Radio TechCheck | NAB
NATIONAL ASSOCIATION OF BROADCASTERS

The Weekly NAB Newsletter for Radio Broadcast Engineers

30 Days until the Radio Show

RADIO SHOW
Produced by RAB and NAB

Just 30 days from today the Radio Show will begin in Chicago (September 14 – 16) at the Hyatt Regency. The Engineering program at the Radio Show will feature a series of expert tutorials and presentations covering the challenges of creating, operating and maintaining a modern radio facility.

During Studio Production Day, September 14, engineers will learn details about the trend toward multiplatform operations. Many stations are now embracing new technologies and looking beyond traditional broadcasting in order to capture new listeners and clients.

The day's presentations are case studies from broadcasters who are incorporating new design ideas into their studios in order to provide flexibility for air talent, program-related social media activities, TV/Web integration and more.

Jim Stagnitto, director of engineering for New York Public Radio, will describe the new studio facilities for WNYC and explain how this station has evolved from its beginnings in 1924 to the present day.

Glynn Walden, senior vice president, engineering, CBS Radio, will show how CBS Radio studios are being designed with flexibility in mind and how social media functions are being integrated into new facilities.

Paul Shulins, director of technical operations, Greater Media Boston, will share thoughts and observations on consolidating five radio stations under one roof in the Boston market. The lessons learned about live audio and video streaming, HD Radio, the Arbitron People Meter and IP audio will be valuable to all radio engineers.

Gary Kline, vice president engineering & IT, Cumulus Media, will cover audio over IP along with examples of how new technology was used to broadcast studio quality audio from the Royal Wedding via iPhone. Facilities budgeting and keeping air talent happy round out Gary's presentation.

Brian Janes, multimedia and remote systems engineer, ESPN Radio, will explain how ESPN Audio has recently expanded its efforts in multimedia production, podcasting, remote broadcasting, Deportes Radio and its radio on TV/Web initiatives.

Jim Roberts, senior product manager - studio systems, Broadcast Electronics, will discuss today's fast-paced studio operations. Jim will show methods for collaborating with talent across a network and detail how to build a reliable studio network for sharing audio files and updating schedules automatically throughout a cluster.

Following the day's presentations, our speakers will join a panel Q&A session lead by MaryAnn Seidler, business development executive (Americas), Tieline Technology.

On Thursday, September 15, the program will feature transmitter facility case studies, maintenance tips and tricks, along with new developments to improve efficiency and save on electrical consumption.

Following traditional transmitter site issues and case studies, the focus will shift to new opportunities and challenges evolving with expanded metadata delivery and multiplatform content distribution. In this segment we will hear from Clear Channel, Emmis, RadioDNS and the Internet Media Device Alliance.

Consulting engineer Gary Cavell and his team, Cindy Cavell, Richard Mertz, Michael Rhodes and Daniel Ryson will start the day by looking at the efficiency of a typical radio transmitter plant. All broadcasters are looking for ways to save money.

Improvements at the transmitter plant are often overlooked. Purchasing a new high efficiency transmitter is one way to save on electricity costs. If a transmitter is not in the budget, there are other ways of improving the transmission system that can certainly help over time. Cavell, Mertz & Associates developed a transmission system efficiency calculator designed to assist engineers with a variety of "what if" scenarios. The engineering assumptions made by Cavell for the calculator will be explained in detail.

Engineering consultant Steve Lockwood will look at another way to minimize power consumption of AM transmitters. Dynamic carrier control has been around for a very long time; however its use has been primarily limited to high-power shortwave broadcast transmitters. Steve's presentation will address Modulation Dependent Carrier Level Control (MDCL). MDCL systems provide significant reduction in transmitter power consumption. Steve will describe various methods for MDCL and show what is currently available from transmitter manufacturers. MDCL system trials were recently performed in Alaska. The results were impressive and certainly worthy of consideration by all AM broadcasters. But present FCC regulations do not permit this type of operation. Steve will review the environment for regulatory changes that would support MDCL use by U.S. AM broadcasters.

Paul Brenner of Emmis Communications will offer a set of case studies related to data applications for radio. He will show both audio with metadata and data only applications running in a traditional facility. Paul will extend the knowledge he has gained through building the Broadcaster Traffic Consortium. He will explain how a cloud-computing approach to running and supporting advanced applications can be an excellent option for broadcasters.

Jeff Littlejohn from Clear Channel Radio brings the topic "Care and Feeding of Streaming Media" to the Radio Show. Jeff's experience with streaming platforms for Clear Channel stations has resulted in tips and tricks that will be helpful to all radio engineers. He will show how consistency and reliability can be attained for both live and on-demand media targeted to a variety of consumer devices.

Nick Piggot is Head of Creative Technology at Global Radio in the UK. Nick's presentation will cover a new way to integrate traditional broadcast radio with the Internet. It's called Hybrid Radio. Hybrid Radio is part of the open-source RadioDNS project and can be a very cost-effective solution toward providing listeners with multiplatform program related content.

Wrapping up Transmission/Distribution Day will be John Ousby. John represents the Internet Media Device Alliance (IMDA). John's presentation is titled "Radio – Not Just Another App." He will explain ways that IP can offer a non-traditional route to the motor vehicle and extend the relationship of radio beyond terrestrial transmission limits. John will address the opportunities and challenges for IP delivery to the car.

Also on September 15, the National Radio Systems Committee will hold meetings of its Digital Radio, RBDS, and AM & FM Analog Broadcasting Subcommittees. All attendees (except members of the press) are welcome to attend these meetings.

Finally, Tower Day, Friday September 16 will focus on an often overlooked asset – the tower. Tower construction, maintenance, safety and management are covered during these presentations. If you aren't leasing space on your tower, you are leaving money on the table. Space on your tower is a valuable asset that can become a consistent, additional stream of recurring revenue. Learn how to market your tower, how to price the space and the keys to a successful landlord/tenant agreement. Find out how to sell your tower and lease it back. The panel of experts discussing towers will be led by Don Bishop, Biby Publishing with panelists Clayton Funk, Media Venture Partners; Adam Kauffman, NTP Wireless and Patrick McCamley, TowerSource, LLC.

The technical side of collocation cannot be ignored. Your new tenants will want a clear signal and a safe workspace. A successful collocation begins with a professional design and installation with attention to user compatibility, overload and intermodulation. Following occupational RF exposure and OSHA rules is critical to the safety of your guests workers. This panel will be moderated by Sharpe Smith, editor, AGL Bulletin and DAS Bulletin with panelists Richard Biby, AGL Magazine; Jim Hopkins, SiteMaster, Inc. and Duane C. MacEntee, Stainless, LLC.

As you plan your Radio Show schedule, be sure to check out the full list of Radio Show sessions, click here. For more information about the Radio Show, visit www.RadioShowWeb.com.

FEMA IPAWS to Hold Next Web Event on Nationwide EAS Test

When: August 15, 2011
11:00 a.m. – 1:00 p.m. (EDT)

A National Dialogue on the Emergency Alert System

Where: Microsoft Live Meeting 2007 (Not active until today)

The FEMA Integrated Public Alert and Warning System (IPAWS) office has announced the next EAS Participant Virtual Roundtable: *Are You Ready for the Nationwide EAS Test?*

This virtual roundtable which will include representatives from the Federal Communications Commission (FCC), National Oceanic and Atmospheric Administration (NOAA) and industry will share, build and refine elements of the best practices guide with industry; discuss overall improvements to the system through coordinated State/local and EAS Participant activities; share and discuss an EAS Test public awareness and information toolkit for State, Territorial, and local government and EAS Participants; review the technical process to receive and relay the EAN and conclude with elements of an EAS Test Preparation Checklist.

IPAWS will briefly recap elements of the best practice guide and discuss a variety of topics with virtual roundtable participants, including:

- EAS Receive and Relay Process
- EAS Originator Message Content and Quality
- State and Local EAS Testing
- EAS Equipment Operation and Maintenance
- Nationwide EAS Test Information Toolkit
- EAS Test Preparation Checklist

In order to prepare EAS Participants for the November 9, 2011 Nationwide EAS Test, FEMA IPAWS, the FCC and NOAA are partnering with industry leaders and experts to draft a comprehensive technical best practices guide on end-to-end national EAS message procedures. The guide will be updated incrementally with the EAS community through webinars, roundtables and other activities leading up to the test.

To contribute to the best practices guide? Please visit A National Dialogue on the Emergency Alert System website to vote on ideas and solutions for a variety of EAS discussions. Ideas from the website will be directly discussed in virtual roundtable on August 15. Follow this on Twitter @NationalEASTest for events and information updates.

For more information on the Nationwide EAS Test, please visit the FEMA IPAWS website.

Proposals Now Being Accepted
for 2012 NAB Broadcast Engineering Conference
Las Vegas Convention Center, Las Vegas, Nevada USA
Conferences April 14 – 19, 2012 // Exhibits April 16 – 19, 2012

The 2012 NAB Show will host the 66th NAB Broadcast Engineering Conference. This world-class conference addresses the most recent developments in broadcast technology and focuses on the opportunities and challenges that face broadcast engineering professionals around the world. Each year hundreds of broadcast professionals attend the conference. They include practicing broadcast engineers and technicians, engineering consultants, contract engineers, broadcast equipment manufacturers, distributors, R&D engineers plus anyone specifically interested in the latest broadcast technologies.

If you feel qualified to speak at the NAB Broadcast Engineering Conference, we invite you to submit a technical paper proposal. The deadline for submitting your proposal is October 21. If you have any questions, contact John Marino, vice president, NAB Science and Technology at 202 429 5346.

Official NAB Privacy Policy
© 2011 National Association of Broadcasters 1771 N Street, NW, Washington DC 20036