



# RADIOWORLD

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## U.S.-Cuba Thaw Could Muffle Air Wars

STAs to protect southeastern AMs from interference could remain for awhile

### NEWS ANALYSIS

BY RANDY J. STINE

Intentional Cuban-spawned interference to U.S. AM radio stations, mostly in southern Florida, has become less of a problem in recent years.

Newly improved relations between the United States and the communist-run island nation may eliminate the problem forever, according to several observers.

Former Cuban leader Fidel Castro's efforts to block U.S. broadcasts from reaching his country, sometimes referred to as "radio wars," are well documented. High-powered Cuban radio transmissions occasionally have interfered with U.S. AM radio broadcasts since the mid-1980s.



Most AM experts contacted for this article believe the electronic warfare was in response to the U.S. government's launch of Radio Martí in 1984.

The Broadcasting Board of Governors is an independent federal agency responsible for U.S. government-sponsored civilian international broadcasting. Its Office of Cuba Broadcasting oversees Radio Martí, whose mission is to promote freedom and democracy by providing the people of Cuba with objective news and information programming.

Cuba, which sits just over 90 miles south of Key West, Fla., continues to jam Radio Martí's short- and medium-wave broadcasts into that country regularly.

Cuba is not a signatory to the International Telecommunication Union's Region II Agreement governing West-

*(continued on page 6)*



**Explore Trends in Studio Design and Furnishings — Page 24**

## What's in Your Production Toolbox?

Some radio pros reveal the tools they use daily to create the content that gets on the air

Radio World talked with radio production pros across the country — at both the network and station levels — to pick their brains and hear what tools they use on a daily basis.

Not surprisingly, different people and operations used various tools. However, there were some tried-and-true names mentioned as well. Read on.

**What is your favorite software platform tool or the main one you use on a regular basis?**

I use the SADiE digital workstation from England; they're distributed in the U.S. by Prism Sound. The BBC

*(continued on page 8)*

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# NextRadio, HD Radio Debut Car Platform

## Also, iBiquity says another 70+ HD Radio models are coming in 2015

BY LESLIE STIMSON

The companies behind NextRadio and HD Radio say there's lots of automaker interest in their prototype of a combined platform, one that demonstrates the possibilities of interactive digital radio in connected cars.

The first implementation combines FM analog and digital over-the-air radio services with visual and digital capabilities of the NextRadio smartphone app. It's a product offering that would help to keep radio relevant, according to Bob Struble, president/CEO of HD Radio developer iBiquity Digital. He believes that soon, "every device that comes with an AM/FM tuner will also have connectivity. Instead of viewing that as a threat, we view that as an opportunity to pair the efficient, free, over-the-air broadcast service with connectivity."

At the International Consumer Electronics Show, the companies demoed the first iteration of this combined auto platform, essentially the NextRadio "Live Guide" on a car radio. It included images to tell users what was playing on the stations in a given market. Other features of the joint platform are thumbs up/down, social media integration, a "buy" feature and enhanced tuning and discovery.

The result is customized for the car, a version of the NextRadio smartphone app that has been visually simplified to reduce driver distraction while tuning, even in unfamiliar cities, according to NextRadio Marketing Director Michael Cox. Station logos displayed in the dash indicate "that's hip hop or



**"We're looking for efficiencies in speed to market," says Emmis SVP/CTO Paul Brenner of NextRadio's relationship with iBiquity and their NextRadio/HD Radio auto platform prototype.**

that's Rush Limbaugh. That's who I want to be listening to. That's my format."

"By working with the needs of the auto environment, there's things we can do to make it easier, simpler and safer for consumers," he said. "The alternative right now is I'm driving at 75 miles an hour and I'm scrolling on my smartphone."

The prototype stems from work on which iBiquity and NextRadio developer Emmis have been concentrating since they announced an agreement to cooperate last fall. The companies say automakers and their suppliers are interested but declined to identify them yet.

iBiquity brings familiarity with the car tuner user interface, software and hardware to this joint project, while Emmis has expertise with smartphone software and hardware and those interfaces. They worked together to adapt NextRadio's initial product offering to the vehicle.

iBiquity also brings relationships with automakers and their original equipment manufacturing partners. Struble said the company is accustomed to working with automakers to incorporate HD Radio upgrades,

and that this effort is similar. "That's a much better way to go to market than Emmis knocking on the door and saying, 'Hey, I'm a new guy. Let me sell you something.' It will go much, much quicker."

Emmis SVP/CTO Paul Brenner agrees: "We're looking for efficiencies in speed to market." Brenner also mentioned iBiquity's relationships with overseas chipmakers, receiver manufacturers, automakers and all of their suppliers. "If I went to market now, I've got five years of relationship-building in a lot of countries before I can ever get to the place where they are today."

The auto platform development is happening at the same time plans are underway for a marketing push to let consumers know about the availability of the NextRadio smartphone app. Cox and Brenner described the audio brand awareness campaign, set to launch Feb. 23, as involving several hundred million dollars' worth of inventory from stations involved in the NextRadio effort. Audio spots were going into preliminary production in January.

The NextRadio-Sprint deal has been well-publicized. Asked if other carriers are interested, Brenner said: "They are really watching. They want to make sure we're going to promote ourselves, that we're going to have enough content on the air so when people activate [the NextRadio app] on their phone, that they'll get a good experience."

Promoting the app and getting more consumers to use it "is really the secret to the first half of this year," Brenner said.

The NextRadio app came preloaded on 34 devices as of mid-February.

### 70 HD RADIO MODELS

While NextRadio and iBiquity combine work in the car, efforts to increase the number of HD Radio tuners in the marketplace increase.

Some 70 new HD Radio consumer products will be available in 2015, according to iBiquity Digital. Approximately 40 of them will be aftermarket car products.

For example, an expanded Kenwood line includes HD

(continued on page 11)



**This display includes models from European suppliers Roberts Radio and View Quest. They manufacture DAB radios and are adding analog/HD Radios to their lineups.**

# Preserve Radio History, Together

It takes the whole village to archive a century of auditory heritage

BY DONALD ANGELO

We all agree that the written word of 2,000 years ago, preserved and translated countless times, is of priceless value today. It gives us a glimpse into who we were, how we lived and what we thought.

Imagine if an audio recording device had existed then.

I've known several people from early in my career who actually worked in radio in the beginning years of the early 1920s. I am planning some recording sessions with a few who are still with us. Their firsthand stories are amazing. It's interesting to note that we are only the second and third generations away from the day KDKA went on the air and the actual historical beginnings of the electronic age of broadcast communications when Marconi brought the world together.

Paul McLane was absolutely correct to ask in his earlier column, "Where do you start a job this big? It sounds monumental." However, I disagree with Josh Shepperd's call to cut the search off at 1925-1975.

I submit that we must focus on preserving and documenting from 1922 to 1999. The recorded history of broadcasting in the 20th century actually documents the medium's very beginning and virtual end as we know it today. Its evolution into what it is becoming now is beginning to have no relation at all to what my generation experienced while working in radio in its first century.

If we start this monumental job today, imagine what a great service we'll have done for civilization 2,000 years from now. How exciting it would be for them to actually see and listen to who we were, how we lived and what we thought.

## LET'S GET STARTED

First, we need a national underwriter who can supply the funding to do the job right. They should receive naming or branding rights.

Next, we must create a central storage depository and quickly collect what



Donald Angelo

has survived. Then, begin the massive long-term job of cataloging, restoring, preserving, digitizing and then promoting and sharing the content.

You will find that local radio stations are not a good source for cooperation, information or material. The outlets we have today are all in big trouble because of a lack of product, along with the lack of funding to buy or produce

quality programming fast enough to satisfy the appetite of the American public.

It would be a great service to make this vast untapped supply of historical programming available to station owners, programmers of traditional media and also to the various new-tech outlets that are now delivering information and entertainment to a new generation of viewers and listeners who would benefit by learning from past broadcast history.

This would be of important educational value to the youth of tomorrow who have never heard of Guglielmo Marconi,

## FROM THE EDITOR



I told you in my Nov. 5, 2014, column about the work of the Radio Preservation Task Force; you can read that story, including the comments of Christopher Sterling and Josh Shepperd, at radioworld.com/preservation.

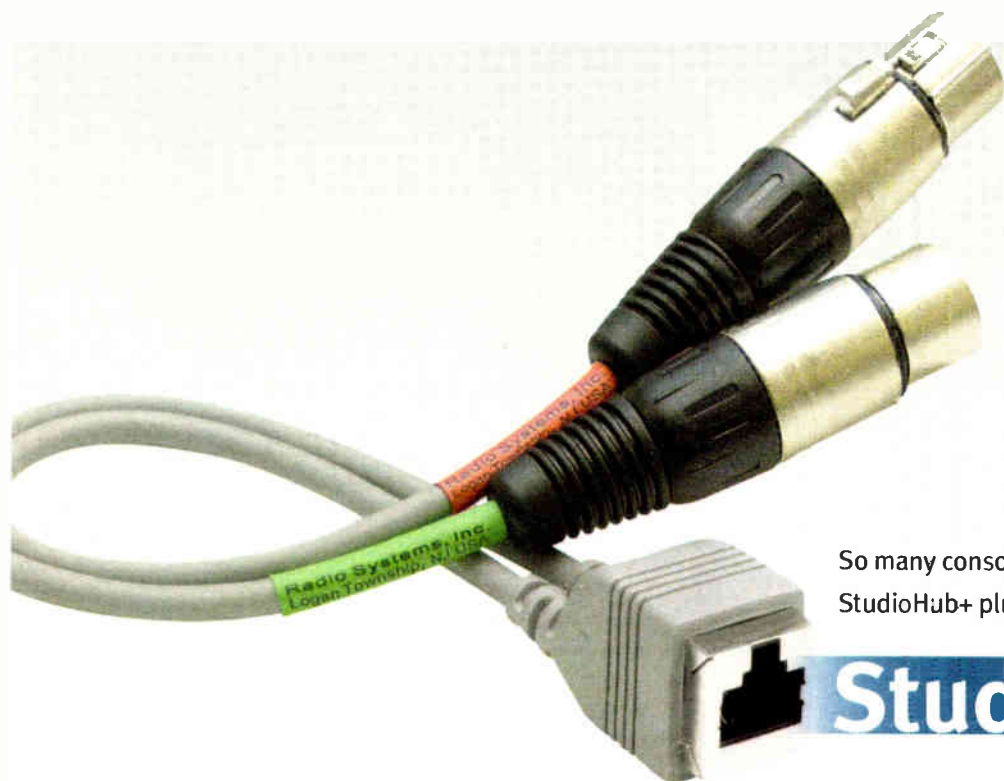
Here, veteran broadcaster Donald Angelo takes up that challenge.

— Paul McLane

Lowell Thomas, William B. Williams, Casey Kasem, Wolfman Jack, George "Hound Dog" Lorenz, Joey Reynolds, Dick Biondi and so many more, plus hundreds of outstanding small-market broadcasters whose talent and gifted abilities have always equaled that of anyone in New York, Chicago and L.A.

Deregulation in 1979 changed the landscape forever. For the first 57 years, broadcast stations were owned and operated by broadcasters serving their communities. The 1980s and '90s saw such a flurry of buying and selling with price multiples increasing at such staggering rates that even some large media cor-

(continued on page 5)



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BROADCAST TOOLS



**THIS ISSUE**

MARCH 1, 2015

**NEWS**

U.S.-Cuba Thaw Could Muffle	
Air Wars	1
What's in Your Production	
Toolbox?	1
NextRadio, HD Radio Debut Car	
Platform	3
Preserve Radio History, Together	4
News Roundup	5, 11

**FEATURES**

Try This Inexpensive Satellite	
Maintenance Trick	12
Going Tubing? Find the Sweet	
Spot	14
IHR Favors AM for Catholic	
Broadcasts	18



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**GM JOURNAL**

Sync Hooks Drivers Up With More	20
Use Influencer Marketing to Your	
Advantage	21
Radio, Interrupted	22
One Bourbon, One Scotch,	
1 Kilowatt	23

**STUDIO SESSIONS**

Trends in Studio Design and	
Furnishing	24
Sonnox Plug-Ins Silence Sibilliance	26
Marketplace	26

**OPINION**

BBG Places Premium on Agile,	
Cost-Effective Ops	29
Reader's Forum	29, 30

*(continued from page 4)*

porations could not serve the debt. This forced an end to independent ownership.

The only way to survive was through massive consolidation. Groups owning hundreds of stations, downsizing staffs, ending local programming in exchange for cheap syndicated programming to cut overhead. This stunted creativity and ended community service and has resulted in the vanilla media we have today.

Every time a station was sold and new management came in, a dumpster arrived at the back door and decades of valuable archives were tossed and lost. "We're downsizing and moving the studios to rental space in a local office building" — this has become a familiar memo.

**BBA'S MISSION**

Our Buffalo Broadcasters Association was formed 20 years ago with part of its mission dedicated to rescuing and salvaging broadcast memorabilia from stations and personal collections that includes thousands of reels of tape from quarter inch audio up to 2-inch video.

In addition, the BBA has the entire 16 mm film library of all the Buffalo TV stations, which represents all the news footage shot from the late '50s through the '70s — a virtual history of people, places and events in Buffalo during those decades.

Today, the BBA has a 4,000-square-foot storage/resource facility full of wonderful broadcast artifacts, equipment, recordings and memorabilia covering the 20th century from 1922 — from Buffalo's Fran Striker, who gave us the Lone Ranger; to Buffalo Bob Smith, who gave us Howdy Doody;

along with Buffalo's Foster Brooks, to Mark Russell, Randy Michaels, Wolf Blitzer and Tim Russert.

Dave May, a retired Buffalo Broadcaster and Hall of Fame inductee, is curator of our storage/resource facility in Buffalo. He leads a group of volunteers who spend several hours each week sorting, cleaning, cataloging and inputting into a database all of this vast collection. This is in preparation for

of Congress. Our new BBA President Heidi Raphael, who is on the board of the Library of American Broadcasting, is also willing to help. I urge the task force to identify, contact and organize all these broadcast clubs and organizations in an effort to open a dialogue that takes advantage of the knowledge and resources that would make this monumental job easier to manage. We are all here and willing to help.

**There is hope** in the fact that there are several organized broadcaster clubs and organizations around the country that have worked hard in a mission similar to the BBA to rescue and store these priceless artifacts.

the day when the BBA completes its mission of establishing The Buffalo-Niagara Hall of Fame interactive museum complex, hopefully to be built near Buffalo's Erie Canal waterfront tribute development project now under construction.

It is a tragedy how much has been lost. However, there is hope in the fact that there are several organized broadcaster clubs and organizations around the country that have worked hard in a mission similar to the BBA to rescue and store these priceless artifacts. We must bring all these groups together.

The Radio Preservation Task Force has billed itself as the first national radio history project of the Library

Chris Sterling's suggestion to conduct a one- or two-day conference in D.C. would be an excellent starting point. It should also be possible to identify all the interested players and to have an online dialogue throughout the year with all interested parties before the event takes place. Let's begin!

*Donald Angelo, chairman emeritus of the Buffalo Broadcasters Association, is a 50-year veteran radio and TV broadcaster with experience on-air, off-air and in management and ownership in several markets. He is a Hall of Fame inductee, founding member and past president of the BBA.*

*Comment to radioworld@nbmedia.com.*

**NEWSROUNDUP**

**GEO-FENCING:** A federal judge dismissed a lawsuit by VerStandig Broadcasting seeking a declaratory judgment against SoundExchange, the entity that collects music recording royalties and distributes them to copyright owners. The broadcaster wanted to use a streaming technology known as geo-fencing to allow it to cap online retransmission of its broadcast programming to within 150 miles of its transmitter and not trigger performance royalty fees. In his decision, Judge Michael Urbanski called the VerStandig allegations "too speculative, indefinite and hypothetical" to allow the suit to go forward. SoundExchange had sought a dismissal. The judge dismissed the case without prejudice, leaving open the possibility that VerStandig or another broadcaster could pursue litigation that could ultimately decide the question of a royalty-free zone.

**BIG BOY:** A Los Angeles County Superior Court granted Emmis Radio's request for a temporary restraining order barring KPWR(FM) DJ Kurt "Big Boy" Alexander from going to work for rival iHeartMedia at KHHT(FM) in that market. The order stemmed from a "breach of contract" lawsuit that Emmis filed; it seeks a permanent injunction to prevent Alexander from moving to KHHT,

in addition to millions of dollars in damages. The court scheduled a preliminary injunction hearing for March 3 to determine whether an injunction is warranted while the case plays out. The iHeartMedia station is not specified in the complaint and iHeartMedia had no comment to Radio World on the litigation. Big Boy had no direct comment; he tweeted: "I'm staying focused on the light."

**PREC:** Registration is open for this year's Public Radio Engineering Conference, slated for April 9-10 in Las Vegas. The event, organized by the Association of Public Radio Engineers, is being held at the Tuscan Suites. Registration for the conference and awards dinner can be done online at [www.apre.us](http://www.apre.us). Registration includes access to PBS TechCon and the SBE/Ennes sessions. Through PBS and the NAB, APRE offers discount NAB Show registrations (for NAB members) in combination with a PREC registration. The deadline for the NAB discount through APRE is March 9.





## PRODUCTION WIZ

(continued from page 1)

used this software for a long time. I began using SADiE 4 in 2003 because it was the best program for long-form production such as a four-hour show. When I was hired to do the countdown, I requested that they provide me with the newer version, the SADiE 5. It's very quick and effective for cutting, pasting and assembling each hour in real time.

*Lonnie Napier*  
Executive Producer  
"American Country Countdown  
With Kix Brooks"  
"Kickin' It With Kix"  
Westwood One



**SADiE 5 DAW**

Sony Vegas Pro — I had to start on it in 2001 because that's all the station I worked at had at the time. I had been an Urban Audicity user in the late '90s as the DAW movement began. I also use Adobe Audition for basic functions like time-stretch, batch converting and basic "two-track" editing, but for imaging, it's always Sony Vegas.

*Chris Morales*  
VP and Head of Imaging  
Yahoo Sports Radio

Adobe Audition CS 6 is what I use. But I still love Adobe Audition 3.0 for speed and reliability.

*David A. Dein*  
Music Coordinator/Creative Services  
WAWZ(FM), Zarephath, N.J.

My digital audio workstation is Pro Tools v10.0, running on a Power Mac G5 with the Digi 002 interface. Some would argue this system is "overkill" for radio production. I would respond: "You don't understand what I do." The richness of my final product requires a robust system that can handle these complexities.

*Scot Kirk*  
VP Production — Music Formats/Shows  
Westwood One

hope for it to continue working on Windows 10, but fortunately we have time for that. ... In my personal home studio, I've switched to Harrison Mixbus. I've tried — and really like — Reaper, and I recommend it to everybody, but I enjoy the sound I get out of Mixbus.

*Al Peterson*  
Production Director  
Radio America Network

### Adobe Audition 6

*Dave Plotkin*  
Director of production & creative services for a large metropolitan radio station

Social media software from my phone — including Twitter, Facebook and Instagram. Social media connects me, the show, the listeners, the artists and what is currently happening in the pop culture world.

*Susan Stephens*  
"Zach Sand and the Gang"  
Senior Vice President/General Manager, Music & Entertainment  
Westwood One

### What is your favorite or most-used software plug-in tool?

Izotope Ozone versions 3, 5 and 6 are amazing. The presets make your final projects pop. There's nothing worse than working on a great production piece with it sounding awesome out of the speakers, only to hear it die on the air. Ozone gives me the right amount of pop on the vocal tracks, as well as just the right amount of mastering on the final pieces, and each successive update is its own self-contained program, so you don't have to trade off your favorite presets when you upgrade.

*David A. Dein*  
WAWZ(FM)

VoxPro. It is the best for recording/editing calls with "Zach Sang & the Gang" listeners for on-air use.

*Susan Stephens*  
Westwood One

### Waves L2 Ultramaximizer

*Chris Morales*  
Yahoo Sports Radio

I use numerous audio plug-ins, all part of the Waves Gold Bundle. Equalization, compression and reverb are the most often utilized.

*Scot Kirk*  
Westwood One

### Waves L1 Ultramaximizer

*Dave Plotkin*

### How about your favorite hardware tool?

I am a strong believer in analog voice compression. That is why I use the Symetrix 528E on all my RE27s. I find the Symetrix to be a lot more transparent and natural sounding in their vocal translation than the digital units that I've used.

*Lonnie Napier*  
Westwood One

For field recording, I love my Edirol R-09. That they don't make them anymore really makes me super sad and very protective of it. It's small; its microphone does a yeoman's job when you have to do a nine-person table discussion or a one-person interview at a concert.

*David A. Dein*  
WAWZ(FM)

### Shure SM5B microphone

*Dave Plotkin*



**Neumann U 87**

### Neumann U 87 microphone

*Chris Morales*  
Yahoo Sports Radio

### What's the one piece of equipment you want but don't have — something that would make your job easier or more fun?

Sennheiser MKH 416 shotgun microphone for voiceovers. What a sound!

*Dave Plotkin*



**Cara Shillenn, a producer for the syndicated "Doug Stephan Good Day Program," assembles a project using Cool Edit 2.1 at the Radio America Network.**

(continued on page 10)

# AUDIO WITHOUT COMPROMISE



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## PRODUCTION WIZ

(continued from page 8)

I'd like to get an outboard mastering processor like TC Electronic's Finalizer 96k ... but who has time for outboard gear anymore?

*Chris Morales*  
Yahoo Sports Radio

Fun? Nothing less than a Moog System 55 analog modular synthesizer. I've wanted one since I was about 14, but they cost the same as a Lexus CT 200H, so it's not bloody likely.

*Al Peterson*  
Radio America Network

### Do you have a music library/service? If so, what one?

I use TM Studios and Benztown Branding. I'm responsible for the creative direction and on-air image of more than 20 different music formats as well as numerous shows. Needless to say, I consume an extraordinary amount of production music and workparts, and these two companies fulfill my needs. Their dedication to the craft — as well as their relentless pursuit of constantly creating and updating relevant production music and workparts — is beyond impressive.

*Scot Kirk*  
Westwood One

We use 5 Alarm. It's easy to search through the cuts, new material is added frequently, and the composers/artists who work through them have a good grasp of a lot of genres.

*Al Peterson*  
Radio America Network

We use Audio Architecture for commercial production and Shortbus for imaging.

*David A. Dein*  
WAWZ(FM)

I use too many to count, but Alien Imaging is worth mentioning. It's cost-efficient and has a buyout imaging library that is really is spectacular.

*Chris Morales*  
Yahoo Sports Radio

"Zach Sang & the Gang" uses Hit Disc Music Service from TM Studios.

*Susan Stephens*  
Westwood One

Elias Music Library, Warner Chappell and Megatrax

*Dave Plotkin*



Waves Ultramaximizer Plug-ins

### What element, segment, bit do you consider yourself the master of?

I would consider myself the master of long-form show imaging, including show opens, rejoins and more, to set the stage for performers and pump them and their listeners up. Over the years, anytime I explain what I do to fans of a show or listeners, they mention "show openings." They don't know to call it imaging, but they recite how they think it sounds cool or makes them laugh before the show begins. That is the goal — we are still doing radio and theater of the mind. Because of budgets and decreasing staffs, we have allowed imaging to be thought of as a dry voice track over a rock or hip-hop bed. That's not imaging; that's production. Let's not get it confused with what our job as imagers is — making something sound "bigger than life" and "cooler than what it really is." It's the station or show's marketing; it's your audio billboards on the side of the freeway of a listener's brain.

A former boss, Andrew Ashwood (RIP), would call it the "Zippie Zow Wow." What does that even mean? Exactly, it means what we want it to be. This is radio.

*Chris Morales*  
Yahoo Sports Radio

In my job turnaround is always a problem. I once had to image an entire new station in less than a week, and it needed to sound like it had taken months. So I think I'm the master of doing things fast that don't sound like it.

Does your show/station/network do enough or not enough in-house production? If not enough, what's missing?

There's always something missing, or to rephrase your work should embarrass you a little if you revisit it six months later. That's the beauty of production, once you know the rules you need to start breaking them, or you get stale.

*David A. Dein*  
WAWZ(FM)

I have a real skill for, not only writing imaginative copy that really paints a picture and tells a story, but making that script come to life.

*Dave Plotkin*

### Do you do jingles and promos? If you do, tell us about that.

Lots of imaging and promos. As a network show, "Zach Sang & the Gang" updates imaging both on the network and for local stations daily. Promos are a must with daily promos sent to all affiliates teasing the next night's show.

*Susan Stephens*  
Westwood One



David Dein works with Adobe Audition at WAWZ. Note the handheld recorders nearby.

Many of our music formats utilize jingles. These are not your parent's jingles: they are updated for the 21st century, and sound fantastic on-air. TM Studios is our go-to ... the best in the business.

*Scot Kirk*  
Westwood One

In creating station promos/imaging, we like to think up different and creative ways to get our message across ... and still be straightforward with the delivery at the same time.

*Dave Plotkin*

### Does your show/station/network do enough or not enough in-house production? If not enough, what's missing?

That's all we do. Radio America produces "The Doug Stephan 'Good Day'" program and "The Roger Hedgecock Show" live every weekday, and we rent studio space to a prominent conservative host aired on another network. The place is buzzing every day.

Some shows come to us from outside producers, and all we do on those is quality control for levels and fidelity. Otherwise, we produce many original hours of political talk, financial and lifestyle shows every day — both live and prerecorded, weekday and weekend — in addition to remixing those shows for podcasts and for affiliate download.

We are uncommon in that we also have a video production arm here as well ([videostudio66.com](http://videostudio66.com)) and a number of our radio staff double as TDs, audio and lighting directors and camera operators. We also record veterans' personal histories, which we share with the Library of Congress, and do studio media tours for outside clients. So, yeah, we're kinda busy.

*Al Peterson*  
Radio America Network

The "Zach Sang & The Gang Show" has access to great in-house production, using the resources of Westwood One Creative Services team with daily updates to imaging and daily production to be current with everything that's happening in the pop world at the moment.

*Susan Stephens*  
Westwood One

We do utilize some freelance producers, but the vast majority of our creative production is done in-house by me and my fantastic team.

*Scot Kirk*  
Westwood One

Do you have some fave production tools or fantastic tips? Let us know at [radioworld@nbmedia.com](mailto:radioworld@nbmedia.com).



# HD RADIO/NEXTRADIO

(continued from page 3)

Radio in-dash multimedia, CD and navigation models.

Pioneer's expanded line features HD Radio in its first CarPlay products, as well as double DIN multimedia and navigation units and CD models. Pioneer introduced the newest HD Radio feature — CAP-compliant EAS. The manufacturer showed units that provide extended text and audio information to supplement broadcast alerts.

New large-display Alpine models feature HD Radio technology, as do double-DIN models from Sony and Clarion.

Grom Audio introduced its first HD Radio auto dongle and firmware. The company's HDR-1 QRadio dongle adds HD Radio to 30 factory car radio models; the dongle plugs into the Grom-USB3 and Grom BT3 car-integration kits. The kits add stereo Bluetooth, Aux input compressed-file playback via USB input, and iPhone/Android phone USB connection to car radios.

According to iBiquity, every automaker that sells cars in the U.S. now includes HD Radio in at least some models, either as factory standard or optional equipment. Struble calls that the result of a "many, many year effort."

However, General Motors had announced late last year it was removing the technology from many of its 2015 model-year vehicles. Asked about this, Struble said HD Radio has remained on Cadillacs and big pickup trucks. "The pullback is sort of, 'Let's get it right. Let's do the development we need to do technically and then come back in a broader application.' We believe that will happen."

Home audio tuners that include HD Radio are coming this year from Magnum Dynalab and Outlaw Audio. Denon is releasing two "InCommand" AV receivers and Yamaha is releasing "Aventage" line AV units that include HD Radio. McIntosh Labs, too, will release AV receivers that feature HD Radio.



**iBiquity is working with its Asian suppliers on a private-label line of HD Radios to be sold online. The pocket-sized SPARC SHD-P360 features FM analog, HD Radio and international tuning.**

### TABLETOPS, PORTABLES?

Fewer devices include over-the-air AM/FM these days. Struble said retail shelf space being devoted to radio products at consumer electronics brick and mortar retailers "is not what it once was."

As an example, he said, there used to be two aisles devoted to radio products at retailers like Best Buy. "Now, that's about two feet."

To combat this trend, iBiquity has added two European suppliers to its receiver partner stable, and plans to launch a private-branded HD Radio receiver line for online sale.

U.K.-based Roberts Radio and View Quest now manufacture DAB radios; they're adding analog/HD Radios to their lineups. In a year, the industry could see a combination analog/DAB/HD Radio from them, according to iBiquity SVP Marketing and Broadcast Business Joe D'Angelo.

In addition to FM HD Radio, the

Roberts Revival RD70HD features FM analog, Bluetooth, 120-hours of battery life and stereo line in. The radio is expected to ship in the U.S. in May.

View Quest says it takes its design inspiration from the arts, interior design and fashion. The company plans to ship five portables, including three featuring Bluetooth wireless connectivity, to the U.S. this year. The models are named

prompts for the visually impaired, the SPARC SHD-BT1, a Bluetooth unit featuring a wood cabinet; and the boombox SPARC SHDTR10.

Three portables appear on the site: the SPARC SHD-TX2, which incorporates emergency alerts; the pocket-sized SPARC SHD-P360; and the SPARC SHD-TR05R, which includes support in English, Spanish, French and Portuguese.

**Promoting the [NextRadio] app and getting more consumers to use it "is really the secret to the first half of this year," Brenner said.**

Bardot, Hepburn, Christie, Retro and Retro Mini.

iBiquity is working with Asian suppliers for its private label HD Radio receivers called "SPARC Radio." Struble described them as affordable portable and tabletop products. There were six units on the website: [www.sparcradio.com](http://www.sparcradio.com) in mid-February; at that time, three were available.

The tabletops include the SPARC SHD-T750, a follow-on to the Narrator AM/FM HD Radio including voice

And iBiquity certified Frontier Silicon's Verona (Model: FS2250) Master Mode HD Radio module and Venus HD Radio Reference Platform for tabletop and home HD Radio receivers. The module is designed for manufacturers that want to make low-cost FM HD Radio products. It is electrically and mechanically compatible with Frontier's Verona DAB module to allow product migration from existing product designs sold in the European markets, according to Frontier Silicon.

## NEWSROUNDUP

**ONLINE PUBLIC FILE:** Deadlines have been set for public comments to be filed to the FCC regarding extending the commission's online public file rules to broadcast and satellite radio, cable and satellite TV. The goal is improved public access to public inspection files and especially political advertising documents, according to the commission. Many radio stations have told the FCC that hardly anyone ever walks into a station asking to see the public file; most stations said that, ultimately, placing documents online benefits only national advocacy groups that seek to discredit stations at license renewal time. Noncommercial stations asked to be exempt from the online requirement in order to protect donor information. NAB didn't fight the proposal but said the agency should beef up its IT architecture to prepare for the onslaught of additional uploaded files. Comments to the FCC (MB Docket No. 14-127) are due March 16 and replies April 14.

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# Going Tubing? Find the Sweet Spot

More tips to keep your transmitter tubes in tip-top shape

## TECHTIPS

BY MARK PERSONS

In the Feb. 1 issue, we discussed what you'll find inside an electron tube and its basic principles of operation.

Now let's talk about how that tube works in an FM radio transmitter.

The key to amplification in a tube is the control grid, the set of thin wires between the filament and the plate. You feed RF drive into this grid, causing electron emission from cathode to vary at the RF drive frequency and amplitude. It is this small voltage and power that regulate a large electron flow at much higher power. What we have been talking about is a 3CX (triode) tube.

Then comes a fourth element, making the tube a 4CX. It is called a screen grid and is another wire grid between the control grid and the plate. Its job is to pull electrons toward the plate with a



Fig. 1: This is a newly rebuilt transmitter tube.



Fig. 2: Here's a 4CX20,000D tube in a Harris FM transmitter.

positive voltage. Most electrons go past the screen grid and to the plate.

Some electrons are captured by the screen grid and become screen current. Yes, it is an unintended consequence of being in the right place at the right time.

If you use a Harris or similar FM transmitter you know that the power control is a screen voltage control. With no screen voltage, the transmitter typically makes about 20 percent of its normal power. You adjust screen voltage upward to increase power. It is as simple as that.

Each transmitter design is different. Sometimes the control grid in these designs has 100 or more volts of negative DC to help bring all the parameters together for best performance and efficiency.

In Continental FM transmitters, the PA (power amplifier) plate voltage,

screen voltage and RF drive are adjusted simultaneously with the raise/lower power control. This is an elegant design but does not easily compensate for tolerance differences between individual tubes, especially as they age. Engineers with Continental Electronics transmitters find themselves changing taps on the screen transformer to accommodate a new or rebuilt tube with slightly different characteristics than the last tube. The idea is to get the volts to current ratio where the transmitter manufacturer designed it to be. Higher-screen voltage means higher PA current. Those transmitters also have a PA bias control that will help with tube-to-tube differences.

### TUNING

You tune or "match" impedances between the RF driver and the control

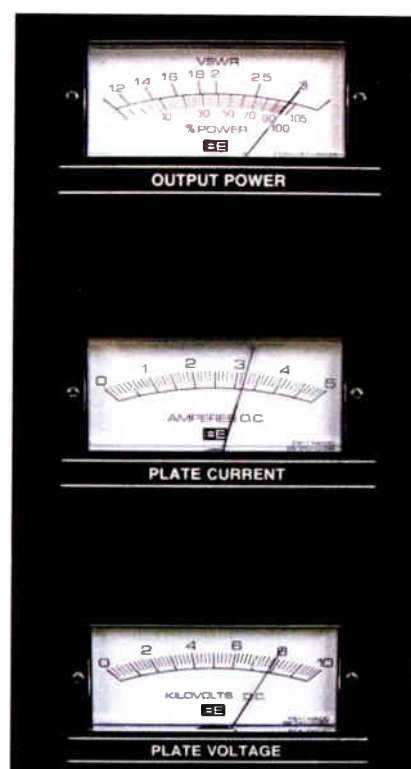


Fig. 3: Watch all the meters, not just the power output.

grid of the tube for minimum reflected power to the RF driver. Best not to try for maximum power transfer as that could lead to higher than desired reflected power/VSWR on the driver stage. Tune for lowest reflected power to keep the driver stage happy. Then there is power amplifier tuning where you adjust for best tube efficiency by again matching impedances. Watch all the meters, not just the power output. Tune toward

minimum PA current while adjusting for maximum power output. Adjust screen voltage to keep the PA current where the transmitter manufacturer says it should be for your power level.

Once you have adjusted for best efficiency, use a thermometer to verify that the exhaust temperature of the tube is within specifications. Output power meters on transmitters are relative devices. Every transmitter has a control to set the meter to read whatever you want.

Set it to read 100 percent only when the transmitter is running correctly. *Never* use the output power meter to determine operating power. You might have higher or lower actual power than is shown on the station license.

**Find the sweet spot, where PA efficiency is best. You will know that when PA current is low and transmitter RF output is highest.**

There is a little-used, FCC-approved procedure for using the transmitter's power meter, but few stations are equipped to do so. You can verify transmitter power with a calibrated Bird or Coaxial Dynamics brand wattmeter, if you like.

An FCC inspector will look at PA voltage, PA current and rated transmitter efficiency to determine if the station is running legal power. The station will pass or fail an inspection accordingly.

You will find PA efficiency listed on the factory checkout sheet for the transmitter or in a graph in the transmitter instruction manual. An example is 8,000 volts x 3.4 amperes = 27,200 watts x 79.1 percent PA efficiency = 21,515 watts of transmitter power output. The station license allows as much as 5 percent over that or 10 percent under that to remain legal.

### TUBE TOO SMALL?

You have a 20 kW FM transmitter with a 4CX15,000A tube. Does that make it a bad design?

No, the 15,000 watt tube dissipation capability is for the inefficiency of the power amplifier. To put out 20,000 watts, the transmitter might achieve 75 percent PA efficiency. That means 26.7 kW of high-voltage DC power is required to enable the transmitter to

(continued on page 19)



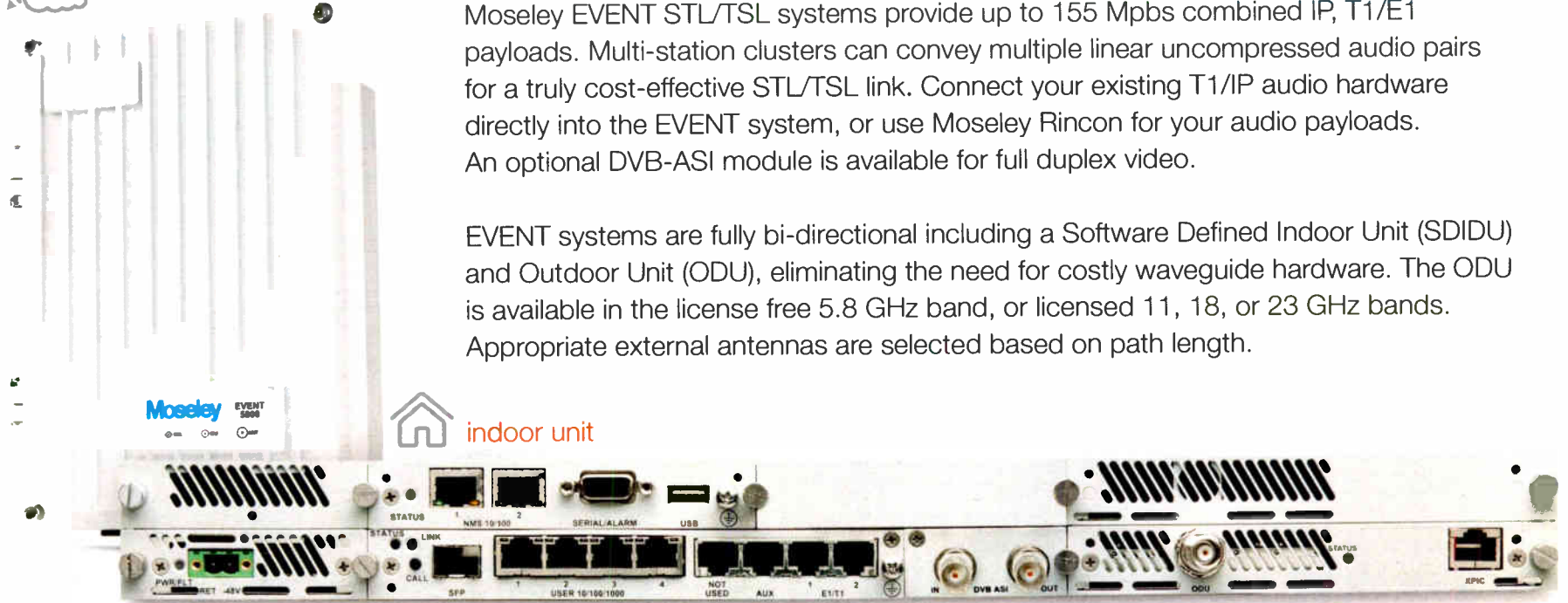
# HIGH CAPACITY EVENT STUDIO TRANSMITTER LINKS



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## INTELLIGENT SYSTEM DESIGN

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## The Scoop on Codecs for IP Audio

Using the Internet for audio distribution makes sense, but the problem is a little like the holiday rush at the Post Office.

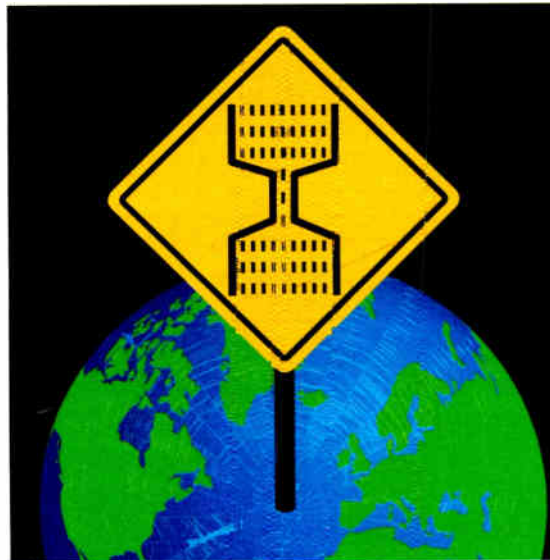
There are simply too many packets of data for the pipeline.

You need a codec to bit-reduce the audio stream. So

what's it going to be? AptX, Opus, G.722 or AAC, and if so, which version of AAC? We asked Charlie Gawley from Tieline, "The Codec Company" and a Wheatstone technology partner, to fill us in on Opus, the EBU ACIP standard, and how the AES67 factors into the use of codecs for IP audio delivery.

For the entire story...

Go to: [INN20.wheatstone.com](http://INN20.wheatstone.com)



## Processing Tip from THE Processing Guy

Here's a helpful tip from Wheatstone Processing Guy Mike Erickson on keeping track of presets:

"One thing I try to remember to do when I'm making presets for a new install, or adjusting presets on a processor that's already online, is to date the presets. This not only gives you a good track record as to when you created that perfect sound, but it also allows you to go back if the PD complains that the processing 'sounded better last week' ... you'll know what preset to go back to even if you didn't physically write it down! Saving presets with the dates allows you to do the processing version of 'System Restore.' Also, it's a good idea to back up your presets. ALWAYS! I recall a Memorial Day failure of a processor in Market #1 going back almost 7 years ago. The backup switched on via silence sensor and I was able to swap out the man with another of the same model we had on the shelf and load the custom presets. Within an hour we were back sounding as good as you could get with that box! The PD was nervous while I was swapping hardware that we wouldn't sound the same because all the presets were lost on the hardware. If I hadn't backed up the presets, weeks of work would have been down the drain."

This tip is brought to you by our new FM-55 audio processor, which is so easy to adjust from the front panel you might want to save and date presets for the presets.

For more great information on processors and how to get the most of them...

Go to: [INN20.wheatstone.com](http://INN20.wheatstone.com)



## Beyond 4K at CES. The Internet of Things

What at CES 2015 could possibly interest a couple of audio network nerds?

Well, yes, gadgets of course. But there was also this: the Internet of Things (IoT). One analyst counted 900 exhibitors with IoT products there.

Thermostats, coffee makers, watches, jewelry, dog collars, ovens, smart sports apparel ... baby bottles. All connected to the Internet of Things.

It's a great concept, this idea of connecting appliances (not to mention, that new 4K TV) to the internet and controlling them through your smartphone or laptop.

For the entire story...

Go to: [INN20.wheatstone.com](http://INN20.wheatstone.com)



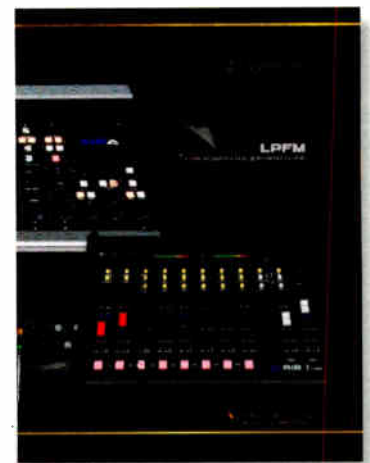
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# IHR Favors AM for Catholic Broadcasts

Immaculate Heart Radio aims to make society better. Call it the "other iheart"

## RELIGIOUS RADIO

BY KEN DEUTSCH

The history of religious broadcasting in America goes back to 1921 when, according to [www.christian.com](http://www.christian.com), KDKA(AM) in Pittsburgh aired a local church service.

But as late as 1997, there were only six stations on the air devoted exclusively to Catholic teachings. That's when Loomis, Calif.-based Immaculate Heart Radio built KIH(AM) in Reno, Nev., its first outlet serving a Catholic audience. Today, of the 300 or so stations and translators in the United States airing programming geared to Catholics, 33 are owned by Immaculate Heart Radio — 17 AMs, two FMs and 14 translators. All IHR stations are 501(c)(3) nonprofits; all are listener-supported.

"Catholics led the way on radio and TV with Bishop Fulton Sheen in the '50s and '60s, but were slow to start radio stations," said IHR General Manager Dick Jenkins. "The challenge we faced was lack of program availability. EWTN" — a worldwide Catholic network — "got the ball rolling by picking up the best Catholic programming from around the country and making it available on satellite. Then we faced a learning curve. National Public Radio was already an expert on non-commercial pledge drives, charitable remainder trusts, etc. We had some catching up to do."

Prior to joining IHR in 2010 as a consultant, Jenkins had a 39-year history in broadcasting including a 23-year stint building the religious "K-Love" network from one station to 500 FMs and translators. He retired but was lured back to work at IHR. In order to make his new business plan succeed, he knew that operational costs had to be kept to a minimum. His weapon of choice: AM radio.

"We do have a few stations on FM, but the AM band has worked well for our talk format, so we find AM to be very efficient," said Doug Sherman, founder and president of IHR since its birth.

"Because of the low cost of acquiring an AM station (about 25 percent of the cost of an equivalent FM signal) and cost-sharing among our stations, we can come in at about \$50 an hour to run them. Within three years of start-up, each one of our properties should be able to cover its own expenses. This \$50-an-hour figure also helps our listeners plan their

pledges. They know that, for example, they can support one hour of programming for a monthly \$50 donation."

Jenkins notes that AM is its "platform of choice out of necessity — the least expensive way to start a station in a market."

Even though there is little direct competition in local markets for Catholic listeners, Jenkins sees a bigger picture.

"We all compete for the same audience," he said. "There are not only terrestrial stations, but translators, FMs, the Internet, streaming audio and video. It's a digital world. Catholic radio is still an unknown entity in many respects, and even people who attend Catholic

**Immaculate Heart Radio**



Technical Director Frankie Maranzino adjusts the playlist on the [ImmaculateHeartMusic.com](http://ImmaculateHeartMusic.com) streaming automation system.

churches may be unaware of it. That's a visibility problem we have to solve, and it'll take time."

### 'MAKING SOCIETY BETTER'

Immaculate Heart Radio creates much of its own programming using recording studios in California, Nevada and Tennessee.

In the Loomis headquarters there are two air-ready studios plus a control room with expanded mixing and distribution functions. The music formats, one of which is contemporary and one of which is sacred music, are automated. The talk-shows use Comrex's Studio Telephone Access Center (STAC) with 12 incoming

lines. The hosts send their shows to the network from Ohio, California and Texas via Comrex BRIC-Link. Simian software by BSI is used for time-shifting. Programs are recorded using Adobe Audition.

IHR stations receive their news from Virtual News Center, profiled in our Sept. 10, 2014 issue. But there's a twist.

"Most non-sectarian stations believe

"Research shows that the average person who supports Catholic radio also supports five other causes," said Jenkins. "These are all values shared by the Catholic Christian 'tribe.'"

Those values include the political hot button of abortion. "You know, 10,000 people may show up for a pro-life rally, but the local newspaper won't mention it because it's not politically correct. That's a natural for us as people who believe in supporting the lives of the unborn."

In the lobby of Immaculate Heart Radio, Doug Sherman, left, president and founder of IHR, stands with Dick Jenkins, IHR network general manager.

IHR also was a co-founder of the Catholic Radio Association and is an active member. Sherman is chairman of the association, which was founded to help others start Catholic stations. It has played a significant role in doing just that over 18 years, and more are on the way, according to Jenkins.

IHR's annual budget is about \$7.5 million; it employs 24 full-timers at its headquarters. IHR provides its original programming at no cost to any station that wishes to run it, and all programming is commercial-free.

"There are two advantages to that," said Jenkins. "First, if we're reading a passage from St. Matthew on the air, we don't want to come out of that with a spot for a car dealer because it would ruin the moment. Secondly, contributions to our stations are tax-deductible."

"There are more hungry, homeless and sick people who are cared for by the Catholic Church worldwide than any other entity. We just believe in making society better — and that's one reason why Catholics believe in supporting Catholic radio, to get that message out."

Immaculate Heart Radio streams its programming via [ihradio.com](http://ihradio.com) and [ImmaculateHeartMusic.com](http://ImmaculateHeartMusic.com).

Ken Deutsch is now in his 30th year writing for *Radio World* and its sister publications.

in the saying, 'If it bleeds, it leads,'" said Jenkins. "That's not for us. We have instructed Virtual News Center that every newscast should end with a positive story, if possible."

"Life is tough enough. We would rather hear about little Suzy in Des Moines raising money for a wheelchair. This is where culture and truth intersect. We don't avoid important topics, and we are in favor of freedom of speech, but there's a question of morality here. People hear name-calling and political whining on the radio all the time, so we try to provide something different."

IHR and its listeners also believe in charity.



# TUBES

(continued from page 14)

achieve 20,000 watts of RF at its output. The tube must lose 6.7 kW in heat from the high-voltage supply plus power lost in the control and screen grid. Add to that the filament, which is 6.3 volts at 160 amperes or 1,008 watts.

Eimac specifications show the tube could develop as much as 36.5 kW under the right conditions. That is pushing the equation way too far, in my opinion, and does not take into account any mistuning. A transmitter and tube might have to handle antenna icing in winter conditions. Poor matching because of that can severely mistune a transmitter causing the tube to dissipate more power in an attempt to stay on the air. Most transmitters have overload and protection circuits to prevent that.

## FILAMENTS

Electron tubes wear out. The filament is what wears. You've heard it before, and I'll repeat it again.

Best life from a tube comes from proper filament management. That means running the filament at the rated voltage as indicated in your transmitter manual or tube specification sheet for 200 hours of operation. Then drop it as low as possible before there is a significant reduction in emission, which you see as lower transmitter power.

You can easily double or triple a tube's life by careful filament voltage management. Some transmitters have filament voltage regulators to make up for power line voltage variations. This is especially helpful when power line voltage sags frequently because of a nearby factory or farm when electric usage increases and decreases.

Tube emission and transmitter power

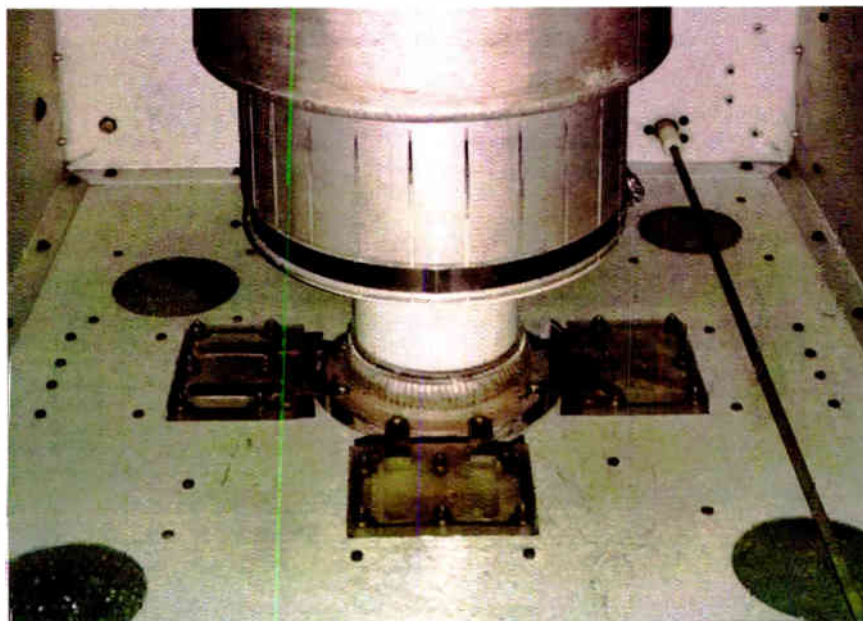


Fig. 4: A tube cavity with 4CX20,00C

output will decrease as a tube nears the end of its life. You should adjust filament voltage upward to compensate. It is time to replace the tube when you are at 5 percent over the rated filament voltage. It is called "end of life."

## PROBLEMS

If you have tuning trouble in a transmitter, it is best to reduce PA voltage or drive to keep the tube within specification for dissipation. If you look in a tube spec book, you will see figures for maximum control and screen grid dissipation too. Sometimes, I've disconnected one of the three leads on the primary of a three-phase power transformer when tuning and troubleshooting. Do this with all the power turned off! Typically the PA voltage will drop to half. That will put the output at one-quarter power. Do the troubleshooting and initial tun-

ing before reconnecting that third wire. That is a great way of handling a problem without burning up a tube.

## MORE IS NOT BETTER

This is for transmitters with solid-state RF drivers.

Just because an FM transmitter manufacturer recommends the PA tube in your transmitter needs 350 watts of drive, it doesn't mean that 400 watts is better. You can get into a situation where PA efficiency will suffer with more RF drive.

Do your tuning to match what the manufacturer test data shows. Your numbers may be a bit off because you have a different tube in the transmitter. Adjust RF drive by tweaking FM exciter power. You will find that the tube efficiency is poor when under driven. It will peak and then drop off again as drive is increased.

Find the sweet spot where PA efficiency is best. You will know that when PA current is low and transmitter RF output is highest.

## RECORD KEEPING

Keep tabs on what condition your tubes are in when removed from service.

You can refer to a serial number on the bottom, which is often difficult to read.

Another way is to mark the tube with a statement something like "makes 90 percent power." *Do not mark on the ceramic.* Yes, ceramic is a wonderful place for a pencil to leave legible markings. Pencil lead is a conductor and can easily help start an arc-over when the tube is returned to service. Pencil lead is also difficult for a tube rebuilding company to remove. Best to use a liquid pen and indicate status on the tube anode.

You'll be glad you did when you return to a broken transmitter in the middle of the night and can't remember which tube is good and which one isn't.

## DO IT RIGHT

My recommendation: Have one new or rebuilt tube on the shelf for every tube that is in service at the site. Tubes are "wear" items and will wear out or outright fail with time. It is just a matter of when.



You can't predict when a tube will need replacing. Yes, a tube can get weak so transmitter power falls off. It can just quit in just seconds, putting you in a bind to get a replacement in a hurry.

Knowing the facts will help you get the job done right.

Mark Persons W0MH is Certified Professional Broadcast Engineer by the Society of Broadcast Engineers and has more than 30 years' experience. His website is [www.mwpersons.com](http://www.mwpersons.com).





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## Sync Hooks Drivers Up With More

Ford's connected car system is featured in 2015 North American Truck of the Year

BY PAUL KAMINSKI

*One in a series of articles about media infotainment systems in today's new vehicles.*

Pickup truck owners need power, and not just to haul loads. Today's owners want power to organize their music, radio listening choices and connections to the world outside the cab.

That's what Ford's Sync system does for the 2015 Ford F-150, which was chosen by a panel of American auto

touchscreen control, enhanced voice recognition and available navigation. It also included HD Radio capability and additional USB and SD card ports.

Of those 10+ million vehicles on the road, 3 million are equipped with



Ford's 2015 Expedition SUV, equipped with Sync with MyFordTouch.



The 2015 North American Truck of the Year is the Ford F-150.

journalists as 2015 North American Truck/Utility of the Year. That choice was announced at the North American International Auto Show in Detroit in January.

I recently tested the Ford Expedition SUV and Ford Transit Connect Wagon and used the Sync system with MyFordTouch.

### NEW FEATURES

Since Sync's rollout in 2007, some 10 million Ford and Lincoln Motor Company vehicles have been delivered with it. In January 2010, the second-generation Sync with MyFordTouch debuted with

receivers that can receive AM/HD and FM/HD signals.

The Sync with MyFordTouch has touchscreen control, analog dials for volume and tuning, as well as voice control. Others in vehicles like the Transit Connect Wagon have smaller screens and rely more on touchscreens and voice for choices. All of the Sync platforms are device-agnostic and let drivers use voice commands to control their connected phones.

The newest version, Sync 3, will debut in Ford and Lincoln cars and trucks beginning in 2016. It'll have enhanced voice recognition, Enhanced AppLink Siri Eyes-Free capability for iPhones and software updates via USB or over the air through a Wi-Fi connection. It will use smartphone-like gestures (pinch and zoom, for instance) to control apps as part of the touchscreen interface. Ford will still include physical controls, such as knobs, for changing features like channels and volume.

### GETTING HANDS-ON

I used a mix of manual and touch-screen and voice control for selection of stations and features when driving the

ed with installed safety systems on the vehicles, and audio dims when an alert situation is detected by backup cameras, as well as available cross traffic and blind spot alerting systems.

AM and FM users using Sync with MyFordTouch will see a general radio



An FM HD Radio screen from the Sync with MyFordTouch is shown installed in a Ford Expedition.



This is how an AM station display appears in Sync with MyFordTouch.

Expedition and Transit Connect.

Occupants will notice the difference when a HD Radio signal is locked on by the receiver — and when the digital signal is lost. When driving down the Palisades Interstate Parkway and locked on an AM HD signal, I hear it in full fidelity closer to the transmitter, but when I drive farther out, it reverts back to analog performance. I grew up DXing AM at night and listen to short-wave, so some diminished fidelity does not bother me. But for others, it appears to be an inconvenience, and I've heard anecdotally that drivers who experience this sometimes complain to dealers that their radios do not work.

What users hear is also interconnect-

button on the main menu, which they must access to unlock the choices for radio (AM, FM and SiriusXM, if that is installed). To get an FM or AM HD Radio station and hear it in digital, yet another menu choice must be made. Tuning in a station is another menu choice.

With all of those choices, people with short attention spans get frustrated because they are not accessing what they want to hear when they want it. Thus the streaming apps on their phone and those installed in systems such as Stitcher, Pandora, etc., are attractive to them; once selected, they immediately start playing through the speakers.

(continued on page 21)

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# Use Influencer Marketing to Your Advantage

Put social media stars to work in local markets to drive results

When negotiations start with “I must have” or “I won’t work without,” I get so turned off that I’m ready to run.

From whom have I heard these demands in recent years? Influencers.

Yes, influencers have arrived. Big influencers possess the status of rock stars. It’s probably only a matter of time until one of them puts “no brown M&Ms” as a stipulation in a contract.

For readers only vaguely familiar with influencer marketing, allow me to explain.

## A STAR IS BORN

It didn’t take long for the new stars of social media to realize that they could post messages and/or content that would motivate large groups of people to action. At first, it was just fun and gained recognition for individuals who were not part of the previous media elite in broadcasting, film, newspapers or publishing.

Naturally, money started to change hands: the influencer was born. Specialists emerged on various platforms. Some were better at Facebook, others with YouTube, and others with Twitter, Instagram, Pinterest and Google+. Influencers hired agents and agencies. Once engaged, influencers exposed their audiences to products, services and even political advocacy. They delivered measureable results to companies eager to reach an online audience with a credit card at the ready.

Here are few examples of huge influencers in various social media:

- Photographer Chris Ozer has more than half a million followers on Instagram.
- Chris Brogan specializes in professional development and leadership and has more than 300,000 followers on Twitter.
- Video blogging (“vlogging”) fashion and beauty megastar Zoe Sugg has more than 7 million YouTube subscribers and 2.7 million Twitter followers.

Before you throw stones at me for suggesting this, allow me to remind you that it was once thought outrageous to market radio stations via television. For years, television was considered a threat to radio station listening and advertising. (I had a radio station owner yell at me for talking about a TV show because they were “the competition!”)

Influencers could help us bring new audiences to personality-driven shows like morning programs or talk shows:



So who’s big in your local market? Check social media for the numbers, or contact one of the many agencies that specialize in finding appropriate influencers.

How does influencer marketing affect broadcasting? I can think of a few intersections, and I’m sure you’ll come up with more angles once you start the discussion with others.

## BROADCAST USAGE

Radio stations should consider using influencers to drive listening and awareness of our products.

raise the profile of our poorly known HD Radio channels; drive online streaming listening nationally; or pull news into their channels from radio to remind people how competitive we are as a breaking news source.

Influencers could complement radio with video on YouTube. Radio typically does a poor job in this area and even when we make video, few people see it on our websites. When the right influencers interact visually with a radio personality, it can be a powerful combination.

In the spirit of “When you can’t beat

## PROMO POWER



Mark Lapidus

‘em, join ‘em.” it is still entirely possible for top radio personalities with already large on-air audiences to become influencers themselves on social media. To do so, they probably will need training from others who are experts in this field; more importantly, they may require financial incentive to invest their time and energy. Perhaps stations and high profile personalities can form business relationships that foster growth in the social space. For example, once an audience is captured, joint selling on-air and in social becomes a strong pairing.

The jury is still out as to whether influencer marketing is a flash in the pan. Critics will (correctly) point out that with the inevitable death of Facebook organic reach, influencers on that platform will soon need investment just to reach their own fans. That could spread across Twitter, YouTube and the rest.

It doesn’t necessarily mean the death of influencer marketing, but certainly could be the start of a new evolution.

How to get started? Take this tip from Malcolm Gladwell, author of the groundbreaking book, “The Tipping Point”: There are exceptional people out there who are capable of starting epidemics. All you have to do is find them.

Good hunting!

The author is president of Lapidus Media and a longtime contributor. Find more of his Promo Power column at radioworld.com/promopower.

(continued from page 20)

(As for the radio industry app NextRadio, the Sync systems in the Expedition and Transit Connect vehicles I tested did not have that on the menu.)

As with any control system in a modern vehicle, quality time spent with the owner’s manual is necessary to optimize the Sync system for driver safety and convenience.

From what I heard at November’s Connected Car Expo in Los Angeles during conversations with manufacturers and panelists there — Ford included — radio will continue to have a place in Sync and other platforms for the connected car and truck, although it must compete with other apps.

In my view, whether radio wins that competition will depend not just on the technical quality of the signal delivered to the receiver, but also on the content (metadata included) that rides on that signal — and if that content is so overwhelmingly compelling that users will take the time to program their connected car systems to receive it or facilitate its reception.

Paul Kaminski wrote here about Chrysler’s UConnect system in November; see radioworld.com, keyword UCon-



This is the homescreen for Sync with MyFordTouch as installed in a Ford Transit Connect Wagon.

nect. He is host of msrp.com’s “Radio-Road-Test” program, now in its 23rd year of production, and a longtime RW contributor and columnist. He’s been a radio reporter for many years, most recently with CBS News Radio. Find him on Twitter @msrp.com.

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# Radio, Interrupted

Commercials don't have to be disruptive clichés

BY JEFFREY HEDQUIST

Listeners tune to programming for entertainment, information, news and inspiration. Commercials are interruptions to that content. If your commercials sound like commercials, listeners probably will ignore them. If you can make sound them less like commercials, your chances of results increase.

Here are some of the ruts we fall into, making our commercials sound like commercials:

**1.** We get it backwards; we start with the client's name before we've given the listener a reason to remember it. Or we initiate the call to action before there's a reason to respond.

*"Downtown Credit Union presents ..."*  
*"At Crestline Jewelers, we don't just save you money ..."*

*"Save this Saturday the 25th!"*  
*"One night only!"*  
*"Jack Frost Dodge-Chrysler-Jeep-Toyota-Isuzu-Hyundai-Desoto-Stude-*

*baker, Pleasantville's Number One dealer, is changing all the rules ..."*

*"Stop everything and write down this number!"*

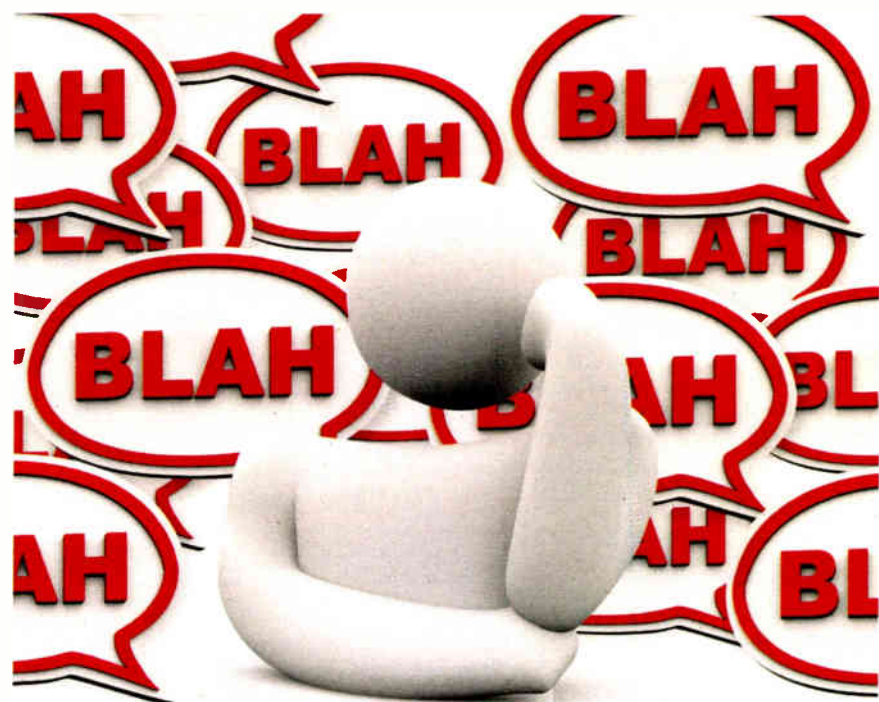
**Remedy:** Give the audience a reason to respond, *then* give them a way to respond.

**2.** We use clichés and speak in "commercialese" instead of having a one to one conversation with the listener.

**Remedy:** Scan for clichés and explain each in language people use.

Maybe your client does have a "friendly knowledgeable sales staff." Is there a more effective way to make that point? Tell a story about how a customer's problem was solved, about how the specialized training they've received will benefit the customer or about the powerful guarantee the store offers to make sure the customer is completely satisfied.

**3.** We tack unrelated entertainment onto a spot, hoping to get the listener's attention. Spots that start with a joke followed by a pitch disappoint the



**Boring, formulaic content is a problem for many radio commercials. Here are ways to fight the monotony.**

listener. Unrelated humor doesn't sell.

Be wary of stories where the name of another advertiser can be substituted. Attempts at humor that make fun of members of the target audience can be painful, results-killing mistakes.

**Remedy:** Weave the entertainment and marketing together. Make audience members who are empowered by the advertiser the heroes of your story. If you poke fun, make the target someone your audience would poke fun at, *not* the prospect.

**4.** We "announce" commercials and subject the audience to bad acting.

**Remedy:** Direct your talent to talk with your audience, not at them. Engage the listener's imagination. Don't write beyond the capabilities of your available talent. Increase your talent pool.

**5.** We start jingles with the client's name.

**Remedy:** Create original music that's a song, not a slogan. At least save the client identification for later in the music.

**6.** We create spots that are predictable. If you create a commercial that follows these patterns or a myriad

of others, it'll *sound* like a commercial and won't do as well as it would have if it didn't, but it will if it doesn't, so don't.

**Remedy:** Radio has the ability to "sneak up" on listeners and engage their interest.

- Do the unexpected. Tell your audience something about themselves that they knew but they didn't know that *you* knew or cared about. Surprise them.
- Start your stories in the middle. Throw away the first paragraph.
- Use unexpected spokespersons or characters to tell your stories.
- Use a variety of story forms — non-commercial-sounding ways to tell stories to get results for your clients.
- Think of your commercial as a conversation with a friend, or a voice-mail message to her. Record yourself sincerely recommending the advertiser because of your positive experience. Transcribe this imaginary conversation. Edit for time, but remember, it should not sound like a commercial.

Avoiding such ruts will make your commercials more like the entertainment, information, news and inspiration listeners seek. They will be more likely to get the results your clients want.

*Do you have the list of 333 of the most common commercial clichés? Avoid them and get better advertiser results. It's free. Email Jeffrey Hedquist at [jeffrey@hedquist.com](mailto:jeffrey@hedquist.com) and he will send them.*



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**FIRSTPERSON**

**ONE BOURBON, ONE SCOTCH,  
1 KILOWATT**

Jimmy Buffet sings of Margaritaville; maybe we should call this “Margarita-casting.” I recently came across a radio station that has a drinking establishment as a neighbor, a very close neighbor. The 1 kW AM outlet rises a tower that is “squeezed” between buildings, with its feet right by the bar’s back door and alongside its patio.

This certainly makes for a focal landmark; indeed the station has adopted a radio theme in its marketing. I happened to be in the area after seeing it posted

in Facebook, so I decided to go take some shots (pictures, not drinks). The tower is visible from the front and back of the bar. The bartender was happy to let me go back on the patio. A visitor can see radiating lines up the side each leg of the tower. The surrounding walls and other surfaces have been decorated artfully. I wonder what the patrons make of the “High Voltage Broadcast Equipment” sign hanging on the plastic yellow chain. All in all, not really my cup of tea. Or bourbon. ...

What interesting things have you seen done with radio tower sites or old radio stations? Tell us at [radioworld@nbmedia.com](mailto:radioworld@nbmedia.com).

— Dan Slentz



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# Trends in Studio Design and Furnishing

Digital technology affects even these worlds

BY BRETT MOSS

Digital and IP technology have changed the face of the radio broadcasting industry over the last decades. One area that might at first glance seem impervious to the march of digital would be studio design and furniture. Yet it, too, has succumbed to the seemingly all-consuming digital catalyst.

Radio World asked several industry project planners about this.

## The Evolving Studio Countertop

*Vince Fiola, Studio Technology* — I speak to quite a few engineers regarding their preferences for furniture in their studios. While some prefer to just stick with the way things have been done for years, others see the changes in technology as a way to make positive changes to their studio furniture as well.

The most apparent change that I have noticed is the reduction of both above-counter and below-counter rack space. If there is even a need for an equipment rack above the counter, the placement has changed from easily accessible, to somewhere out of the way. Rack space below the countertop can be reduced due to the decrease in the amount of equipment and wiring needed. A well-vented accessible cabinet to store computer hardware alongside a rack area is becoming more common.



A Studio Technology project at Binnie Media. Note the single equipment rack set off to the side and computer equipment far more centrally located.

In the creative studio end of things, we are being asked to maintain more counter work surface in the "traditional console" location by moving the mixing console into a secondary position off to the right or left. This enables the levels to be set on the board and allows a comfortable area in the traditional operator position to work on digital editing for longer periods of time.

We are also beginning to get more requests for adjustable-height work surfaces. This allows for each operator's preference while they work, but it can still put a dent in the budget.

Finally, with the reintroduction of vinyl records as a viable media in some parts of our industry, we are being asked to make room for turntables once again in some air studios. When I started working in broadcast in the early 1980s, turntables were the norm — proving once again that everything old becomes new again.

## Digital Routing Is the Core

*Conrad Trautmann, Chief Technology Officer, Westwood One* —

Our studio and facility concerns vary depending on whether it's new/refurb or acquisition. In all cases, the first consideration is, "What is the house router system?" Clearly, we'd like to be compatible with what we're using to route audio. In some locations, we have SAS 32KD systems, and in others we're using Telos Axia. If we're putting in a new studio in an existing facility with one of these systems already in place, it makes sense to extend the routing system to the studio. In the case of a new build, it's highly likely we'd install an IP audio-based system.

Looking at a hot topic, accommodating video, we do consider and plan for it when we are gutting and building a new control room/studio. Not so much for edit workstations or smaller production rooms.

Another topic of interest is green and more energy-efficient technologies. We've made use of newer LED technology, which provides good coverage and much less heat than older incandescent lighting did. That also helps with air conditioning loads and operating costs as well.

We have been building performance spaces at some of our specialized facilities such as our famous TM Studios in Dallas. Studio A there is a sight to behold. It was built as a professional recording studio, and it gets used every day for our original music products and jingle business. In our Culver City facility, we have a studio that has moveable furniture to allow a band to set up if needed.



Westwood One's Culver City, Calif., studio shows a changing face of radio studios. More open, less formal, there's even a couch. The area can also be cleared to create a live performance space.

## Wallets Are Cracking Open

*Ben Palmer, Arrakis Systems* — About six years ago, in the middle of the recession, we mostly got standard finish/standard design orders — whatever was cheapest. Now that the economy is doing a little better, we have been receiving a lot of requests for custom colors for the side panels and tabletops, as well as custom designs for the configurations. We have also been moving away from the older finishes, and have adopted a modern look with our Accent line. We have found that high-end studios prefer this look to the older finishes.

Clean lines and modern finishes are proving popular, as typified by Arrakis' Accent line.





Photo by Cheryl Fleming

Inside the Airstream trailer studio. The control room is at one end, while the recording room/performance space is at the other.

## Expanding the Studio Envelope

*John Storyk, Walters-Storyk Design Group* — Walters-Storyk Design Group has built studios in a basement (Electric Lady) and a penthouse (Jungle City), but a recent project was the first time we've worked in an Airstream trailer. Dave Pentecost, director of technology for New York's Lower Eastside Girls Club, brought WSDG a compelling challenge: "Can you create a pro recording/broadcast/teaching studio within the confines of a 140-square-foot Airstream trailer?"

With a live booth for broadcast and recording and a control room to mix programming for LEGC's WGRL Internet radio station, this compact studio also creates sound tracks for student videos and their planetarium's educational presentations. The control room accommodates three students and an instructor. The front booth can host four guests. Visible from the street, the Airstream resides in the second floor, stage-equipped, classroom/ community room.

The compact 5.1 surround-ready CR features an Avid C/24 mixing console, Genelec speakers, Manley, API, Rupert Neve Designs, Universal Audio, SSL (and other) processing gear, along with Neumann, Royer, Shure and Sennheiser mics to provide club members with a professional, hands-on recording experience.

Radio projects remain an important aspect of the WSDG client mix. We are currently involved in two public broadcast station projects. KEXP(FM) in Seattle is preparing to move to a brand-new facility in the Seattle Center. It will feature cutting-edge broadcast and recording studios, and, a live performance venue. We are also in planning stages with KPFK Public Radio in Hollywood. This award-winning station is upgrading its original home with an acoustical update of their live performance studio and a new control room.



World Radio History

## Calling for Visual Radio

*David Holland, Omnirax Furniture Co.* — We're seeing a lot of call for visual radio. At the 2014 NAB Show, at least 50 percent of the people we talked to that were planning new studio builds were considering some type of video component in their project. Simulcast, streaming video, webcasting — all need to overcome the visual clutter of radio's typical above-counter profusion of monitors and mic booms and present a clean face to the cameras.

The trend presents itself as a desire to recess monitors, lower mic booms, pay more attention to sight lines, add glam features such as lighting and shiny tops. It's a subject that comes up in any larger build-out — both preparing for it in the near term and anticipating it coming down the road.

Beyond that there is a less-is-more trend, as in less rack space generally. But, as we well know, people are not getting any smaller — so sound ergonomics and attention to the individual needs of each person in the room is an immediate and enduring trend.

From the audience's perspective, this studio looks like a TV set. This Omnirax design has recessed monitors and switches, and low profile mic booms to accentuate the "new face of radio." Plus, it's bolted together and on hidden casters, so it can be moved out of the way to create a performance space for in-studio bands.



Photo by Claire Tallero

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# Sonnox Plug-Ins Silence Sibilance

A voiceover pro cleans up a track with SuprEsser

## SHORT TAKE

BY CLAUDINE OHAYON

As an actress and professional voiceover artist, I've been lucky enough to enjoy an exceptionally varied career, lending my voice to everything from national TV and radio campaigns to audio books to live Hollywood award shows. Thanks to a knack for effectively communicating both plot lines and sales messages (and with the invaluable support of the William Morris Endeavor Agency), I've built a vocal résumé that includes Mastercard, Disney World, Pillsbury, Sony Music and countless promos for ESPN, USA Network, VH-1 and MTV.

In November 2014, I flew to Los Angeles to serve as on-air announcer for the CBS TV "Hollywood Film Awards." In addition to my live performance, the show included tracks I prerecorded at my Pro Tools-equipped home studio.

Over the course of my career I've learned to adapt to a constantly evolving process of winning and producing assignments. When I started in the business, I'd make visits to Manhattan casting agencies where I would record and edit my auditions on-site. There was a casting director present who would help me polish and focus my delivery. These days, I'll receive an email from my agent with the specs for an audition, record and edit a demo myself in my studio, and send it to the agency as an MP3 file.

### PLUGGING IN

I've developed a flexible vocal style and a dependable tool box that helps me deliver optimal performances. One of my key assets is a Sennheiser MKH 416 microphone, which I first encountered at a New York recording studio. I love the way my voice sounds when I use it, but I had to find a way of de-essing my natural sibilance which, depending on the text, it occasionally emphasizes. It was tricky, the MKH 416 put my vocal quality and delivery right where I wanted the but the sibilance was an off-putting byproduct.



**Claudine Ohayon**

A producer with whom I was working introduced me to the Oxford SuprEsser plug-in from Sonnox, and I learned that it eliminated the problem without compromising my performance. It's an indispensable tool in my studio. I've got a preset which generally gets me exactly where I want to be. Depending on the script, I can perform additional tweaking by honing in on extraneous sibilant frequencies to shave away superfluous "esses."

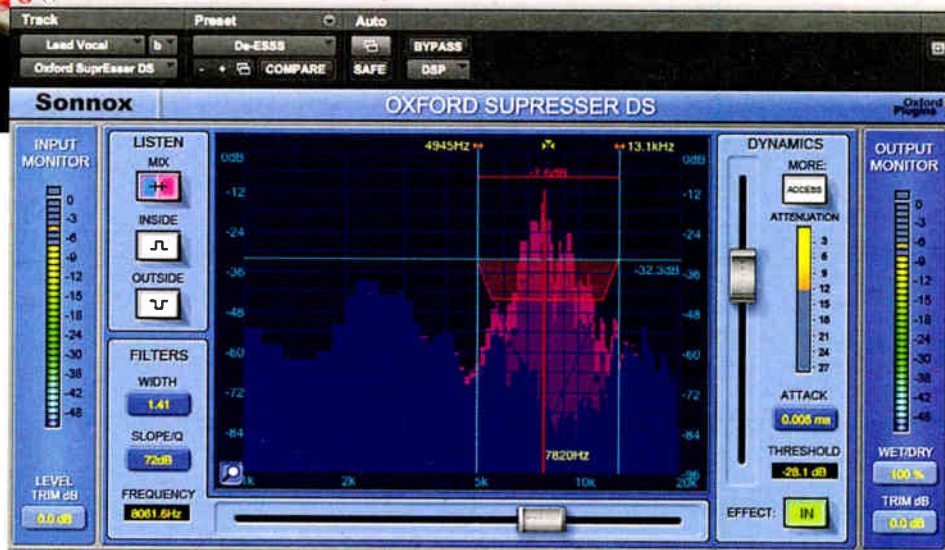
Occasionally, I'll use two SuprEssers, one for the esses up at around 7 kHz, and then another down much lower around 200 Hz or so to soften or eliminate some of the "plosives" in the mic. I don't use the lower frequency filtering as much,

but occasionally I need to read closer to the mic to get more intimacy or warmth out of my voice. That recording style has a propensity to pop some particularly powerful plosives, and that's where the lower frequency SuprEsser shines.

I also use Sonnox's Oxford EQ to remove any unnecessary low end. By switching on a filter I can take out as much bottom as I need — I just push it up until it sounds good. Sometimes I'll use the Oxford Dynamics with a little compression, but my favorite tool is the Oxford Limiter. The voiceover world is extremely competitive. I'm often competing with literally hundreds of other

distorted and it keeps it clean and bright. Every little bit helps to kick the presentation up that extra notch.

I auditioned for the CBS Hollywood Film Awards assignment by recording different versions of the show's intro. Using my entire Sonnox production chain I delivered the audition and I got the job. Before flying out to L.A. to do the live show, I prerecorded a variety of billboards, sponsor tags, intros and outros that were being incorporated into the broadcast, and for the pre- and post-shows as well. My prerecorded tracks were used along with the live announcing I did that night at the Hollywood Palladium. My family DVR'd the show, and when I listened back I was really happy with the results.



artists for the same job. Producers and clients review all these MP3 demos on their computer speakers. They're listening for a special voice to deliver their copy in the most effective way. Having the Oxford Limiter on my track really helps my performance register. It's never

*Claudine Ohayon is a voiceover professional who has worked in radio and television.*

*Got a studio product you want to write about? Email Gear & Technology Editor Brett Moss at [bmoss@nbmedia.com](mailto:bmoss@nbmedia.com).*

## MARKETPLACE

**Automation Initiation:** AEQ has released AudioPlus, its newest automation, management and playout system for broadcasting. The company says it is based on feedback from users of its Mar family of automation systems.

AudioPlus is a set of applications and services that enables users to more easily carry out tasks that are typical for radio stations, explains the firm.

It offers programming for automatic playout for up to four independent players, as well as remote controlled playout. Users can also automate playlist generation based upon selectable sorting criteria, in addition to CD ripping with CDDDB link and audio object indexing.

AudioPlus also features a broadcast network audio card bypass function. Internal or external object editors use either the standard provided editors for texts and audio or other preferred applications.

It is integrated with AEQ Forum and Capitol digital mixing consoles using the USB audio I/Os. AudioPlus is compatible with Windows computer and servers.

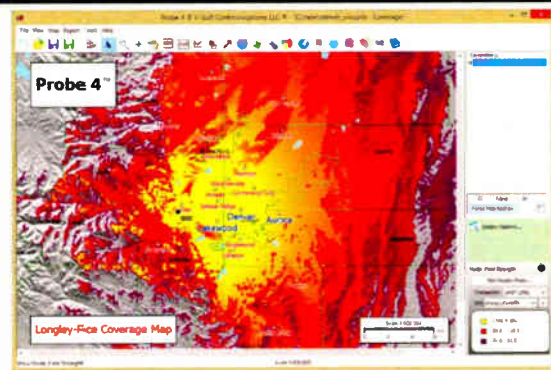
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Looking for KFRC signoff radio broadcast from 1930 Andy Potter, running time is 0:22 & also the KLX kitchen the program guest is Susanne Caygill, a discussion of women's affairs with a long promotion for Caygill's appearance at a local store. Anne Truax, Susanne Caygill, running time is 13:44. Ron, 925-284-5428 or email ronwtamm@yahoo.com.

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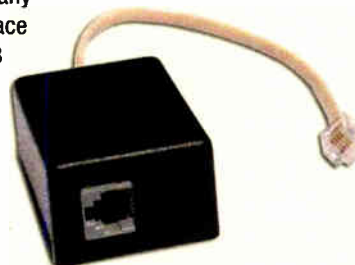
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# BBG Places Premium on Agile, Cost-Effective Ops

Mendes lays out the agency's plans to stay ahead of the media curve

## COMMENTARY

BY ANDRÉ MENDES

*The author is director of global operations for the Broadcasting Board of Governors.*



Courtesy André Mendes

### LEVERAGING CONS

As content consumption patterns continue to change throughout the world, we are making almost all of the BBG networks' content available via live streaming and on demand.

Currently utilizing Akamai, we can accommodate the overflowing demand of this distribution methodology without having to build massive peak requirements capacity. In addition to serving the multiple platform demands of our global audiences, the BBG is also increasingly leveraging non-real-time content distribution to its TV and

radio affiliates via an online portal (BBG Direct) that provides our distribution partners with metadata search capability and content downloading as their needs dictate.

### MOVING TO OPEN SPACE OFFICE CONFIGURATION

Modern, collaborative workflows do not lend themselves to the old walled-off office paradigm.

In addition, the economics make it increasingly prohibitive. Given the cost of real estate and increasing telework, the concept of a 200-, 300- and 400-square foot individual office being occupied less than 50 percent of the time is increasingly unaffordable and anachronistic.

Recently, under pressure to vacate some space in a satellite office, the agency gutted half of one floor of our headquarters and renovated, replacing individual offices with an open floor lay-out peppered with 24 meeting rooms. Leveraging these new workstations for our technical team, we simultaneously migrated to enterprise wireless access, voice-over-IP and increased telework availability. As a result we generated taxpayer savings calculated at around \$38 million over the next 10 years.

### MARKET-DRIVEN DISTRIBUTION PLATFORMS

Operating the widest distribution portfolio of any global media enterprise (with the possible exception of Chinese media) the BBG manages some of the largest remaining shortwave stations, some of the most powerful medium wave (AM) transmitters and an increasingly larger number of FM outlets. In addition, the BBG also employs 13 satellites (C and Ku Bands), streams almost all of its content, operates hundreds of websites, Twitter feeds, social media properties and even engages in some terrestrial TV distribution (Iraq).

This is necessitated by the needs of our target audiences that range from media-repressive environments, like North Korea, Cuba and certain central Asian countries (Turkmenistan and Uzbekistan), to relatively free media spaces like the Middle East, the Balkans and Thailand.

With such diverse markets, the BBG must constantly shape its distribution strategy to the needs, and appetites of its audiences. While shortwave and medium wave remain the only reliable way to reach North Koreans, populations in Africa are quickly reducing their utilization of cross-border radio in favor of satel-

lite TV and mobile platforms. In Central Europe and Russia, satellite and cable TV rule the market, but by virtue of censorship or sheer audience preference, mobile and Web platforms are quickly gaining ground.

Geopolitical situations change, market economics change and with those changes, so must the BBG ground game, while of course, keeping a close eye on the bottom line.

Our industry challenges, as well as our organizational ones, are inextricably entwined with rapid societal change. As anyone in the media industry well understands, change is exponential in technical terms.

With a long history of fostering freedom of information across a myriad of despotic environments, BBG is more important than ever in a crucial time of clashing ideologies, and an increasing need for objective information. Judging by its sizeable audience growth over the last five years, from 165 million to 215 million people, the agency has undergone massive transformation. It is not only necessary but absolutely crucial for us to continue that trajectory as we go head-to-head with far better financed state-sponsored media organizations and we engage in a titanic global struggle in the marketplace of ideas.

The BBG is the independent federal government agency that oversees U.S. civilian international media. BBG is also the name of the board that governs the agency.

*Comment on this or any story. Email radioworld@nbmedia.com with "Letter to the Editor" in the subject line.*

## READER'S FORUM

### TRANSITION

Yes it is a platform transition — transitioning from HD Radio back to analog, where it should have stayed in the first place ("Auto Analyst to Radio: Don't Freak Out," *radioworld.com*, Aug. 29, 2014).

Bob Young, KB1OKL  
Millbury, Mass.

### STEREO, BACK IN THE DAY

Paul, thanks for the snapshots like the one of Jake Bechtold ("He loves that AM Stereo Light," *radioworld.com*, Nov. 19, 2014).

My Denon AM stereo/FM stereo tuner is still my regular listening tuner.

Back in the day, the country music on Radio KEEN (1370 in San Jose) sounded glorious in stereo. Even the talkers that cared (KGO) sounded clean bright in the wideband mode of the tuner. Out here (on the Big Island of Hawaii) the electrical (and thermal) conductivity of the lava is zilch and electricity costs 43 cents per kWh ... so we have a couple of 5 kW satellite sports talk rigs that sound horrible and barely cover their market (Hilo).

AF Rick Melzig  
Pahoa, Hawaii

The pace of change in government is rarely a match for the speed at which our societal constructs evolve.

Headlines will tell you that the Internal Revenue Service is still heavily reliant on systems first built in the 1960s and that the Veterans Administration continues to struggle with un-integrated systems that are ill-equipped to deal with the needs of a fast-growing veteran population.

At the Broadcasting Board of Governors, that inherent challenge is exacerbated by a global media environment that is being overhauled amidst dramatic shifts into satellite TV, over-the-top deployments, smartphones and social media; and these same media are also increasingly leveraged by rogue regimes, revanchist governments and terrorist organizations. All of these factors necessitate the emergence of an organization that places a premium on organizational agility and cost-effective operations, even as it deals with dwindling budget allocations.

This type of transformation must permeate every aspect of day-to-day operations.

Here is a brief description of some of the major efforts undertaken at the BBG over the last five years that have laid the ground for relentless improvement.

### RAPID MIGRATION TO CLOUD-BASED COMMUNITY FUNCTIONALITY

Three years ago, the BBG became the first sizeable agency to migrate its unified messaging environment (email and voicemail) into the Microsoft Office 365 environment.

That effort was followed by leveraging cloud-based customer relationship management systems, and more recently, the agency has begun testing a hybrid SharePoint deployment that provides universal access to most of its business data. Later this year, we will begin archiving all media content in a tiered system whose ultimate storage resides 2,000 miles away in Colorado.

### CONTENT DISTRIBUTION VIA MPLS

While point-to-point satellite distribution is extremely reliable, it is also very expensive and not easily scalable at a reasonable price point.

Over the last three years, we deployed a managed multiprotocol label switching network that will ultimately carry all of our global content to four different satellite uplink facilities located in Germany, the Czech Republic, Kuwait and the Philippines. Replacing links will dramatically reduce our operating costs while simultaneously enabling us to execute its migration to HD (and eventually 4K) TV without breaking the bank.



**READER'S FORUM****HELP AM**

No truer words have been spoken: "The Washington bureaucrats wouldn't know public interest if it hit them in the backside" — a quote from Ed De La Hunt in the Nov. 19 edition of RW's *Readers Forum*.

There are many theories out there to help AM radio, and most are plausible: antenna designs, power increases and digital. The FCC sits on most of this technology because they are incapable of making decisions to help smaller one- or two-station owners. The corporate giants quash most everything that comes down the pike that will help 1 kW full-time operations, and they definitely fight any proposals to allow low power FMs to take up the slack. Of course, the FCC fouled up the ruling allowing AMs to get FMs back in the '70s. Those FMs should have never been allowed to be sold off from the AMs. The FCC really blew that one.

The solutions to help small AMs are really pretty simple:

- Antenna designs that reduce skywave.
- 1 kW full-time for all AMs (arguments against this are foolish and baseless)
- 100-watt FMs, for the 1 kW AMs, that must simulcast and can never be standalone or be sold off from the AM. The FM is a part of the AM license.
- Start the elimination of 100 and 50 kW FMs in metro areas. They can't be justified.
- Force the FCC to hold meetings in every state, several if necessary, to hear the problems and what small operators think concerning AM radio. This would be ongoing year after year. The enforcement bureau can do this. The bureau is not really needed to bird dog AM or FM radio. We demand quality and probably self-regulate more than any business in the U.S. Enforcement is nothing more than a tool to generate revenue for the FCC and probably should be investigated.
- I would go as far as to assign an agent to multiples of stations he or she must visit on a regular basis to

talk and not bring the heavy hand of the FCC. This would certainly bridge the gap between the FCC and owners.

With all of that said, the FCC will not change. Much like the IRS and the EPA, the FCC runs with total disregard for the business world and what is really best for the public. They never know because they never ask, kind of like the ostrich with its head in the sand.

I'll probably never see any changes with AM radio, and that is a shame. I spend a lot of time on the road, and hearing a 50 kW nighttime torch is a real challenge these days. I miss the days of listening to any number of Eastern and upper Midwest stations at night here in the West. Those were the days.

Harry Hoyler  
KKAY Productions  
Donaldsonville, La.

**LISTENER BEHAVIOR**

Hi Mark, I just read your articles "Does Your Mobile Strategy Fly?" (May 21 issue) and "Our Free FB Ride is (Nearly) Over" (Sept. 10) on *radioworld.com*, and I thought they were very insightful.

I recently received my masters in digital media communications, and I wholeheartedly agree that radio stations need to better understand and adapt to their listeners' changing behaviors, and that should start by better understanding the importance of their mobile behavior as a primary communication channel.

Traditional media like radio is still seen as a one-to-many platform, but I think when radio stations utilize

social media and mobile channels as a many-to-one platform, it enhances listener loyalty and engagement. From a more philosophical perspective, when a listener starts texting with a DJ from their favorite station, they eventually save them as a contact in their phone's list of contacts. The station then is seen less as a business entity, and equated more with that listener's friends and family.

To me, the medium is the message. How we communicate via texting is different than email, social media posts, talking over the phone, etc. It is a much more intimate back and forth, and yet it seems it is being underutilized in radio. I've heard of short codes, but utilizing existing request or studio phone numbers through texting seems untapped. If you have a vanity phone number, the ability to fully bring your branded communication channels to the 21st century and through the medium listeners prefer seems promising.

But then again, I don't know how open-minded radio people are about new technologies. Your piece did give me hope though.

Ian Olson  
Digital Media Coordinator  
Zipwhip  
Seattle



Stockphoto/Christophe Heylen

Mark Lapidus replies:

Thank you for the kind words and for such an insightful perspective. You're right — texting is underutilized in radio. To do it right, it does really require a simple short code. Tough to do high volume with a phone interface. Several companies do this for broadcast (radio and TV), but it takes effort, money and education to get it executed. I have seen hundreds of texts come in for song requests within 10 minutes. It's quite

amazing. A big radio station can have over 50,000 people listening at any given moment!

I hope you're going into broadcasting. We need your kind of thinking in the industry.

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