

TV TechCheck

The NAB Labs Newsletter for Television Broadcast Engineers



NAB LABS

February 9, 2015

The 2015 NAB Broadcast Engineering Conference

The Broadcast Engineering Conference (BEC) presented annually at the NAB Show offers broadcasters, consultants, equipment manufacturers and researchers a venue to present emerging developments and solutions to industry needs. Engineers working in radio and television attending the conference have a unique opportunity to hear real-world case studies that may provide opportunities for their companies.

The BEC is co-produced by NAB and the Society of Broadcast Engineers. Each year our BEC Planning Committee meets to determine which topics are most relevant for practicing broadcast engineers and other professionals working in or allied to the broadcast industry.



2015 BROADCAST ENGINEERING CONFERENCE COMMITTEE Shown l-r: Front row: Kim Sacks, CBS Radio; Milford Smith, Greater Media; Larry Oaks (Committee Chair), Meredith Corporation; Robert Russell, Journal Broadcast Group; Alan Jurison, Clear Channel Media and Entertainment; Sam Matheny, NAB. Back row: James Liefer, Clear Channel; Clyde Smith, FOX Network Engineering; John Poray, SBE.

Broadcast Engineering Conference sessions for 2015 include:

- Next Generation Television
- Advanced Radio Technology
- Radio Technology Forum
- UHD 8K and 4K Technology
- Technical Regulatory Issues for Broadcasters
- UAVs in Broadcast
- Broadcast Facilities
- Radio Connectivity
- Broadcast IT Infrastructure
- Disaster Preparedness and Recovery
- Television on Multiple Platforms
- Working with Metadata
- Understanding Adaptive Bitrate Technologies
- Radio on the Move

An ATSC 3.0 tutorial is scheduled for Sunday afternoon in the BEC. This three-hour tutorial is being developed to help explain the work efforts from myriad specialist groups involved in the standard-setting process. Anyone interested in the progress toward an ATSC 3.0 standard will find the tutorial educational and informative.

The Institute of Electrical and Electronics Engineers Broadcast Technology Society will present a tutorial on RF radiation exposure safety standards. The three-hour event on Tuesday afternoon looks at current standards, FCC policy on RF exposure, and practical considerations for broadcasters. RF exposure case studies and a variety of RF safety programs will be presented and offered as technical background for broadcast engineers developing their own safety programs.

Additionally, NAB Technology and NAB Labs are presenting the following full-day specialized educational content:

[AM Radio Boot Camp](#): The NAB AM Boot Camp is designed for broadcast professionals who need an overview of AM transmission, the peculiarities of AM, and how to insure proper operations and coverage. This program will address the most important elements of an AM transmission facility and offer advice on when you need to call in the experts to solve RF related problems.

With renewed interest in AM improvement from the broadcast industry and the FCC, this educational program will have wide ranging interest from engineers, consultants, communications attorneys and others interested in preserving and improving AM radio. The boot camp will wrap up with a high-level panel discussion including owners and operators of AM facilities. The panel will focus on the questions surrounding digital broadcasting on the AM band and whether all-digital is a feasible option for broadcasters.

[The RF Boot Camp](#) is presented as part of the NAB Labs educational initiative, the boot camp brings in expert instructors to teach the basics to broadcasters who need to understand RF – a mission-critical part of broadcast operations. The boot camp is ideal for broadcast professionals working primarily in studio/IT environments who want to expand their knowledge.

The boot camp covers both radio and television and demonstrates in a simplified light-technical way, how transmitters towers and antennas convey program content to listeners and viewers. The boot camp program also addresses best practice methods for monitoring/maintaining transmitter plant equipment to insure that the station remains in compliance with FCC and OSHA regulations. Instructors for the RF Boot Camp include Gary Cavell and his team from Cavell Mertz & Associates.

And there is more!

The SBE Ennes Workshop is celebrating 20 years. As part of the Broadcast Engineering Conference, this years program is *The All IP Facility*. The Ennes program will take place on Saturday, April 11.

NAB Technology has partnered with the IEEE-BTS (Institute of Electrical and Electronics Engineers Broadcast Technology Society) to present a tutorial on RF radiation issues and the importance of understanding safety requirements related to RF transmission.

Full details about the BEC are available [here](#).

Last Call for 2015 Technology Innovation Award Nominees



This is the last call for nominations for the NAB Technology Innovation Award.

First presented at the 2009 NAB Show, NAB presents the award to organizations that bring advanced technology exhibits and demonstrations of significant merit to the NAB Show. The nominated exhibit should present advanced research and development projects in communications technologies that have not yet been commercialized.

Candidates for the Technology Innovation Awards must be organizations who are currently exhibiting at the NAB Show. The size of the organization is not a determining factor. Nominated projects may not be commercial products that have been offered for sale prior to or at the NAB Show. The merit of the technology exhibit is the sole factor to be taken into account. The entry deadline is February 20, 2015. The awards will be presented at the NAB Technology Luncheon on April 15, 2015 at the NAB Show in Las Vegas.

Additional information and a nomination form are available on NAB's [website](#). The deadline for nominations is **February 20, 2015**.

The Amateur Radio Operators Reception – Call for Prizes:

The 2015 Amateur Radio Operators Reception is one of the most anticipated events at the NAB Show. We are currently seeking door prizes to be awarded at the Reception. All prize donors will be recognized in a scrolling video display at the event, and in the NAB Radio and TV TechCheck newsletters. Prizes can be of any size and value, but should be selected to appeal to technically inclined individuals who have a passion for their craft.

If you wish to donate a prize, please email Rich Johnson at rjohnson@nab.org. Thank you in advance for helping us make the 2015 Amateur Radio Operators Reception another outstanding success.



The reception takes place on Wednesday, April 15, 6-8 pm in the Wesgate Hotel (formerly the Las Vegas Hotel), Ballroom B.

Important Dates and Upcoming Events

[Hollywood Post Alliance \(HPA\) Tech Retreat](#)

February 9 - 13, 2015

Indian Wells, Calif.

[Audio Engineering Society \(AES\) 57th Conference: The Future of Audio Entertainment Technology](#)

March 6 - 8, 2015

Hollywood, Calif.

[2015 NAB Show](#)

April 11- 16, 2015

Las Vegas, Nev.