

8:00 AM - 9:00 AM

The New Rules, Regulations and Processes for Keeping Your Tower Infrastructure in Compliance - Silver Scribe 1st Place Winner

Cory Crenshaw, *Crenshaw Communications Consulting, LLC.*

Room: 350 D

In the last year, both the FCC and the FAA have adopted new rules and regulations regarding tower compliance. To aid in the deployment of new tower infrastructure, the FCC has given additional guidance and timelines for reviewing projects which consulting tribes and SHPOs must adhere to. The new regulations are proving favorable for many in the critical infrastructure industry.

This session will discuss the key changes and how those changes impact your business operations, share compliance best practices and help you understand the processes and steps you need to take to ensure compliance while leveraging the new regulations to help keep your project on schedule

Objectives of this session:

- Discuss new regulations
- Discuss action plans and steps for implementation
- Create a long term strategy for tower compliance

Industry Sector: Oil & Gas, Pipeline, Electric Utility, Waste Water

Category: FCC & Regulatory

Intended Audience: Executive/Director, Manager, Field Tech, Entry Level

Oil & Gas Digital Transformation: Leveraging New Choices for Protected Spectrum

Louis Lambert, *Redline Communications*

Room: 350 E

The Oil & Gas industry is engaged in its most significant transformation in decades. At the core is the requirement for a new, secure, multi-service network delivering industrial-grade, always-on, network access for people and machines on the move. To build these new networks, Oil & Gas companies require transformative technology and protected spectrum. This session covers how the digital transformation is enabled with access to Private Industrial LTE technology and associated spectrum.

Objectives of this session:

- Present the unprecedented technology and spectrum access now available to Oil & Gas companies in the USA and abroad.
- Review how this technology and spectrum access plays a strategic role in the digital transformation.
- Review how the shared spectrum model may impact the global market.

Industry Sector: Oil & Gas

Category: Networks/Communications Infrastructures, IoT

Intended Audience: Executive/Director, Manager, Field Tech

A Practical Overview of Private LTE Technology and Its Impending Impact on Oil & Gas

Derek Ellingsworth, *GE MDS*

Technical Sessions Sponsored by:



Room: 350 F

A Practical Overview of Private LTE Technology and Its Impending Impact on Oil & Gas. We'll start the discussion by reviewing why one should consider private LTE. The features offered by LTE technology and the benefits of a private system will be brought to light. We'll discuss considerations that should be addressed when determining if private LTE is right for Oil & Gas. We'll outline a typical private LTE system rollout. We'll include network topology, relevant cost considerations, and performance metrics calculations. Finally, we'll conclude with the current status of LTE technology and how it's been shaping the telecommunications industry. Our goal is to build confidence in this proven technology and encourage them to explore the option of forgoing the iterative, and proprietary, migration options for an evolutionary standards-based technology.

Objectives of this session:

- Highlight the applicable benefits and features offered by private LTE while also providing insight into the considerations that go into implementing a private LTE network
- Outline what a typical private LTE network rollout would look like from conception to implementation. This includes network topology, relevant costs, and general performance calculations.
- Discuss the LTE trend in the telecommunications industry. Where the LTE technology currently stands and how LTE is shaping the future of communications with focus on the impact it can have on the Oil & Gas Industry.

Industry Sector: Oil & Gas

Category: Emerging Technologies

Intended Audience: Executive/Director, Manager, Field Tech

9:00 AM – 10:00 AM

Vendor Shoot Out - Solutions for the Emerging Digital Oil Field Technologies

Moderated by: JL Betts, *End 2 End Technologies*, *ENTELEC Technical Committee*

Room: Exhibit Hall B3

Come join us as vendors explore current topics relevant to the industry. This will be a lively discussion and audience questions and participation are welcome.

11:00 AM - 12:00 PM

Top CyberSecurity Considerations for Oil Field IoT

Glenn Longley, *OleumTech Corporation*

Room: 350 E

In this presentation, we will walk through trade-offs and top system considerations as well as network and wireless questions you should ask about the IoT equipment that you are deploying and what you can do to ensure you minimize the risk associated with taking advantage of the considerable business advantages that can be had using the IoT offerings that are available now.

In today's Oil Field, the transition from traditional automation to the Internet of Things (IoT) is here. While CyberSecurity is not a new consideration, the shift to more and more connected devices, and connecting field (OT) devices to a wider range of networks continues to push the importance. A number of recent highly publicized CyberSecurity events have highlighted the relevance in our industry. In this paper and presentation, we will walk through trade-offs and top system

Technical Sessions Sponsored by:



considerations as well as network and wireless questions you should ask about the IoT equipment that you are deploying and what you can do to ensure you minimize the risk associated with taking advantage of the considerable business advantages that can be had using the IoT offerings that are available now.

Objectives of this session:

- trade-offs and top system considerations
- network and wireless questions
- IIoT

Industry Sector: Oil & Gas, Pipeline

Category: Cyber Security/Physical Security, System Architecture for Industrial Control Systems, Networks/Communications Infrastructures, Emerging Technologies, IoT

Intended Audience: Executive/Director, Manager, Field Tech, Entry

Practical Network Management for the Oil Field

Craig Tedrow, *GE MDS*

Room: 350 D

Today's industrial wireless networks carry SCADA, video, badge access, work reports, and dispatch data that is used by a wide variety of people and systems to drive production and maintain critical systems. These wireless networks need to deliver reliable and secure performance every day. Network management software is the key tool for monitoring, measuring, configuring, and securing these critical networks. This session will provide practical examples using network management software to monitor, manage, and troubleshoot wireless networks.

Objectives of this session:

- Establish understanding of network management systems, how they work, what information they provide, and what overhead they place on the network
- Demonstrate practical, real-world examples of troubleshooting networks and optimizing performance
- Demonstrate how deployment of large scale networks can be facilitated with network management software and how cyber security controls can be tied into the existing security infrastructure

Industry Sector: Electric Utility

Category: Networks/Communications Infrastructures

Intended Audience: Manager

Wireless Communications for Intrinsically Safe Environments

Speaker TBD, *Tessco*

This will be a discussion around the challenges and some solutions for those challenges pertaining to connectivity in designated hazardous environments. Specifically including oil and gas extraction, petrochemical, and refining. Attendees will learn about how some of the companies in their industry are currently designing and deploying wireless communications in areas where safety is a requirement.

Industry Sector: Oil & Gas, Pipeline, Electric Utility, Waste Water, Railroad, Mining

Category: Networks/Communications Infrastructures

Intended Audience: Executive/Director, Manager, Field Tech

Technical Sessions Sponsored by: