuss what's working, what isn't, and where the real opportunities lie. Then we open the floor: bring your experiments, your questions, and your war stories. No prior AI experience required - just a willingness to explore what these tools might mean for your work and your profession.
- Credits: 2

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## 8:00 AM – 10:00 AM.....CONCURRENT SESSIONS

### • **NAVIGATING MARYLAND LAND RECORDS 5.0 - A100**

- Speaker: Rachel Frazier, Maryland State Archives
- Description: Learn tips and tricks for navigating the latest version of Maryland Land Records, for both modern and historic record searches. Following the presentation, dig into the site with Rachel's assistance by using hands-on, pre-planned activities or by using your own research interests.
- Credits: 2
- [Handout](#)

## 10:00 AM – 12:00 PM.....CONCURRENT SESSIONS

### • **FROM POINT CLOUDS TO LINEWORK: APPLYING AI IN SURVEY PRACTICE - BRIDGE**

- Speaker: Max Leung, Mach9
- Description: Surveyors increasingly work with dense point clouds and imagery from mobile mapping systems, terrestrial scanners, and UAV platforms. The bottleneck has shifted from data collection to data production. This session provides a technical walkthrough of how AI driven extraction works across the full pipeline, from sensor input to QA/QC to deliverables. We will compare conventional manual workflows with automated extraction, highlight where AI excels, where it struggles, and how human in the loop validation fits into production environments. The focus will be on real world use cases, accuracy considerations, standards, and practical lessons learned from statewide and municipal projects.
- Credits: 2
- No Handout

### • **2026 DRONE LAWS FOR SURVEYORS: FEDERAL RULES, STATE REQUIREMENTS, AND WHAT'S COMING - A100**

- James Shaw, JMT
- Description: UAS technology has transformed surveying practice, but are you compliant with current regulations? This session provides Maryland surveyors with a complete regulatory roadmap, covering Part 107 requirements, Remote ID implementation, LAANC authorization procedures, and navigation of the DC Flight Restriction Zone. We'll examine critical emerging issues including the foreign drone ban impacting equipment purchases and the proposed Part 108 rules that could reshape commercial UAS operations. Since many surveyors work across state lines, we'll review Virginia's municipal drone laws, PennDOT registration requirements, and specific regulations in Delaware and West Virginia. Whether you're expanding your UAS capabilities or ensuring existing operations remain compliant, this session delivers the regulatory knowledge you need.
- Credits: 2

## 12:00 PM - 1:00 PM.....LUNCH

## 1:00 PM – 5:00 PM.....CONCURRENT SESSIONS

### • **LIDAR & PHOTOGRAMMETRY FOR SURVEYING PURPOSES...AND WHEN TO USE THEM - AUDITORIUM**

- Speakers: Lukas Duruttya and Kevin Guthrie, DiCarlo Precision Instruments
- Description: Compare traditional, mobile, and then aerial LiDAR workflows with photogrammetry data collection. All for surveying purposes; considering the complexity of working with mass data and feature extraction and finally generating deliverables. (no drone related legal conversations!)
- Credits: 4

### • **MD ROAD GRADE & STORM DRAIN (MINOR ENGINEERING) REVIEW - A304**

- Speaker: Bill Bower, Bay Land Inc.
- Description: The MD Road Grade & Storm Drain (Minor Engineering) review class is intended as a review of the hydrologic & hydraulic principles of the design and construction of storm drain structures and ESD devices, and the principles of vertical curve design for highways in Maryland to prepare surveyors for the Maryland Road Grade and Storm Drain (Minor Engineering) portion of the Professional Land Surveyor's licensing exam. The course will utilize the following design manuals:
  - MDSHA Storm Drain Design Manual
  - MDE Maryland Stormwater Design Manual, Volumes I & II
  - MDE's 2011 Standards & Specifications for Soil Erosion & Sediment Control
  - USDOT-FHWA Urban Drainage Design Manual, Rev. Aug 2013
  - USDOT-FHWA Hydraulic Design of Highway Culverts, Rev. May 2005
  - USDA-NRCS Urban Hydrology for Small Watersheds (TR-55)

Students are expected to be familiar with these manuals prior to attending the class. A laptop with PDF versions of the manuals is recommended. The instructor will review design concepts and provide practice problems to complete during the class.

- Credits: 4
- [Handouts](#)

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## 1:00 PM – 3:00 PM.....CONCURRENT SESSIONS

### • LOSS PREVENTION THROUGH BETTER COMMUNICATION - A100

- Speaker: Kyle Damalouji, Foundation Risk Partner
- Description: Poor communication is the single largest non-technical factor that gives rise to professional liability claims against A/E firms. In this session we will discuss the correlation between communication and risk, become familiar with common communication breakdowns and challenges, learn the basics of effective communication, and know how to respond and communicate if there is a problem.
- Credit: 2
- Speaker providing handouts

### • FROM CHAIN TO CLOUD: THE PAST, PRESENT, AND FUTURE OF SURVEYING DELIVERABLES - A302

- Speaker: Rick Johnston, Keystone Precision Solutions
- Description: This course explores the rapid evolution of land surveying deliverables over the past decade, from conventional total stations and GPS to today's robotic total stations, satellite based GNSS rovers, drone-based (UAS) mapping, and augmented reality solutions. We will examine current workflows and explore innovated solutions like AR/VR integration, SLAM laser scanning, and automated processing that will redefine the deliverable process. Designed to connect core surveying principles with emerging tools, this course equips attendees to navigate the changing landscape of creating surveying deliverables.
- Credits: 2

## 1:00 PM – 2:00 PM.....SESSION

### • A SURVEYORS GUIDE TO SUBSURFACE UTILITY ENGINEERING - BRIDGE

- Speakers: Ken Kerr and John Berrettini, A|||DATA
- Description: Maryland surveyors are often asked to include locations of underground utilities in their deliverables. When it comes to gravity storm and sanitary sewers, manholes and invert elevations help to pin down these utilities. But what can the surveyor do to represent pressure and cable systems that don't run in straight lines between manholes, valves, pedestals, and similar surface features? That's where utility investigations and Subsurface Utility Engineering come in. This presentation will help the surveyor navigate requests to map underground utilities on various project types that they may encounter in Maryland and elsewhere.
- Credit: 1
- Speaker providing handouts

## 2:00 PM – 3:00 PM.....SESSION

### • LASER SCANNING AN NFL STADIUM - BRIDGE

- Speaker: Shaun Lewis, VHB
- Description: This presentation provides a practical, start-to-finish overview of laser scanning an NFL stadium, from initial planning through final deliverables. We'll cover project planning, scanner selection, optimal scan setups, and field workflows tailored to large, complex venues with tight schedules and active operations. Real-world examples from an NFL stadium project will highlight lessons learned, common pitfalls, and best practices for improving accuracy and efficiency.
- Credit: 1
- No Handouts

## 3:00 PM – 5:00 PM.....CONCURRENT SESSIONS

### • SURVEY POINT DATA IN CIVIL 3D - A111/113

- Speaker: Margaret McMenamin, CivilTraining, LLC
- Description: This training session is a two-hour hands-on training in which we will import, label, and organize survey point data in the Civil 3D environment. We will discuss differences between the survey point database and live COGO data, automatic translations, description keys, and how to create custom point markers. Attendees will need their own laptops, with Civil 3D already installed (2018 or later). Instructor will provide course data and template.
- Credits: 2
- No Handouts

### • ALTA-NSPS RPP CALCULATION USING CARLSON SOFTWARE - A302

- Speakers: Jesse Kozlowski and James Carlson, Carlson Software
- Description: Reviewing best practices for combining GNSS RTK and total station observations for achieving optimal results that can be tested for reliability using the ALTA-NSPS RPP Calculation in Carlson SurvNet running within SurvPC 7 while still onsite in the field or later on in the office using Carlson 2026 SurvNet. The newly published (2024) NOS NGS 92 GNSS Standards will be introduced as a guide for developing efficient workflows and standard operating procedures for obtaining the required positional accuracy for the project .
- Credits: 2