



The Society of Broadcast
Engineers Chapter 53
presents an

Ennes Workshop

Friday, March 2, 2018
8 a.m. to 5 p.m.

To be held in the
WFOR Transmitter Site
American Tower
1255 NW 210th St.
Miami Gardens, FL 33169

Topics include:

- ATSC 3.0
- FCC & Repack
- Bend Radius
- ST2110
- Grounding & Lightning Protection
- Cat 5e, 6, 6a for A/V
- Tower Structure and Site Safety

Registration:

SBE Members: \$40
Non-members: \$50

lunch is included

Register at
sbe.org/education/EnnesSFL
sbe53.com/meetings.html



Society of Broadcast Engineers
9102 N. Meridian St, Ste 150
Indianapolis, IN 46260

What is an Ennes Workshop?

ENNES

EDUCATIONAL FOUNDATION TRUST

The Ennes (pronounced "ENN-ess") Workshops were created in 1991 through the Ennes Educational Foundation Trust in an effort to bring affordable education to members locally. The Ennes Educational Foundation Trust, through its Education Foundation Committee, offers periodic workshops and seminars around the United States. These programs feature multiple topics and speakers that provide television and radio engineers with the latest information in broadcast and media technology.

About the Ennes Educational Foundation Trust

The Harold Ennes Scholarship Fund Trust was initiated by Indianapolis Chapter 25 in 1980 in memory of Harold E. Ennes, author of many textbooks for broadcast and broadcast-related communications training and a member of the Indianapolis chapter. Ennes was a member of the SBE's national Certification Committee and made many contributions to the early development of the Certification Program.

To encourage greater growth, the Scholarship Trust was transferred by Chapter 25 to the SBE national organization to administer in 1981.

Over the years, the purposes of the Trust were expanded. In addition to granting scholarships, the Trust now is involved with the funding and presentation of broadcast engineering-related educational programs, seminars and workshops. It also helps to underwrite costs associated with publishing technical books and manuals.

SBE Ennes Workshop • Miami Gardens, FL

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Planned schedule

Time	Topic/Event	Speaker
7 - 8:15 a.m.	Check-in/Registration & Opening Remarks	
8:15-8:45 a.m.	Repack: SFN and Nexgen TV Covers what broadcasters are doing across the US for the repack, and looks at single-frequency networks and Nexgen TV with ATSC 3.0.	Jim Leifer, CPBE; American Tower Corporation
8:45-9:30 a.m.	ST2110 The new SMPTE standards for live production and master control facilities for video, audio, and timing over IP infrastructure, including SMPTE 2022, SMPTE 2059, and the new SMPTE 2110 standards.	John Mailhof; Imagine Communications
9:30-9:45 a.m.	Break	
9:45-10:30 a.m.	Introduction to ATSC 3.0 ATSC 3.0 makes TV interactive and a participant in targeted advertising and viewer customization, and it helps with lost bandwidth because of the repack.	Fred Baumgartner, CPBE, CBNT; Trustee, Ennes Educational Foundation Trust
10:30-11:15 a.m.	Repack Progress Update & Planning for ATSC 3.0 Amid the Repack An update from a manufacturer's perspective, and the steps to take during the repack to enable a smooth transition and ATSC 3.0-ready transmission facility.	Joe Seccia; GatesAir
11:15 a.m.-noon	FCC and Repack The manufacturing process of both Parallax and the HC product lines will be discussed as well as how they would be placed in the USA.	Doug Thompson; Hitachi Kokusai Electric COMARK, LLC
1-1:45 p.m.	Using Category 5e, 6, 6a for Audio and Video Applications Using Category 5e, 6 or 6a to carry analog and digital audio; analog and digital video; S-video, RGB or VGA and HDMI; broadband/CATV; Ethernet AVB and HDbase.	Steve Lampen, CBRE; Belden
1:45-2:30 p.m.	Tower Structural Evaluation and Site Safety Learn about the techniques used to evaluate the soundness of deteriorating guyed tower structures, and the engineering and execution of controlled tower drops.	Dave Benco; ERI
2:30-2:45 p.m.	Break	
2:45-3:30 p.m.	Grounding and Lightning Protection Covers the various aspects of facility grounding to reduce potential lightning damage through proper routing and ground connections.	Jeff Welton, CBRE; Nautel
3:30-4:15 p.m.	Bend Radius: How Wire Fails Learn the results of impedance tests from bending and crushing a cable, then restoring the cable to being straight and testing again. The results will surprise you.	Steve Lampen, CBRE; Belden
4:15-5 p.m.	Topic TBD	

Schedule is subject to change

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