OVERVIEW

For many utility industry observers, it’s not a matter of whether drones will be integrated into the operational landscape—it’s when. The practical applications of unmanned aircraft systems (UASs) are poised to transform the industry with strong implications for worker safety, system reliability, and data collection & storage. The opportunity to get an aerial view of transmission and distribution lines, towers, and poles without deploying a crew is attractive to many utilities.

This conference gathers industry experts to discuss all of the important topics relevant to UAS use for electric utilities. An FAA representative will discuss the Final Rule for drones and its implication for the utility industry. The Director of the UAS Research Center for Oak Ridge National Laboratory will discuss his research regarding best practices of UAS usage in the utility industry. Southern Company and Xcel Energy will provide case studies pertaining to their usage of UAS. Legal experts will discuss important considerations including state/local regulations, traffic management, property rights, and privacy rights. NRECA will assess the business case for UAS. Practical applications of UAS will be discussed, including transmission line monitoring and asset inspection. Finally, a panel of experts will convene and discuss hot topics and audience questions regarding UAS.

LEARNING OBJECTIVES

- Summarize the Final Rule for Small UAS
- Discuss UAS concept of operations and applications to support utility work
- Review a comprehensive guide and foundation for safe operations
- Describe challenges to realizing UAS potential, including spectrum, traffic management, and state/local regulations
- Evaluate Southern Company’s UAS policy and integration plan
- Assess how Xcel Energy plans to use UASs to change how they assess electric and gas facilities to pinpoint potential risks while improving reliability, safety and enabling regulatory compliance
- Address primary exposures associated with UAS operations
- Review UAV economics
- Determine best bets for immediate UAV uses
- Discuss long-term UAV applications
- Evaluate systems and processes that still need development
- Participate in a question & answer session with UAS & utility experts
- Discuss utility asset inspection programs
- Describe state law issues related to property rights, including questions related to trespass, nuisance, and takings
- Discuss state law issues related to privacy, including tort considerations, as well as federal initiatives and litigation concerning UAS and privacy considerations
- Explain the extent to which federal laws and regulation may pre-empt state regulations
- Discuss UAS for transmission line and pipeline mapping
AGENDA

Tuesday, October 18, 2016

8:00 – 8:30 am  Registration and Continental Breakfast

8:30 – 8:45 am  Conference Introduction

8:45 – 9:30 am  Keynote Presentation: Mainstream Utilization of UAS within the Electric Utility Industry
- Publication of a comprehensive guide and foundation for safe operations
- UAS concept of operations and applications to support utility work
- Considerations for using UAS near energized infrastructure
- UAS-mounted sensors applications
  - Rick Lusk, Director - UAS Research Center, Oak Ridge National Laboratory

9:30 – 10:30 am  FAA UAS Rules & Regulation
- Overview of the Final Rule
- Updates & changes
- Impact on the utility industry
- Waivers
  - Alvin Brunner, Aviation Safety Inspector- UAS, FAA

10:30 – 11:00 am  Networking Break

11:00 am – 12:00 pm  Challenges to Realizing UAS Potential (Spectrum, Traffic Management, State/Local Regulations)
UAS legal experts will discuss policy and regulatory challenges to realize full UAS potential, including:
- **Spectrum:** While current VLOS unmanned aircraft flights utilize unlicensed spectrum, beyond line of sight flights will require spectrum and infrastructure to provide the control links necessary to operate the unmanned aircraft. This session will discuss the options available for such spectrum.
- **Traffic Management:** Wiley Rein experts will discuss the NASA initiative to develop a traffic management system for unmanned aircraft systems.
- **State/Local Regulations:** This session will discuss the scope of FAA authority, as well as strategies for addressing the multiplicity of state and local regulations that inhibit UAS flights.
  - Anna Gomez, Attorney, Wiley Rein
  - Josh Turner, Attorney, Wiley Rein

12:00 – 1:00 pm  Group Luncheon

1:00 – 1:45 pm  Case Study: Xcel Energy: Harnessing UAS Potential and the Power of Collaboration
- How Xcel Energy plans to use UASs
- Xcel & Environmental Consultants UAS case study
- Utilities & consultants: Best practices for working cohesively
  - Eileen Lockhart, UAS Program Manager, Xcel Energy
  - Jim Downie, President, Environmental Consultants, Inc.
AGENDA

Tuesday, October 18, 2016 (Continued)

1:45 – 2:30 pm  UAS for Transmission Line and Pipeline Mapping
• Vegetation mapping for encroachment and volume measurement
• Measuring line sag from point clouds
• Tower inspection geolocation, data storage and 3D modelling
• Thermal inspection and mapping for transmission towers
• Pipeline survey before, during and after construction
• Pipeline inspection & leak detection with thermal and other sensor
• Future pipeline monitoring with new sensors to detect leaks
- David Day, Executive Vice President, Keystone Aerial Surveys

2:30 – 3:00 pm  Networking Break

3:00 – 3:45 pm  UAS Insurance & Liability Considerations
• Primary exposures associated with UAS operations
• Insurance coverage available for UAS operations
• How to manage exposures associated with UAS operations
• Non-owned considerations for companies who hire UAS operators to work on their behalf
• Check-list of insurance requirements for contracted UAS operators and documents that should be obtained
• How telematics insurance can provide a real-time picture of UAS fleet operations and control
- Terry Miller, President, Transport Risk Management

3:45 – 5:00 pm  UAS Integration into the Utility Industry
This Q&A panel will be the perfect opportunity for audience members to ask questions of UAS experts.
Moderator: Donald Chance Mark, Shareholder, Fafinski Mark & Johnson
Panelists:
- Eileen Lockhart, UAS Program Manager, Xcel Energy
- Dexter Lewis, Senior Research Engineer, Southern Company
- Linda Rhodes, Operational Strategy & Business Intelligence, Commonwealth Edison, an Exelon Company
- Brian Sloboda, Program and Product Line Manager-Energy Utilization/Delivery/Energy Efficiency, NRECA
- Rick Lusk, Director- UAS Research Center, Oak Ridge National Laboratory
- Nathan Schuett, CEO, PreNav

5:00 – 6:00 pm  Networking Reception
AGENDA

Wednesday, October 19, 2016

8:00 – 8:30 am  Continental Breakfast

8:30 – 9:15 am  UAS Based Automated Inspection of Utility Assets
  • Improved reliability of electricity distribution and transmission
  • Reduced risks of field work hazards
  • Faster reaction to emergency events
  • More efficient maintenance
  • Optimized operations
  • Enhanced environmental compliance
  - Joseph J. Leccese, VP Client & Partner Development, Sharper Shape Inc.

9:15 – 10:00 am  Case Study: Southern Company
  • Utility applications of UAS
  • Southern Company’s UAS policy and integration plan
  • Business case of UAS for transmission inspections
  - Dexter Lewis, Senior Research Engineer, Southern Company

10:00 – 10:30 am  Networking Break

10:30 – 11:15 am  UAS Usage: Property Rights Issues & Privacy
  • State law issues related to property rights, including questions related to trespass, nuisance, and takings
  • State law issues related to privacy, including tort considerations, as well as federal initiatives and litigation concerning UAS and privacy considerations
  • The extent to which federal laws and regulation may pre-empt state regulations
  - Tom Dougherty, Partner, Lewis Roca Rothgerber Christie

11:15 am – 12:00 pm  The Business Case for UAS
  • Review of UAV economics
  • Best bets for immediate UAV uses
  • Long term UAV applications
  • Look at systems and processes that still need development
  - Brian Sloboda, Program and Product Line Manager-Energy Utilization/Delivery/Energy Efficiency, NRECA

12:00 pm  Conference Adjourns
INSTRUCTIONAL METHODS

Case studies, PowerPoint presentations, and group discussion will be used for this conference.

REQUIREMENTS FOR SUCCESSFUL COMPLETION OF PROGRAM

Participants must sign in/out each day and be in attendance for the entirety of the event to be eligible for continuing education credit.

IACET CREDITS

EUCI has been accredited as an Authorized Provider by the International Association for Continuing Education and Training (IACET). In obtaining this accreditation, EUCI has demonstrated that it complies with the ANSI/IACET Standard which is recognized internationally as a standard of good practice. As a result of their Authorized Provider status, EUCI is authorized to offer IACET CEUs for its programs that qualify under the ANSI/IACET Standard.

EUCI is authorized by IACET to offer 1.0 CEUs for the conference.

EVENT LOCATION

A room block has been reserved at the Grand Hyatt Denver, 1750 Welton Street, Denver, CO 80202, for the nights of October 17-18, 2016. Room rates are $209, plus applicable tax. Please contact Danielle Menard at dmenard@euci.com with your check in/check out dates. The cutoff date to receive the group rate is September 26, 2016, but as there are a limited number of rooms available at this rate, the room block may close sooner. Please make your reservations early.

REGISTER 3 SEND 4TH FREE

Any organization wishing to send multiple attendees to these conferences may send 1 FREE for every 3 delegates registered. Please note that all registrations must be made at the same time to qualify.

PROCEEDINGS

A copy of the conference proceedings will be distributed to attendees at the event. If you are unable to attend or would like to purchase additional copies, a downloadable link will available two weeks after the conference is complete. The cost per download is US $295. The link includes visual presentations only. Upon receipt of order and payment, the link will be sent to you via email.

NOTE: All presentation sales are final and are nonrefundable.

SPONSORSHIP OPPORTUNITIES

Do you want to drive new business through this event’s powerful audience?

Becoming a sponsor or exhibitor is an excellent opportunity to raise your profile before a manageably sized group of executives who make the key purchasing decisions for their businesses. There is a wide range of sponsorship opportunities available that can be customized to fit your budget and marketing objectives, including:

• Platinum, gold, or VIP sponsor
• Workshop sponsor
• Lanyard sponsor
• Networking break host
• Luncheon host
• Tabletop exhibit
• Breakfast host

Custom sponsorship opportunities are also available. Please contact Erin Burba at 720-988-1260 or eburba@euci.com for more information.
PLEASE REGISTER THE FOLLOWING

☐ UAS FOR ELECTRIC UTILITIES CONFERENCE, OCTOBER 18-19, 2016: US $1395
EARLY BIRD ON OR BEFORE SEPTEMBER 30, 2016: US $1195

☐ I'M SORRY I CANNOT ATTEND, BUT PLEASE SEND ME A LINK TO THE CONFERENCE PROCEEDINGS FOR US $295.

How did you hear about this event? (direct e-mail, colleague, speaker(s), etc.)

Print Name | Job Title
---|---

Company

What name do you prefer on your name badge? | Address
---|---

City | State/Province | Zip/Postal Code | Country
---|---|---|---

Telephone | Email
---|---

List any dietary or accessibility needs here

CREDIT CARD

Name on Card | Account Number
---|---

Billing Address | Billing City | Billing State
---|---|---

Billing Zip Code/Postal Code | Exp. Date | Security Code (last 3 digits on the back of Visa and MC or 4 digits on front of AmEx)
---|---|---

OR Enclosed is a check for $ ___________________ to cover ________________ registrations.

Substitutions & Cancellations

Your registration may be transferred to a member of your organization up to 24 hours in advance of the event. Cancellations must be received on or before September 16, 2016 in order to be refunded and will be subject to a US $195.00 processing fee per registrant. No refunds will be made after this date. Cancellations received after this date will create a credit of the tuition (less processing fee) good toward any other EUCI event. This credit will be good for six months from the cancellation date. In the event of non-attendance, all registration fees will be forfeited. In case of conference cancellation, EUCI’s liability is limited to refund of the event registration fee only. For more information regarding administrative policies, such as complaints and refunds, please contact our offices at 303-770-8800. EUCI reserves the right to alter this program without prior notice.