

2018 SCSPLS Convention and Technical Conference  
SCSPLS Wednesday, January 31, 2018  
Conference: Thursday, February 1-2, 2018

Courses include the following:

**Thursday, February 1, 2018**

**All Attendees will earn 1 PDH for the Key Note for Thursday.**

**Track 1**

**7 PDH for Day**

**Gary R. Kent, PS**

**The Schneider Corporation**

Surveyor's Judicial Role

All Day Seminar

Only two persons can truly resolve a disputed boundary or title problem. Those persons do not include attorneys, title companies or surveyors. And, in a sense, they do not even include judges and juries - at least not of their own volition. In this program, we will explore the role that the professional surveyor can and arguably should take in helping property owners establish or maintain their common boundary at the location they were perfectly satisfied with - at least until the surveyor showed up! As a part of the program, we will take a close look at the role of the surveyor as eloquently expressed by renowned Michigan Supreme Court Chief Justice Thomas Cooley in his seminal 1881 treatise "The Judicial Function of Surveyors." We will also review several examples that demonstrate the problem and alternatives to what is often the standard approach by surveyors.

**Track 2**

**7 PDH for the Day**

**Jeffery N. Lucas, JD, PLS**

**Lucas & Company, LLC**

New Practice Models

½ Day Seminar – 3.5 PDH

How can the land surveying profession affect a paradigm shift, from the current broken model of simply finding people's problems without being able to offer solutions, to a new practice model where the surveyor doesn't just find people's problems, but offers solutions as well. This seminar will explore how the land surveying profession can structure a new practice model that will allow for better protection of the public, a more lucrative career for the land surveyor and the survival of the practice of land surveying as we know it. Power Point presentation.

**Jeffery N. Lucas, JD, PLS**

## **Lucas & Company, LLC**

### Water Boundaries

½ Day Seminar – 3.5 PDH

This seminar will cover the basic concepts behind water boundaries and how those concepts affect the private practice land surveyor. The history of water boundaries will be discussed including the “equal footing” doctrine, “navigability,” “submerged lands” and various other issues affecting the identification and location of the boundary between the upland owner and submerged lands belonging to the sovereign. The common law and civil law rules with regard to water boundaries will be studied. The riparian and littoral rights of the upland owner and the problems facing the boundary surveyor will be studied.

### **Track 3**

### **7 PDH For the Day**

#### Seminar 1:

8:00 – 9:50 AM

Scott Lokken, Mid-Atlantic Regional Geodetic Advisor, NOAA/NOS/National Geodetic Survey

Matt Wellslager, SC Geodetic Survey

NSRS Modernization Updates.

2 PDH

Points discussed will be:

- How leveling will work in the new datum
- Segments about the NGS tools (NCAT, VDATUM)

#### Seminar 2:

10:00 – 10:50 AM

David Bowers, PLS, Duncan-Parnell

1 PDH

Terrestrial Laser Scanning with a Robotic Total Station

- Field Data Collection
- Working with Point Cloud Data
- Photo Stations
- Automated Linework
- Creating Deliverables from Point Clouds

#### Seminar 3:

11:00 – 11:50 AM

Zach Faulkner, SmartVent

1 PDH

FEMA Elevation Certificate, the NFIP and Floodplain Management Perspective - The National Flood Insurance Program (NFIP) was scheduled for reauthorization in September 2017 and there have been some short-term extensions as bills are proposed to continue to reform the program, this class will provide a summary of the current state of the NFIP and how it will influence the Surveying industry. Meanwhile demand for Elevation Certificates has never been higher due to driving forces such as Biggert-Waters and the Homeowners Flood Insurance Affordability Acts that are reforming the current

NFIP. This course will provide an in-depth look into how the New Elevation Certificate (FEMA form 086-0-33) is utilized by the Insurance Industry to rate a property's flood risk for NFIP Flood Insurance. In addition it will explain how a local municipality uses the form to enforce their Floodplain Management Ordinance and check floodplain compliance. At the end of the course participants will have a better understanding on how the Elevation Certificate should be completed, correctly, and more accurately, which will improve their residents flood insurance premiums and ensure a flood resilient structure is built. Case studies will be used to illustrate what flood loss preventive solutions are available and how to identify possible solutions using the Elevation Certificate that can dramatically lower an owner's NFIP premium. FEMA's Technical Bulletin 1 on Flood Opening Compliance will be reviewed along with International Code Council Construction Code and ASCE 24-14 standards.

#### Seminar 4

2:00 – 2:50 PM

Ben Sullivan, Lead Survey Specialist, Foth Infrastructure & Environment, LLC

1 PDH

"Improving the End User Experience with Reality Modeling from UAS Data

In summary, I would like to share what reality modeling is for folks who are new to this growing technology. Additionally, how Foth has started using it as well as how data is collected by various sensors including UAS/drones and how the 3D world is being better communicated for end user collaboration on infrastructure projects.

#### Seminar 5

3:00 – 3:50 PM

Allen Brock, GPI

1 PDH

Merging of Survey Data from Multiple Acquisition Platforms

In this presentation, we will explore the advantages and challenges in which multiple technologies were used for a single deliverable for transportation projects. There are many different platforms that can be used to collect data for high accuracy mapping projects. These include terrestrial LiDAR, mobile LiDAR, aerial LiDAR (fixed wing and helicopter) and traditional photogrammetry. On many occasions, no single platform can meet all of a project's needs. Utilizing multiple acquisition platforms and technologies to secure data for a single project has proven to be a safe, cost effective and schedule friendly alternative for transportation as well as other projects such as ALTA Surveys and is becoming more common. These challenges can be overcome by upfront coordination with the design team to thoroughly understand their requirements and expectations and with well-coordinated mission planning and data collection. In this presentation, we will explore the advantages and challenges in which multiple technologies were used for a single deliverable for transportation projects.

#### Seminar 6

4:00 – 4:50 PM

Gore Bolton, So Deep

1 PDH

3-D Mapping Underground

#### **Track 4**

7 PDH for the Day

Serminar 1:

8:00 – 11:50

4 PDH

Daniel Katz, Aerotas

How to create the most profitable & effective drone survey program

Flying a drone is easy, but creating a successful drone mapping program is complex. Drone technology presents a huge opportunity to survey firms look to grow their businesses despite a nationwide shortage of hireable survey staff. However, surveyors need to be sure they can get the absolute maximum benefit out of their drone survey programs. In this seminar, Daniel Katz will share lessons from implementing drone mapping programs for over hundreds of surveyors nationwide. Key topics include benchmarks of a successful UAV program, best practices for profitable & high accuracy mapping, a live demo of producing final line-work from UAV data, limitations of UAV surveying today, and business implications for surveyors using UAVs

Seminar 2:

2:00 – 2:50

1 PDH

Matthew Fultz, ASA, Matheson Advisors

**What is the Right Value for your Firm**

Seminar 3:

3:00 – 3:50

1 PDH

Matthew Fultz, ASA, Matheson Advisors

**Financial Management and Tracking Ratios**

Seminar 4:

4:00 – 4:50

1 PDH

Troy Deaton, Geo-Tronics

## **Friday, February 2, 2018**

#### **Track 1**

7 PDH for Day

**Gary R. Kent, PS**

**The Schneider Corporation**

8:00 – 11:30 AM

3.5 PDH

### **Risk Management for Surveyors**

This course is designed to help surveyors be attuned to the realities of liability in their practice. The program will review liability that surveyors necessarily incur as part of their practice and how they can mitigate their exposure. But sources of *unnecessary* surveyor liability will also be explored by exposing the things that surveyors inadvertently or unwisely do that increase their liability. In all cases, steps that surveyors can take to eliminate or at least mitigate their exposure will be outlined.

**Gary R. Kent, PS**

**The Schneider Corporation**

1:00 – 4:50 PM

3.5 PDH

### **Health and Safety for Surveyors**

Safety on the job is really a function of just two primary things: promoting a culture of safety, and taking personal responsibility for your safety and for those around you. While we can talk about all of the factors that can go into a good safety program – training, safety plans, equipment, safety manuals, hazard communication and so on - none of it matters if the company and/or the employees do not care. Aside from the obvious wish to return safely to our families every night, this program will look at the practical concerns that companies and individuals need to consider in the daily activities and in their safety programs

### **Track 2**

**7 PDH for the Day**

**Jeffery N. Lucas, JD, PLS**

**Lucas & Company, LLC**

Legal Research for Surveyors

½ Day Seminar – 3.5 PDH

This seminar will explore the law and sources of the law. The legal research project will be studied from beginning to end. A live internet search will be conducted that will include finding the law on several key areas that affect surveyors in their everyday practice, including, but not limited to: liability; statutes of limitations; boundary disputes; property law; deeds and instruments of conveyance; and contracts. Participants will come away with a better understanding of the law and how it affects the professional land surveyor.

**Jeffery N. Lucas, JD, PLS**

**Lucas & Company, LLC**

Surveyors in Court

½ Day Seminar – 3.5 PDH

This seminar will explore the world of civil litigation and the land surveyor's role as an expert witness or as a party to the case. Good and bad testimony will be examined through real-life case studies. Important issues relative to the surveyor's liability will be examined. Strategies for winning in court will be explained and strategies for avoiding court altogether, will be discussed. This seminar will teach the participants how to thrive as an expert witness and how to survive as a defendant in court.

### Track 3

8:00 – 10:50 AM

Charles Pecchio

Kingston Capital Company

**Ownership Transition (“OT”)** - This session focuses on the sometimes complex concepts surrounding a change in ownership. The average age of a surveyor in the U.S. is 58. The time to plan for OT is now. Proper planning will optimize the company’s value and maximize the likelihood of a successful OT that accomplishes ownership’s goals.

Topics discussed include: What are ownership’s goals? How can the current value of the company be determined? How can ownership prepare for OT and optimize the value of the company? What are the various deal structures and how to determine the best approach based on ownership’s goals and minimization of taxes? What are the risks and pitfalls to avoid? What is the OT process?

11:00 – 11:50 AM

Karen McCabe

IMCI

Protecting Your Practice – Contracts for Land Surveyors

1 PDH

2:00 – 2:50 PM

Tom Scott

SC Cyber

Cyber and Workforce Development

1 PDH

3:00 – 3:50 PM

Earl Hunter, SC Civil Justice Coalition

SC Legislative Process

1 PDH

4:00 – 4:50

Leadership

1 PDH