Leaders in Wireless Communications Offer New Insights at Education Forum

Where is the one place where critical communication technology professionals gather to evaluate, learn and network with industry leaders? People passionate about wireless communications and related industries who are interested to learn from skilled communications professionals are invited to hone their skills at Education Forum 2020, in Las Vegas next spring.

Greencastle, October 23, 2019: Electronics and communications professionals with fresh ideas and practical solutions to the challenges facing today’s communications industry, especially those which provide case studies and innovative solutions for communications challenges, will present technical sessions during ETA International’s Education Forum 2020 (EF20), co-locating with the International Wireless Communications Expo (IWCE), in Las Vegas March 30-April 3, 2020.

Technical sessions of interest include:

- **Who is Being Exposed & Necessary Safety Training**
  5G is the next generation cellular network technology. People & advocacy groups are concerned about the Radiofrequency radiation exposure of this new technology. Concern isn’t new; however, it is once again becoming more prominent. Utilities are sharing space on their poles. And public safety professionals need to know what to watch for and how to work safely. This session will be presented by Miranda Allen and Brenda Myers of RSI Corp.

- **Living on The Edge: Building Smart Cities, Smarter**
  The purpose of this topic will cover two overlapping areas involving 5G and smart cities. The first is to imagine the possibilities of 5G applications and smart cities. How will these networks benefit cities and their constituents? Which real-world challenges must be overcome to make “living on the edge” a reality? This session will be presented by Patrick McNerney of 3D Design & Engineering.

- **Assessing the Effects of Radio Failure in High-Risk Incidents**
  Monitoring, managing, and maintaining radio communication is paramount to public safety preparedness. Even new communication systems are susceptible to failure due to poorly maintained radios. Most often, these problems remain hidden until the equipment fails. When a failure occurs, it can create a problem that results in radio system managers spending hours chasing down the source of the issue before they can begin fixing it. This session will be presented by Eileen Cole of LocusUSA.

- **Understanding Fiber Basics for Wireless Backbone**
  The growth of wireless deployment and bandwidth demand means more fiber backbones will be needed. We will review how fiber works, the key components in the backbone and basic fiber testing needs. This is a good primer for anyone working with wireless technology, yet new to fiber optics. This session will be presented by Lee Kellett of Light Brigade.

- **Proprietary Video Files - the Science of Processing the Digital Crime Scene**
  Over the last few years, there has been an extraordinary effort to equip officers with body worn cameras. Agencies struggle with correctly processing these systems in a standards compliant / scientific manner. After a brief presentation on the problems and the technology, the presenter will guide the attendees through a variety of sample cases to illustrate how fast and accurate processing and analyzing this type of evidence can be. This session will be presented by Jim Hoerricks of Apex Partners, Ltd.

- **RF Exposure Awareness for Communication Technicians**
  Exposure to RF signals is a fact of life for radio technicians. This class will inform you about the current and proposed laws related to RF exposure safety, how to prevent and minimize RF exposure to yourself and the general public, how to do RF exposure testing and how to meet FCC and other regulatory agency exposure standards. This session will be presented by Mark Pallans of Pallans Communications Associates.
• **Fiber To The RF: Antenna, RRU, DAS**

There is a rapidly growing demand for commercial, residential, indoor, outdoor and everywhere seamless wireless/Wi-Fi availability. DAS (Distributed Antenna Systems) and Fiber to DAS are providing the potential solution. To get career-ready for this technology, DAS technicians must be familiar with basic theory of RF/Wireless, and in-building DAS (IDAS), and learn about fiber optics and know basic fiber theory, installation, and testing outdoor DAS (ODAS). This session will be presented by Frank Ghassemi, DAS, of Golden Eagle Academy and David Diaz of Innov8.

• **The Importance of Antenna Mount Analysis**

This session will discuss the importance of analyzing antenna mounts to prepare the 5G antennas for macro builds, the importance of proper installation of the antennas, how improper installation can negatively affect the strength of the mounts and will reference 5G antennas in terms of how they will affect loading. This session will be presented by Luke Ferguson of Valmont Site Pro 1.

• **Verifying Fresnel Zone Clearance for Point-to-Point Microwave Systems**

Clear line-of-site is critical for long distance microwave point-to-point link performance. Even if the path to a remote site is visually clear, the radio line-of-site may be affected by objects in the Fresnel zone, which is an elliptical area immediately surrounding the visual link path. This presentation describes how a battery-powered portable signal generator and a battery-powered portable spectrum analyzer can be used to verify the Fresnel zone clearance. This session will be presented by Thomas Brinkoetter, LAS of Radiositetest.

• **The Evolution of mmWave RF Communications in Future Terabit Optical Wireless Communication Technologies**

This session examines the current mobile capacity of the RF spectrum in respect to 5G small cell technology and outlines the evolution of wireless systems to SAT5G/6G and terabit optical wireless system network technologies. This session will be presented by JB Groves, FOI, ITS, STS of Wharton County Junior College.

• **UAS Analytics and Best Practices for Optimizing Drone Data**

Data-capture is the core value in sUAS (drones), and this session will look at post-flight analysis software, workflow and interpretation of data. We’ll briefly examine the setup of sensors for best data capture, while diving deeply into the use of software to provide actionable data post-flight. This session will be presented by Douglas Spotted Eagle of Sundance Media Group.

In addition to the short courses at EF20@IWCE, ETA will host hands-on training workshops leading to ETA accredited certification as part of IWCE’s robust conference program. To prepare both entry-level technicians and seasoned professionals for successful careers in electronics and wireless communications, hands-on training workshops that will be hosted by respected industry leaders include: 5G for Technicians, Basic Electronics, Distributed Antenna Systems, Fiber to the Antenna, General Communications Technician, Cybersecurity, Line and Antenna Sweep, Passive Intermodulation, Practical Antenna Basics, R56 Communications Site Installer, and Radio Frequency Interference Mitigation. For registration information, go to: [https://www.iwceexpo.com/iwce20/Public/Content.aspx?ID=1072168](https://www.iwceexpo.com/iwce20/Public/Content.aspx?ID=1072168).

**About ETA International** – Celebrating 40+ years of service to the electronics industry, ETA has delivered over 250,000 certification examinations successfully. Widely recognized and frequently used in worker job selection, hiring processes, pay increases, and advancements, ETA certifications are often required as companies bid on contracts. ETA’s certifications are personal and travel with the individual, regardless of employment or status change and measure competencies of persons, not products or vendors. All ETA certifications are accredited through the International Certification Accreditation Council (ICAC) and align with the ISO-17024 standard: [www.eta.org](http://www.eta.org)

**About ETA’s Education Forum** – ETA International is proud to host hands-on training through outside vendors in popular technology areas related to ETA certification during Education Forum, co-located with the International Wireless Communications Expo, for the sixth year in a row March 30 – April 3, 2020, at the Las Vegas Convention Center, South Hall. ETA’s partners, the industry’s most respected trainers, will provide in-depth hands-on training in several key areas of expertise. Following each training class, ETA will provide opportunities to test for ETA certification: [http://www.eta.org/education_forum.html](http://www.eta.org/education_forum.html)

**About International Wireless Communications Expo (IWCE)** – Since 1977, the International Wireless Communications Expo (IWCE) has been the premier annual event for communications technology professionals. IWCE features over 380 exhibitors showcasing the latest products and trends in the industry. Over 7,000 individuals attend from a diverse group of industry professionals including government/military, public safety, utility, transportation and business enterprise. For more information, visit [www.iwceexpo.com](http://www.iwceexpo.com).


# # #