

September 24, 2012



Radio TechCheck



The Weekly NAB Newsletter for Radio Broadcast Engineers

Automotive HD Radios Aplenty at 2012 Radio Show

The radio industry gathered in Dallas, Texas last week for the [2012 Radio Show](#), a three-day event featuring a wide array of conference sessions, technology exhibits and a chance to catch up and network with friends and colleagues, old and new. Highlighting this year's event in the Radio Show "Marketplace" was a vast array of automobiles with original equipment manufacturer (OEM) HD Radio receivers including, for the first time, vehicles manufactured by General Motors. This week's *Radio TechCheck* offers a brief review of some of the excitement from this year's event.

HD Radio receivers – because radio listening in the car is a cornerstone of the radio business, one of the industry's priorities in the transition to the [iBiquity](#) HD Radio in-band/on-channel digital radio system has been getting automakers to offer factory-installed HD Radio receivers. At this year's Radio Show, iBiquity had on display in their exhibit six brand-new autos with factory-installed HD Radio equipment (see photos at right and below), including two General Motors cars, a Cadillac XTS and a Chevrolet Traverse.



While HD Radio will be a standard feature on these two GM vehicles in 2013 (and optional equipment on the other four), the Chevy receiver was perhaps the most exciting of the lot because it was the only OEM receiver being shown that includes the Artist Experience feature, which allows for the display of album art and station logo information synchronized to the HD Radio audio program. According to iBiquity, 19 more auto models (besides the Traverse) will have available HD Radio receivers with the Artist Experience in 2013.



LINCOLN MKS



HYUNDAI SANTA FE



CADILLAC XTS



TOYOTA CAMRY



KIA SOUL



CHEVY TRAVERSE

In a Thursday morning conference session entitled *HD Radio Update*, Joe D'Angelo, iBiquity's Senior VP, Broadcast Programs and Advanced Services, indicated that in 2013, 94 vehicles will have HD Radio as a standard feature, and that 190 models in all will have HD Radio available either as standard equipment or an option (typically included with a navigation or premium package upgrade). He added that "every 15 seconds, a new car with HD Radio is sold in the U.S." to illustrate how rapidly the number of new vehicles equipped with HD

Radio is now increasing. The HD Radio Update session panel is shown in the photo below, and consisted of (from left to right in the photo) session moderator (and NAB Board member) Ben Downs (VP and general manager, Bryan Broadcasting

Corporation), Paul Brenner (senior VP and CTO of Emmis Communications), Glynn Walden (senior VP of Engineering, CBS Radio), and Mr. D'Angelo.

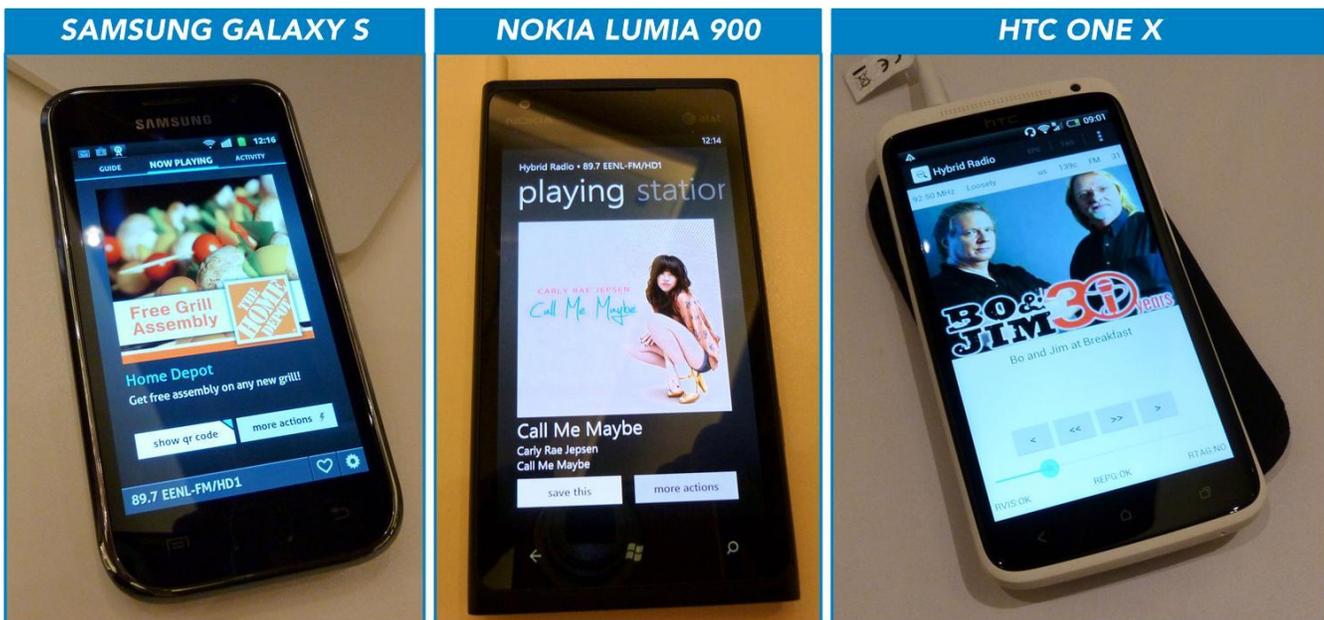
Radio in cell phones – a hot topic at this year's Show was that of radio chips in cell phones. In his keynote speech on Wednesday, excerpted here, NAB President and CEO Gordon Smith provided some interesting facts about this topic as well as his insight:

“Recently, NAB's technology experts set out to find out how many smartphones in today's market come equipped with radio chips. They discovered that all of the top 10 best-selling smartphones in the U.S. were already equipped with radio chips. But, unfortunately, none of them had the chip activated.

“Now some might see this as terrible news. But I'm an optimist. I think this information simply proves what an easy lift it would be for the wireless carriers to activate this service for the safety and convenience of their customers. These phones represent more than 70 percent of the smartphones sold during the first quarter of this year - that's 17 million units. Activating these radio chips presents huge opportunities for listeners, wireless companies and broadcasters alike. We just need to continue educating our friends in the wireless industry about the benefits of providing their customers with built-in radio. The bottom line is: radio provides a great service to the public ... and we must continue to inform all Americans about the facts.”



Two of the exhibitors in the Radio Show Marketplace were demonstrating exciting new “apps” running on a variety of smartphones (shown in the photos here), illustrating the promise of radio in cell phone technology for broadcasters and consumers. [Emmis Interactive](#) (located in the HD Radio booth) was showing their “FM in smartphone” app running on both a Samsung Galaxy S Android phone and a Nokia Lumia 900 phone which uses the Windows Phone 7 operating system. Both of these phones have analog FM chips included and while the version of the Nokia phone sold in the U.S. has the FM chip activated, the U.S. version of the Samsung phone does not, so a non-U.S. version was being demonstrated at the Show. This latest effort from Emmis follows their successful development of an HD Radio in smartphone app which was introduced at the 2012 NAB Show in Las Vegas (see the [April 23, 2012 issue](#) of *Radio TechCheck* for additional information), and includes all of the feature supported by the HD Radio version of the app, with the principal difference being that the FM in smartphone app relies more heavily on the mobile broadband connection since it does not have the advanced data services capability of an HD Radio receiver.



The other exhibitor with FM radio in smartphone technology on display was [RadioDNS](#). Nick Piggott, the chairperson of RadioDNS, was staffing the booth and demonstrating an HTC One X phone running an app that utilizes RadioDNS technology to link the radio signal being received to relevant Internet content which is accessed over the mobile broadband connection. This demonstration was conducted using a test platform developed by [EBU Labs](#) which allows a radio station to feed images to a receiver using a RadioDNS test app (developed by RadioDNS and being run on the HTC One X phone). For additional information on RadioDNS, contact the RadioDNS Project Office by sending an email [here](#).

Checking on TechCheck – Your Opinions Needed

If you didn't get a chance to submit your thoughts about NAB's *Radio TechCheck*, please do so now. It should require no more than five minutes of your time and will provide valuable and unique feedback for NAB Technology staff that we can use to guide improvements for *Radio TechCheck*.

Please help us make sure *Radio TechCheck* is a publication that best serves your needs by completing the survey by September 28.

[Click here to take the *Radio TechCheck* survey.](#)

Thanks!

Registration Open for 2012 IEEE Broadcast Symposium

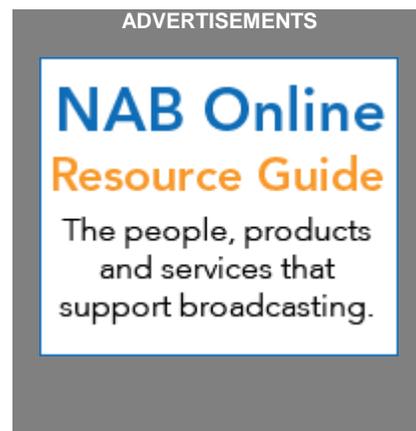
Registration for the [2012 IEEE Broadcast Symposium](#) is now underway. This year, the October 17-19, 2012 event's [technical program](#) includes more than 20 presentations from top industry leaders on cutting edge broadcast engineering topics, as well as half-day tutorial sessions on broadcast IP technology and broadcast engineering computer simulation tools.



In addition to technical presentations and tutorial sessions, this year's program features a panel discussion on broadcast towers and an update on the government's broadband plan, spectrum usage, and broadcast audio issues.

The Symposium also offers attendees the opportunity to network and socialize with their peers at evening receptions and luncheon programs. This year's luncheon keynote speakers are Kevin Gage, NAB's executive vice president and chief technology officer, and Sam Matheny, Capitol Broadcasting's vice president of policy and innovation. For those unable to attend in person, all Symposium sessions will be made available globally via live and archived streaming on the Internet. Also, up to 2.5 Continuing Education units (CEUs) are available to on-site attendees. Complete information is available on the Symposium website.

The three-day event will be held at [The Westin Alexandria](#) hotel in Alexandria, Va. Early registration is encouraged in order to take advantage of special rates which expire after Oct. 1, 2012. Special early bird hotel room rates are also available. For complete registration information, visit the organization's website at <http://bts.ieee.org/broadcastsymposium>.





NAB BROADCAST ENGINEERING CONFERENCE
PROCEEDINGS 2012

Order the BEC Proceedings now
for the latest trends in:
Hybrid Television HD Radio
Broadcast 3DTV Mobile DTV

www.nabstore.com