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ETA® INTERNATIONAL



PRESS RELEASE

New ETA Fiber To The Antenna Certification Prepares Workforce

Mobile network bandwidth demands continue to increase, driving fiber deeper and higher into the radio network. Due to the demand for qualified technicians, ETA® International recently developed a Fiber To The Antenna certification to validate the skills required to be successful in this industry.

Greencastle, **August 12**, **2016**: Fiber optic cable has become the basis of high speed data transport around the world. With the integration and installation of Long Term Evolution (LTE) as a wireless 4G technology, getting high speed data closer to the antenna has become very important. <u>ETA® International</u>'s Fiber To The Antenna (FTTA) hands-on certification prepares electronics professionals for the challenges of deploying reliable fiber to the antenna.

This certification is for students, site integrators, contractors, construction professionals and anyone who is involved in installation, maintenance, testing and repair of fiber optic cables on towers and rooftop antennas, or wireless and cellular facilities. Distributed Antenna Systems (DAS) and small cells are being deployed using fiber as the back-haul and intermediate data paths. It is critical that during installation of these systems, base line tests are conducted to ensure the fiber ends are clean and the loss in the network meets industry standards.

"ETA intends to lead the industry in providing the necessary certifications to insure there are competent installers and technicians certified and available for working on public safety systems, utilities, or for a government agency," said ETA President Teresa Maher, CSS.

Following industry best practices and standards, ETA's FTTA certification exam covers how to prepare and install pre-terminated fiber cable assemblies, how to test fiber after installation and how to identify problems during and after installation. Basic fiber safety and optical transmission theory are also covered, along with core concepts such as fiber optic cable types, modes, construction, installation maintenance and testing.

This <u>accredited</u> certification includes a hands-on component with a discussion on the carrier Method of Procedure (MOP). In order to offer ETA certifications with a hands-on component, schools and trainers must have a valid course approval for the program. ETA serves in its capacity as a third party to technical education, providing a way for school systems and training providers to validate their courses. Submit an <u>ETA course approval application</u> for FTTA today.

FTTA is a broadband network architecture in which optical fiber is used to connect the remote radio head (RRH) to the base station in new antennas, or retrofitted in existing ones, to replace all or part of the coax local loop. The biggest advantages of fiber-optic cable are that it is lighter than coax cable and has the ability to preserve more bandwidth. FTTA also gives better signal integrity, has increased capacity, coverage and energy efficiency and since it takes up less space, it leaves a smaller footprint.

Newer and more powerful mobile devices are the driving force behind bandwidth growth. As a result, mobile network operators are racing to implement new technologies, such as Long Term Evolution (LTE), to satisfy these requirements to deploy fiber. With digital interfaces, fiber is required over coaxial cable due to higher bandwidth, better reliability and less weight. Fiber also allows the separation of the Baseband Unit (BBU) and Remote Radio Units (RRU), giving mobile operators the ability to rethink how they deploy their system.

Mobile traffic demand will continue to drive innovation and FTTA will play a critical role as operators look to reduce cost and improve performance. For example, the deployment of fiber will be a benefit to public safety communications when additional mobile cell site units are brought to use in disaster recovery incidents. Effectively testing the physical layer during installation and deployment is essential for lowering maintenance cost and improving network reliability.

The network operates from the Radio Frequency (RF) side in the same manner as a cellular telephone network: comprised of a main switch, a backhaul network connecting cells, cell sites and subscriber devices. From the network side, it is an all Internet Protocol (IP) solution and does not have the circuit switched 'voice' channel as with trunked Land Mobile Radio (LMR) or 2G and 3G cellular systems. The LTE system has a lofty goal of achieving 10 GB/s data transfer rates between a subscriber device and the user's target application.

ETA extends a very special thanks to all the Subject Matter Experts (SMEs) who have contributed their field knowledge and hands-on expertise to the development of this certification. The FTTA committee is led by Thomas Bonner, Ph.D., who has over 20 separate certifications in fiber optic instruction, teaching courses for AT&T, 3M, OFS, Lucent Technologies and Viavi (formerly JDSU). Other SMEs on the committee include: Larry Johnson, Light Brigade Founder, Phil Shoemaker, FOI, FOT-OSP, Light Brigade; Bill Woodward, P.E., FOD, Geodesicx; Paul Neukam, FOI, FOT-OSP, DCI, RCDD, BreakThru Training Solutions; Tom Dover, Dover Telecommunications Services; Dane Brockmiller, FOI, LAS, PIM, dBc, LLC; Richard Booth, FOT, Empire High School.

About ETA - Since 1978, ETA has issued over 150,000 professional certifications. 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-i.org

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