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The show theme was "The M.E.T. Effect," for the merger of media, entertainment and technology. Convention attendance was estimated at about 103,000 and slightly up from last year. ▼



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Photo by Jim Peck

▲ Kira Parker of Vermont Public Radio at the Public Radio Engineering Conference. PREC drew more than 90 registrants; speakers participated from organizations including NPR, Inovonics, WBUR, WETA, Nautel, WorldCast Systems and others. The Association of Public Radio Engineers named Dan Mansergh as recipient of its 2017 Engineering Achievement Award.



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▲ "We need to believe in the virtuous cycle — the idea that adopting new distribution platforms serves to build our overall audience and engagement with them," said NAB President/CEO Gordon Smith. "And with our core service, we need to embrace our strengths: We are live, local and targeted. We are the most trusted source for news and information for those events that shape the world and our communities. We have a one-to-many architecture that is the envy of other media platforms." Read his remarks at [radioworld.com/smith-2017](http://radioworld.com/smith-2017).

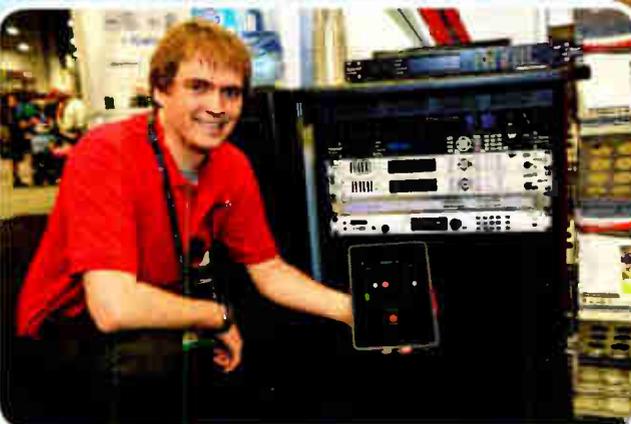


Photo by Al Powers

▲ Jacob Daniluck shows a new version of Teline's smartphone reporting app, Report-IT SIP, which streams live, studio-quality audio to all N/ACIP 3326-compliant codecs in SIP mode. He showed it connecting to Comrex Access and Telos Z/IP One codecs.



Photo by Al Powers

▲ GatesAir introduced the Intraplex IP Link MPXp codec, describing it as an intelligent networking solution to reduce costs and bolster opportunities associated with program transport over digital IP STLs.

## FROM THE EDITOR

Paul McLane



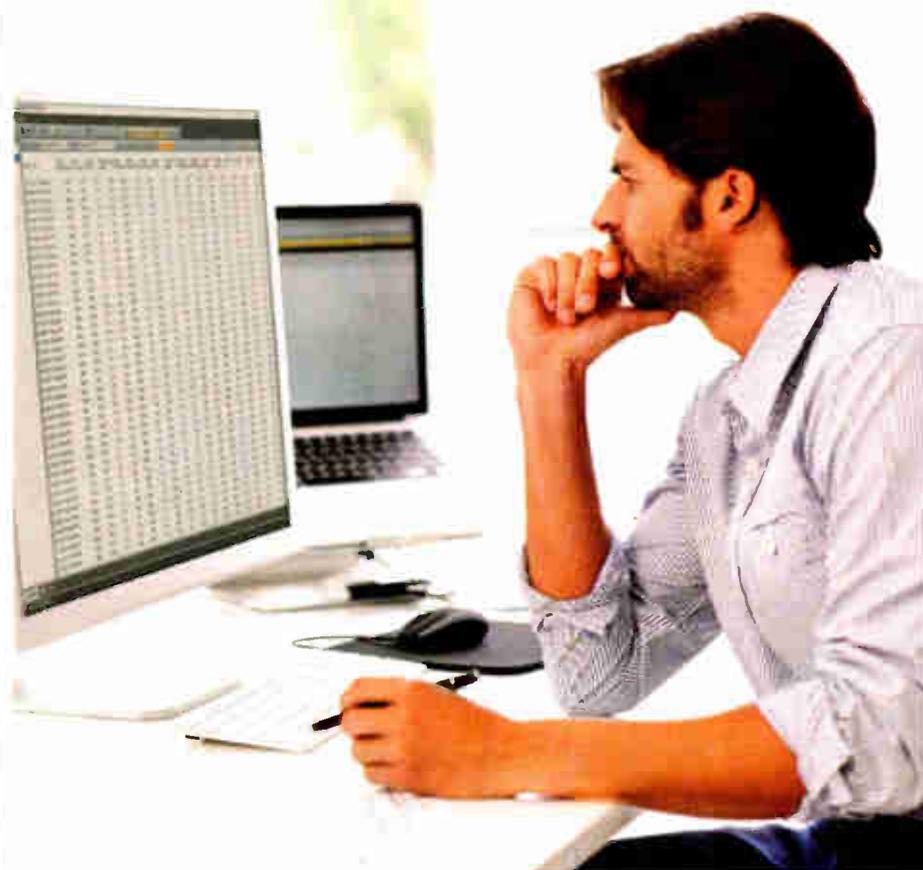
# RW Salutes Cooney's Excellence in Engineering

Radio World was honored to present our 2016-17 Excellence in Engineering Award to Michael Cooney during the NAB Show, joined by leaders of his employer Beasley Media Group and several of our past award recipients.

Shown from left are Radio World Publisher John Casey; 2009 honoree Gary Kline; Beasley's Lamar Smith and Heather Monahan; 2016 honoree David Layer; Brian Beasley; 2011 honoree Barry Thomas; Radio World Editor in Chief Paul McLane; Beasley's Steve Meyers and recipient Mike Cooney; 2004 honoree Andy Andresen (middle row); Caroline Beasley (foreground); Beasley's Soni Dimond (rear); Justin Chase and Bruce Beasley; 2006 honoree John Lyons; Beasley's Buzz Knight; and Brady Dreasler, Quincy Media Inc.



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Photo by Al Powers



◀ Kaden is a power user of the VoxPro; Wheatstone featured his artistry in its booth, promoting the new VoxPro 7 digital audio editor.

"The last thing broadcasting — or any industry for that matter — needs is outdated regulations standing in its way," said FCC Chairman Ajit Pai, right. "And that's particularly true in communications, where things change so quickly. That's why I'll work aggressively to modernize the FCC's rules, cut unnecessary red tape, and give broadcasters more flexibility to serve their audiences. Broadcasting remains an indispensable part of America's communications landscape. And under my chairmanship, broadcasting won't be seen as a speed bump." Read the text of his remarks at [radioworld.com/pai-2017](http://radioworld.com/pai-2017). ▶



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Photo by Jim Peck



▲ Beau Lund stops by the Comrex booth and chats with Kelly Clark. Comrex showed Access NX, the latest audio IP codec in its line, and Opal, a new IP audio gateway that allows remote guests to deliver "studio quality" sound without the need for special equipment on their end.

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MAY 10, 2017

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## TRANSLATORS

(continued from page 1)

The explosion of translators in the United States has left the FM band more crowded in larger markets, but Garziglia said interference complaints are not always legit and that punishment meted out by the FCC is based on the commission's outdated definition of a fill-in area translator.

"These distant out-of-market interference complaints are hindering efforts of owners of FM translators from providing enhanced service to their local communities," Garziglia said. "It's time to rethink the FCC's FM translator interference rules and policies."

Several recent actions in Washington could lead to just that.

The National Association of Broadcasters in April proposed rule changes to give translator licensees more flexibility in order to resolve interference complaints. In a petition for rulemaking, NAB asked the FCC to consider policy changes meant to "facilitate the efficient disposition of interference complaints against translators."

"We propose that Section 74.1233 of the rules be amended to allow translators to move anywhere on the FM dial (instead of only to an adjacent or IF-related channel) to resolve interference, as a minor change," the NAB wrote in the executive summary. "This additional flexibility will enable more translator licensees to efficiently cure interference by simply changing channels."

The NAB suggests four procedural changes to improve the process for resolving interference complaints against translators.

"First, we propose that an actionable complaint should be supported by interference complaints from at least six different listeners to the desired FM station, or perhaps more or less depending on the specific circumstances, such as whether the relevant service area is rural or urban," it stated.

It goes on to say such complaints must be verifiable statements "that include clear evidence that the complainant is a regular listener of the FM stations and unaffiliated" with the complaining station.

"Third, actual interference must be shown from a sufficient number of loca-



istockphoto/Robin Olimb

tions to indicate a consistent problem, and be confirmed by an on/off test, where practical," the NAB states.

"Finally, an actionable complaint must document that the full-power station has used commercially reasonable practices to inform the relevant translator licensee of the claimed interference, to ensure an opportunity for the parties to cooperate on resolving the alleged interference without commission involvement, and if an interference complaint is subsequently filed, resolution should be governed by a specific time limit (e.g., 90 days)."

### AZTEC

Separately, the owner of an FM translator in Philadelphia filed a petition for rulemaking in April seeking a "rebalancing of the equities in the FM translator rules" so that radio service provided by fill-in translators is not "forested or removed by distant radio stations far outside" a local radio market.

Aztec Capital Partners Inc. is seeking to rebroadcast its Spanish language programming from WHAT(AM) on a fill-in translator at 92.1 MHz. However, a complaint lodged by Clear Communications Inc. alleges potential interference with its full-power Class A FM station WVLT on the same frequency in southern New Jersey, approximately 50 miles away, according to the petitioner.

"Clear Communications is attempting to extend its signal into the Philadelphia metro area claiming listeners far outside its community of license and service area. These filings allege interference to at most several dozen purported distant listeners in the Philadelphia metro area," Aztec Capital Partners wrote in its petition.

Art Camiolo, general manager of El Zol Media, a subsidiary of Aztec Capital Partners, said the listeners of a local FM translator deserve some consideration when the FCC looks into interference complaints.

"We want to serve the local Latino audience in Philadelphia. We are not saying full-power stations don't deserve protection, but there really should

be some relief for the owners of FM translators targeted by distant owners claiming interference," Camiolo said, "especially when our goal is the local revitalization of radio."

He believes local radio service provided by an FM translator should not be removed from the air by the FCC unless there is a "significant public interest reason to do so, and the public would be significantly served by such a loss of service."

## It's time to rethink the FCC's FM translator interference rules and policies.

— John Garziglia

Aztec Capital Partners wrote, "We believe that there has been a fundamental shift in the nature of FM translators in that they now provide AM revitalization lifelines and diverse HD sub-channel programming to local radio listeners. FCC policy and rules have not adjusted."

The FCC agreed to accept public comments on the petition for rulemaking (RM-11786), but declined to comment about ongoing rulemaking procedures.

### FEW COMPLAINTS

Despite the huge spike in FM fill-in translators, FCC officials told Radio World there has been only a small increase in interference complaints against FM translators in the past 36 months.

The FCC has issued several thousand new translator station CPs or modified translator authorizations over the past three years and "has seen only a slight increase in the number of complaints from existing FM stations during this time," according to an official who asked not to be identified.

"During that same time, we have received FM translator station interference complaints on less than 1 percent of the translators that have commenced operations."

A fill-in translator station rebroadcasts the signal of a primary FM or AM station on a separate frequency. The secondary service, which allows a translator station to have a max power of 250 watts, was created in 1970 to help FM stations provide supplementary service to areas with indirect reception.

AM stations were first authorized to use FM translators to rebroadcast its programming in 2009; in many cases translators are used to rebroadcast HD Radio sub-channels of the primary FM.

### "CASUAL MANNER"

Garziglia said he isn't surprised to see an increase in interference complaints, if only a small one, especially since an FCC filing window in 2016 allowed some FM translators with AM primary stations to move facilities within 250 miles of the original translator location.

While he is not seeking a change in secondary status for FM translators, Garziglia points to a 1990 FCC FM Translator Report and Order that updated rules as now being outdated.

"Are those 1990 rules equitable any longer? They only looked at the translator service then when a single listener complaint of interference to a distant radio station from a FM translator could get the translator removed from the air. And it still can today," Garziglia said.

Some owners of full-service FMs are attempting to extend their signals to that last bit of owner's contour that is "just FM hash anyway," Garziglia said.

"Is that really in the public interest any longer? Distant out-of-market interference complaints are threatening to deny local radio service to thousands of local radio listeners. You have scenarios now that the FCC is denying radio service to thousands of local listeners by allowing full service FMs to extend their listening areas to the very distant edge where there might be just a hand-

(continued on page 8)

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Jeff Robbins, Sun Prairie Media Center



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## TRANSLATORS

(continued from page 6)

ful of people listening,” Garziglia said.

He also claims a significant number of listener interference complaints against FM translators before the FCC have connections to distant FMs through family, employees and friends.

Garziglia said most of the interference complaints the FCC receives against FM translators are being handled by the Audio Division. “I’m not aware of any complaints in the past 10 years that have gone up for a commission review. Maybe some of these rules used by the Audio Division should be reviewed,” he said.

He has clients who own FM translators who have been subject to distant station complaints. “I also have clients [for whom] FM translators are causing legitimate interference to existing radio service that we are addressing,” he said.

Under current procedures, Garziglia feels, unverified interference complaints are accepted as truth by the FCC, with the commission only exchanging informal emails with the involved parties.

“The casual manner in which the FCC appears to be handling these complaints is concerning,” he said. “It’s hard to find out how many complaints are being filed and how the proceedings are being handled. Often you can’t find them in CDBS [Consolidated Database System] or in public filings.”

The Washington-based attorney says he is aware of FM translators that have been forced to make channel changes to remediate the interference or sign off. “And that is where the informal nature

of the FCC’s proceedings becomes an issue, sometimes simply sending e-mails or a letter to FM translator licensees ordering them off the air,” Garziglia said.

FCC rules clearly say “an interfering FM translator station must resolve any such interference or cease operation.”

### ZERO TOLERANCE

A commission official told Radio World that the FCC staff reviews each interference complaint that comes to their attention but could not discuss specific cases involving translators.

**We believe** that there has been a fundamental shift in the nature of FM translators in that they now provide AM revitalization lifelines and diverse HD sub-channel programming to local radio listeners.

— Aztec Capital Partners

“In some instances, a translator is able to take immediate steps to resolve or address an FM station’s complaint. Our zero tolerance is explained in paragraph 83 of the 2012 LPFM order,” the official said.

Section 74.1203 sets forth the rights and obligations for FM translators that are alleged to cause interference. That rule prohibits “actual interference to ... the direct reception by the public of the off-the-air signals of any authorized broadcast station,” the official said.

The FCC has interpreted “direct reception by the public” to limit actionable complaints to those that are made by bona fide listeners. “The commission also requires that a complainant be ‘disinterested,’ e.g., a person or entity without a legal stake in the outcome of the translator station licensing proceeding,” the official said. “As with other types of interference complaints, the staff has considered only those complaints of FM translator interference where the complainant cooperates in efforts to identify the source of interference and accepts reasonable corrective measures.”

Once the commission concludes that a listener has made an actionable complaint of uncorrected interference from an FM translator, it will notify the station that interference is being caused and direct the station to either resolve the interference, generally within 30 days, or discontinue operations.

### DON'T “GAME” THE SYSTEM

There is support for Garziglia’s position from others who feel the FCC’s zero tolerance policy for translators that

cause interference to distant FMs needs revision.

Charles Anderson, president of engineering consulting firm Anderson Associates, said it is time the FCC recognizes the need to give fill-in translators some protection short of a primary license.

“The number of required interference complaints and their documentation should be strengthened to prevent gaming of the current system,” Anderson said. “The commission should also permit translators faced with an interference complaint to modify to any channel in the commercial band as a minor change.”

Ed Henson, president of Henson Media, which owns primary FM stations and several fill-in translators, said the FCC deserves credit for allowing AM stations to utilize fill-in translators, but agrees the interference issues are a concern to many radio station owners.

“The FCC has done a lot to help radio operators and deserves recognition for that. I’m not an engineer but understand FCC’s allocation process and respect that. However, when it comes to the way FCC resolves complaints in regards to FM translator interference it deserves another look,” Henson said. “I think we need a better system to resolve complaints.”

Henson — an NAB Radio Board member but commenting only on his own behalf — said he understands the FCC is working with limited resources and personnel but feels radio owners deserve more clarity when it comes to interference rules.

“This is not a small market versus large market issue, either. You have big owners and smaller owners who are complaining about interference from translators. But yet, theoretically it takes just one official complaint to negate all the work an AM owner has done to buy a translator, pay for engineering work and file paperwork with the FCC. It has to be frustrating to go through that and scary to go through,” Henson said.

He sees the need for a balance at a time of a major shifting in the number of FM translators on the air.

“It will be hard to gain a consensus on this topic, and rightly so. But there has to be a solution. At what point are full-power stations granted total immunity from interference and what contour will serve as the cut off?”

Observers believe the interference issues could even accelerate in 2017, with the FCC soon to open two windows for AM operators to apply for new FM fill-in translators. The FCC in February also extended the fill-in area in which the 60 dBu service contour of a FM translator can be placed to rebroadcast the AM primary station.

Comment on this or any story to radioworld@nbmedia.com.

## IN CASE YOU MISSED IT

Radio World and its NewsBytes e-newsletter complement one another; the magazine brings you news analysis, features and deep-dive coverage 26 times a year while the daily newsletter provides a more immediate snapshot of one day’s regulatory and technology headlines. To receive the free newsletter, click the **Subscribe** tab at radioworld.com, then **Newsletters**.

Here’s a sampling of what NewsBytes readers learned about in recent weeks:

### ► FCC’s Pai Launching May Media Reg Review

The commissioner offered some details on his major review of broadcast rules and cable and satellite regulations.

### ► Analysis of 2016 National EAS Test Offers Rich Details

Some 20,000 participants took part, but data revealed that a range of operational and technical issues still need to be addressed, the FCC said. Some participants failed to receive or retransmit alerts due to erroneous equipment configuration, equipment readiness and upkeep issues; and participation was low among low-power broadcasters.

### ► “You Are What Drives This Industry Forward”

So said NAB Pilot leader Sam Matheny to engineers during the spring convention.

### ► Blanco-Pi Loses Experimental Licenses

The commission said his experiments in synchronized AM in Puerto Rico have concluded and his original five-year license period is long over.



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The National Radio Systems Committee bestowed service awards to Milford Smith and Stan Salek. In the foreground, from left, are Mike Bergman, Milford Smith, Stan Salek (remoting in via a tablet held by Jeff Detweiler), and David Layer. ▶



Photo by Jim Peck



Photo by Al Powers

Connections make the man, as the folks at SWR can testify. ▶

▶ Audio-Technica's BP40 is a large-diaphragm dynamic broadcast microphone.



Photo by Jim Peck



© NAB

Terry Baun, below left, announced his retirement. An engineering icon in Wisconsin and national broadcasting circles, he most recently worked for the Wisconsin Educational Communications Board, overseeing engineering and operations of the delivery system for Wisconsin Public Radio & Television. He is a former two-term president of the Society of Broadcast Engineers, among numerous other accomplishments. Baun is shown with spouse Linda Baun, who is vice president of Wisconsin Broadcasters Association, and Michelle Vetterkind, its president/CEO. ▼

▶ The connected car is a nexus for the combination of media, entertainment and technology, according to Radio Luncheon keynote speaker Scott Burnell, Ford Motor Co.'s global lead for business development and partner management of the Ford Developer program. Despite an upsurge in streaming among younger consumers, he said, broadcast radio has advantages and opportunities that streaming does not. "Humans want interactions with humans," he said.

▶ Members of Cirque du Soleil show off their stuff.



Photo by Jim Peck



Photo by Jim Peck

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## WORKBENCH

by John Bisset

Read more Workbench articles online at [radioworld.com](http://radioworld.com)

Here's a Workbench suggestion from Wayne Kirkwood for do-it-yourselfers who need a simple ground binding post.

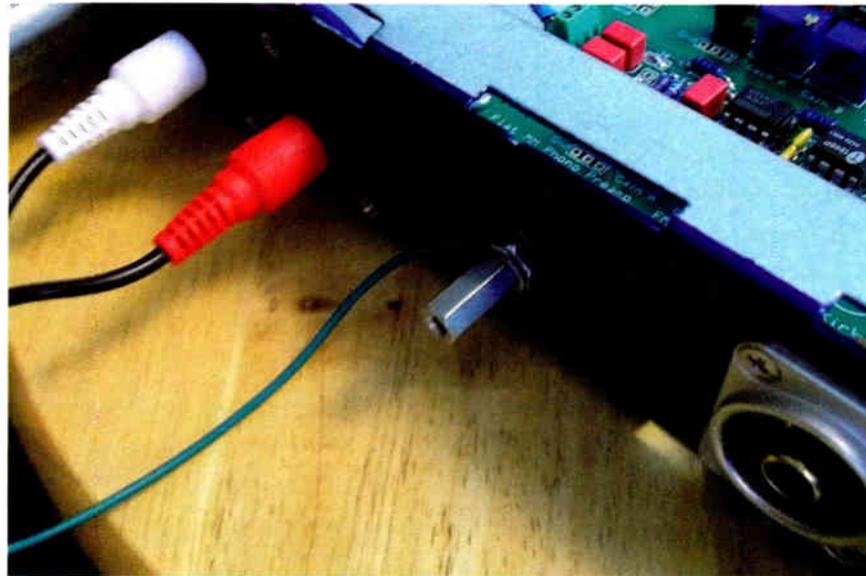
This particular project, a phono pre-amp, was sent to Wayne by a customer for test and calibration.

The original ground connection was a slotted 6-32 screw head, poking out of the back panel and held in place by two jam nuts, one on each side of the rear panel. There was no way to tighten the screw, and the ground connection required an alligator clip.

In order to make it a binding post, Wayne reversed the screw so that the head was on the inside of the chassis, with the stud poking outward. A nut and lock washer attach it to the rear panel. The result is a 6-32-inch threaded stud poking out of the back panel. To make it a binding post, Wayne took a threaded hex 6-32 spacer and screwed it onto the stud. Wayne also recommends at least one flat "thrust" washer between the spacer and panel nut.

This solution is much neater than the original (or a wing nut) and easy to loosen or tighten by hand or using a nut driver. If there is paint on the inside of

the panel, always remove it. This is so the ground connection is bare metal. A lock washer cannot be trusted to provide a good ground on a painted surface.



A threaded hex spacer makes a secure ground binding post.

This trick may be obvious to some readers but it's easy sometimes to overlook simple solutions using new combinations of standard hardware.

Tom Norman does project work, currently in Chicago; he commented about rodent infestation. He's had suc-

cess using steel wool, as we've discussed here, but reminds us to replace the steel wool from time to time. Steel wool becomes "rust wool" in short order, even in arid climates. Consider using copper Chore Boy-brand scrub-

(available at Home Depot).

Tom encountered duct seal years ago when he was putting a new radio transmitter on the air. The phone company delivered their wires to the transmitter building via flexible conduit. Their cable emerged from this conduit, and the conduit was sealed against the cable by stuffing duct seal into the conduit until no more could be inserted. With that in mind, it was interesting to see it used in other places by local phone companies.

Duct seal sheds moisture and, apparently, is not appetizing to rodents. This made Tom wonder if the Chore Boy part of the solution was even needed.

Because duct seal is a putty, there are limits to the kinds of openings that can be sealed with it without providing other kinds of support. It stays pliable, even out in direct sunlight, and its viscosity changes with temperature. Its real advantage is that it can be stuffed into places you might have a hard time reaching by just forcing more of it into the area. Tom has used it to seal moderate-sized openings on vertical surfaces, and painted over it with reasonable results.

Good luck to anyone and everyone who has to deal with rodent problems at a transmitter site. There is no way to kill off all the vermin at a site, but there are ways to minimize their destruction.

Duct seal is available at Home Depot and other big box stores. A 1-pound block costs less than \$25. Check out [www.homedepot.com](http://www.homedepot.com), keyword "duct seal," to find a variety of products from Gardner Bender and Ideal. Tom normally purchases 1-pound blocks because they are manageable for small applications.

Tom also mentions that duct seal could be used in conjunction with wire mesh to manage openings of irregular size or shape, the object being to provide a surface upon which the duct seal can attach.

Steve Keating is with Mission Electronics in Las Vegas. He tell us about a project he built up for a five-tower array several years back. He needed to be in the transmitter building while a technician was in each of the doghouses. They were measuring transmission line impedances, and Steve needed to communicate with them.

A small speaker was not available but a 2-inch driver was, so he used a 4S junction box in each doghouse and a larger enclosure in the building with switches and a power amplifier to form an inexpensive intercom.

This also would work for monitoring on-air reception just about anywhere, if

(continued on page 15)

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**Mike Cooney**



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## PEOPLE NEWS



**Jeff Lyon**

*Cumulus Media*

Appointed vice president/  
market manager for Abilene,  
Texas, group

**James Ruedlinger**

*Electronics Research Inc.*

Rejoined the  
company as senior  
vice president of  
engineering

**Steven Meyers**

*Beasley Media Group Inc.*

Upped to executive vice  
president of digital



**Rob Kaloustian**

*CBS Radio Philadelphia*

Named general sales  
manager WIP(FM),  
WPHT(AM), Phillies  
Radio and the Eagles  
Radio Network



**Jeff Kapugi**

*iHeartMedia*

Chosen as region senior  
vice president of program-  
ming for Washington and  
Baltimore

**Mark Brunner**

*Shure*

Promoted to vice  
president of global  
corporate and gov-  
ernment relations

*SBE*

Elevated to the rank of SBE Fellow:

**Frank Giardina**

**Ted Hand**

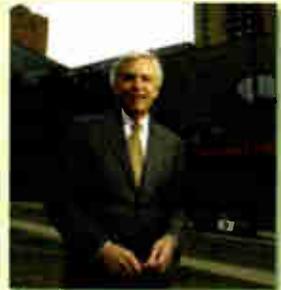
**Robert Hoffman**



**Dan Mansergh**

*Association of Public Radio Engineers*

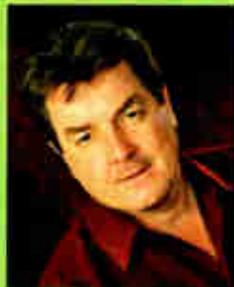
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Achievement Award



**Bill Kling**

*Minnesota Public Radio*

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christened the Kling  
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*Orban Labs*

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**Bradford Caldwell**, Chief Financial Officer, East Arkansas Broadcasters

**Bruce Goldsen**, President and General Manager, Jackson Works Inc.

**Randy Gravley**, President and CEO, Tri State Communications

**Roger Harris**, General Manager, Chickasaw Nation Enterprises

**Ed Henson**, President and Owner, Henson Media, Inc.

**Scott Herman**, COO, CBS Radio

**David Hoxeng**, Owner, WNRP(AM) and WYCT(FM)

**Beth Neuhoff**, President and CEO, Neuhoff Communications

**Dave Santrella**, President of Broadcast Media, Salem Media Group

**Jeffrey Warshaw**, President and CEO, Connoisseur Media LLC

**John Wharff**, President, JAWCO Inc.

**WORKBENCH**

*(continued from page 12)*

fed from a standard radio or tuner with line out and an amplifier mounted inside a handy box.

Nowadays, the size of things has shrunk, and Steve shares a link for a very tiny speaker.

It measures 1.1 by 1.6 inches and is manufactured by Visiton. It's their part number K 28.40-8 micro speaker. A great choice where space is at a premium. The speaker costs about \$6 and will handle 2 watts. Visiton uses a neodymium magnet that allows the speaker to fit almost anywhere: the magnet is the strongest type of permanent magnet commer-

cially available. Because of its size, you can add audio to projects you never thought possible.

Find out more at [www.parts-express.com](http://www.parts-express.com).

*Workbench* — *Radio World's* iconic and most popular column — *relies on your good, practical ideas and those of your colleagues. Send in tips big or small; help your fellow engineers and qualify for SBE recertification credit. Email* [johnphibbsel@gmail.com](mailto:johnphibbsel@gmail.com). *You can even (gasp) fax them to (603) 472-4944. And discover a trove of past tips by clicking on the Columns & Views tab at* [radioworld.com](http://radioworld.com), *then choosing Workbench.*

*John has spent almost five decades in the broadcasting industry and yet he is still learning. He handles West Coast sales for the Telos Alliance; he is SBE-certified and is a past recipient of the SBE's Educator of the Year Award.*

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Photo by Jim Peck

▲ Sierra Automated Systems was founded 30 years ago by Ed Fritz and Al Salci, shown at right in the SAS booth with Shotgun Tom Kelly and Mark Thompson, who helped them celebrate.

Doug Vernier speaks during a session on AM revitalization issues. During the convention, FCC Chairman Pai indicated that the first of two expected windows for AMs to apply for new FM translators would open this summer. That window will be for Class C and D stations. ▶



Photo by Jim Peck



Photo by Jim Peck

◀ Paul Brenner of NextRadio confers with Erica Farber of the Radio Advertising Bureau. NextRadio highlighted the new Dial Report campaign measurement tool, enhancements to the NextRadio app and a free basic version of TagStation.

We can't say it any better than that. ▶



Photo by Jim Peck

It was a party at the WorldCast booth. The company showed, among other things, a new RDS encoder that provides support for existing RDS technology and for the new RDS2 international standard. ▼



Photo by Jim Peck

◀ JK Audio turned 25. Shown are Wayne Reed, Joe Klinger, Linda Klinger and Alberto Colin.



Photo by Jim Peck



# Leave Your Competitors in the Dust

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# What's in Your Studio?

Radio World asked a number of contributors and engineers to provide us with a picture of the microphones they depend on in their daily studio operations.

Los Angeles-based Peter Verhoeven uses a Shure SM7 during his show for Belgium's Qmusic.



CBS Radio's Las Vegas cluster placed their bets on the old standard, the EV RE20.



Courtesy Tracy Teagarden

One for the "Røde," Peter King's Broadcaster at CBS Radio News Orlando.



A pair of Sennheiser MD 421 II mics pull duty in a studio at KLZ in Denver.



Courtesy Amanda Hopp

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Electro-Voice Model 3

Electro-Voice RE20s can be found throughout Liberty University's "The Journey" radio network.

Courtesy Chris Wygal



Courtesy WRPR

Shure KSM32 carries the load at Ramapo College's WRPR in Mahwah, N.J.



Courtesy Curt Yergler

WAWZ believes that the Electro-Voice RE27 goes with everything.



Courtesy Stephen Poole

An Electro-Voice RE20 awaits a DJ at WDJC(FM) in Birmingham, Ala.

**TECHUPDATE**

**NEUMANN'S NEW MONITOR**

Neumann has introduced a new powered studio monitor, the KH 80 DSP.

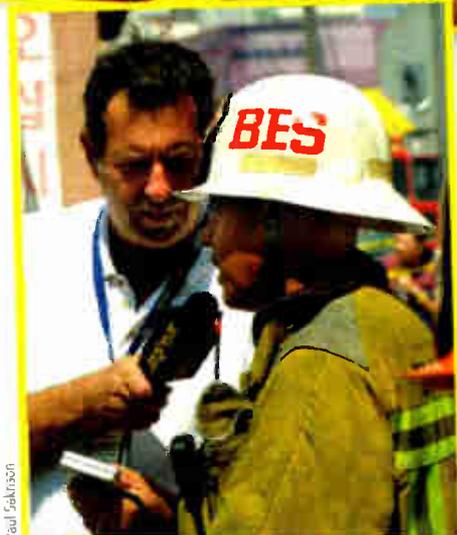
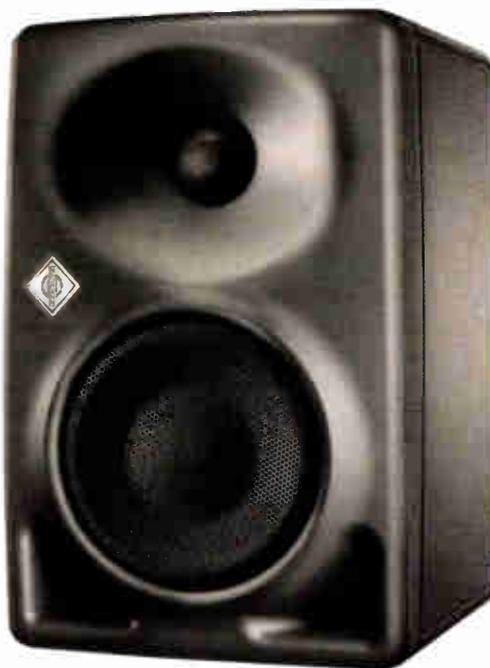
Coming out of its former Klein & Hummel line, the KH 80 DSP is different in that it adds digital signal processing, the company says.

The business end of the two-way KH 80 DSP is a four-inch composite sandwich cone bass driver with Extremely Linear Force Factor LF driver and a one-inch alloy fabric tweeter. An Elliptical Mathematically Modeled Dispersion waveguide helps with wide horizontal and narrow vertical dispersion.

The onboard amplification consists of a 120 W low-frequency driver amplifier and a 70 W high-frequency driver amplifier. Double insulated electronics should prevent ground loops.

The heart of the onboard DSP section is an eight-band parametric which aids in calibrating the monitor's response for the room it is in. Neumann Control software provides control for it and other useful tools such as delays.

For information, contact Neumann USA in Connecticut at (860) 434-9190 or visit [www.neumann.com](http://www.neumann.com).



Courtesy Paul Erickson

Pete Demetriou interviewed Deputy Chief Mario Rueda using a Sennheiser MD 46 in this 2006 Los Angeles Fire Department photo.

Take your pick of an Electro-Voice RE20 or an RE320 at WDPE(LP) in Dover/New Philadelphia, Ohio.



Courtesy Dan Slentz

Beyerdynamic MC 840 at work in London's Capital FM.



Courtesy Gary Kline

A Shure SM58 commands this studio at Denver's KLVZ.



Courtesy Amanda Hoop

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**TECHUPDATES****COUNTRYMAN MAKES THE CONNECTION**

Countryman Associates, known for small lavalier microphones, has now covered most every conceivable connection option for its tiny B6 omnidirectional lav microphone.

According to the company, "New detachable connectors span more than 400 models of equipment from AKG, Shure, Sennheiser, Lectrosonics, Sony, Wisycom, and many additional equipment manufacturers. The connector types include 3.5 mm, Hirose, TA3F, TA4F/Tiny QG, TA5F, LEMO,



and XLR (for use with phantom-powered equipment such as digital recorders and mixing consoles)."

President Chris Countryman said, "Due to its unusually small form-factor, our B6 omnidirectional lavalier has proven to be incredibly versatile. Because of its popularity, we regularly receive requests to make the B6 better able to interface with a wide range of equipment."

In addition, Countryman has upgraded construction for a tougher and more RF-resistant connector, it says. The connectors are available individually.

For information, contact Countryman Associates in California at (650) 364-9988 or visit [www.countryman.com](http://www.countryman.com).

**HENRY MIKE ALERT IS FOR TALLY LIGHT ARMS**

Henry Engineering recently introduced the Mike Alert. It is a tally control interface for use with mic arms that utilize a two-color integrated tally light system, including "m!ka" mic arms made by Yellowtec.

These popular mic arms have two tally lights that are visible to the user.

Three are used for mic audio, and the two remaining wires are used for both the white and red tally lights. The two lights are wired with opposite-polarity, so that reversing the polarity of the control voltage determines which light, white or red, will be on.

Mike Alert provides the power and control circuitry necessary to interface the mic arm to the tally outputs of a console, router or other equipment.

Each Mike Alert unit can control two mic arms. Both the microphone audio and tally circuits are interfaced,



One light is white, the other is red. In many installations, the white light is used to indicate a "ready" condition, e.g., the mic has been assigned to a console channel.

The red light is used conventionally, to indicate on air or that the mic is live.

Mike Alert solves the problems encountered when interfacing the dual-color lights to a broadcast console mic tally output. Because the mic arm cable uses a five-pin XLR connector, it's limited to five conductors.

with automatic polarity control to correctly operate the white and red tally indicators.

Mike Alert is compatible with any console or equipment that provides a GPI contact closure, open collector, logic, or DC voltage for tally light control. It is now in stock at Henry Engineering dealers with a list price of \$250.

For information, contact Henry Engineering in California at (562) 493-3589 or visit [www.henryeng.com](http://www.henryeng.com).

**RAPCO OFFERS BLUETOOTH INTERFACE**

Widget maker RapcoHorizon has a new Blox problem solver, the BTIBlox, a Bluetooth interface in an XLR plug-on package.



The BTIBlox has a male XLR plug on one with a translucent other end covering status LEDs. It can plug into a mixer input to provide a streaming input from a Bluetooth transmitting smart device such as a smartphone or tablet.

It operates under phantom power or an internal rechargeable battery. It follows Bluetooth 4.2 spec and has a line of sight range of 75 feet.

Rapco's Darius Seabaugh said that the spring NAB Show was "a unique opportunity for us to display our BTIBlox to a crowd that might not otherwise consider this product ... This new self-contained device allows users to simplify their audio streaming workflow by eliminating the need for multiple wires to connect to an audio device."

For information, contact RapcoHorizon at (800) 325-0266 or visit [www.rapcohorizon.com](http://www.rapcohorizon.com).

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## MICROTECH GEFELL OUTFITS THE MOBILE REPORTER

Microtech Gefell's SRM 100 is a digital dynamic microphone with omnidirectional polar pattern, designed for use with mobile devices such as smartphones, tablets, etc. The company says the microphone has been engineered for professional applications and has not been compromised even though "it's only for a smartphone."

It is been optimized for speech intelligibility, and the capsule is elastically suspended to minimize handling noise. It should perform well as an interview microphone, allowing for quick interviews, editing and emailing the recording back to base at a moment's notice.

Because the microphone is light and portable, it can be kept handy and deployed quickly; you can be on-air in seconds.

The SRM 100 will be available in the summer and is supplied complete with foam windshield, a cable and a carrying pouch.

For information, contact Microtech Gefell in Germany at +49-36649-882-0 or visit [www.microtechgefell.de](http://www.microtechgefell.de).

## MXL DEBUTS BROADCAST MICROPHONE

MXL, the studio microphone division of Marshall Electronics, is bringing out an always welcomed piece of equipment: a new broadcast microphone.

The BCD-1 is a dynamic cardioid end- or top-address microphone.

It is designed to minimize side noise and has a built-in shock mount and "tuned" grille to eliminate internal reflections. MXL specs the BCD-1 at 40 Hz–15 kHz.

The first version comes in black. Expected price will be \$249.95.

For information, contact MXL Microphones in California at (310) 333-0606 or visit [www.mxlmics.com](http://www.mxlmics.com).



## SHURE CELEBRATES SM58'S 50TH

Shure says that its SM58-50A Limited Edition microphone has the award-winning characteristics and technical specs of the famed SM58, along with a silver finish and printed denotation of the 50th anniversary on the handle.

The SM58-50A marks the first time in 50 years that the company has released a color variation of the SM58.

Highlighting historically-inspired packaging, the model includes a commemorative certificate, photo print, historical user guide and a celebratory sticker. Otherwise, the SM58-50A is the familiar dynamic microphone tailored to deliver warm and clear vocal reproduction under extreme conditions.

Designed for professional vocal use in live performance, sound reinforcement and studio recording, the microphone is constructed with a built-in spherical filter that minimizes wind and pop noise and internal pneumatic shock mount. A unidirectional/cardioid pickup pattern isolates the main sound source while minimizing unwanted background noise.

The SM58-50A special anniversary microphone has a retail price of \$109.

For information, contact Shure at <http://sm58.shure.com/en/>.



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The CAP-DEC1, Gorman-Redlich is a stand-alone CAP-to-EAS converter for use with your existing emergency alerting equipment. This cost-effective device allows broadcasters to easily meet Common Alerting Protocol (CAP) compliance requirements mandated by the FCC without requiring the purchase of an additional encoder/decoder system or other costly equipment. The CAP-DEC1 is CAP 1.2 compliant and requires only one unit of rack space. Trust the experts with over 35+ years experience in the emergency alerting industry to help you meet your broadcasting needs. Visit our website or contact us today for more information about the Gorman-Redlich CAP-DEC1. We continue to support equipment we made 35 years ago.



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- Automatic clock synchronization via NTP servers
- Software can be updated via LAN or USB
- Print alert reports to USB or network printer
- Polling 3 URL's currently with room for future expansion
- FEMA independent lab affirms CAP 1.2 compliance
- Printer no longer required for EAS log

Gorman-Redlich Mfg. Co.  
[www.gorman-redlich.com](http://www.gorman-redlich.com)

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 Phone: 740-593-3150

O.C. White introduced the Mic-Lite LED on-air light, which installs on a microphone arm and plugs directly into a console; it signals red when the mic is live and white on standby. It is compatible with the company's Ultima mic arms, foreground, and can be retrofitted for ProBoom arms. Killian Slattery and Andrew May show off the wares. ▶



Photo by Jim Peck

Lisa Trapani Shumate of Houston Public Media makes a point during the session "Leveraging the Vast Public Media Broadcast System for Public Safety" as Dana Golub of PBS reacts. ▼

DaySequerra and Orban teams celebrate the recent acquisition of the latter by the former. ▼



Photo by Jim Peck



Photo by Al Powers



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Photo by Jim Peck

▲ Talk about your engineering firepower! New and past recipients of NAB's Engineering Achievement Award gathered at the Technology Luncheon. From left: Richard Chernock, Tom King, Leonard Charles, 2017 TV recipient John Lyons, Sterling Davis, 2017 Radio recipient John Kean, Geoff Mendenhall, Merrill Weiss, Ben Dawson, Jay Adrick, Jeff Littlejohn and Glenn Reitmeier.

Photo by Jim Peck



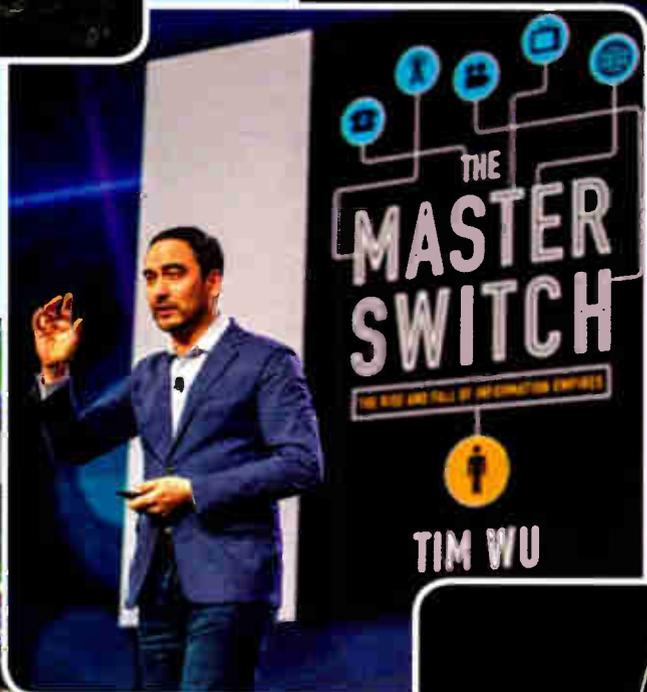
Photo by Al Powers

▲ The NAB Show Radio Luncheon was sponsored by ASCAP.



Photo by Jim Peck

▲ Lawo highlighted a theme of "Broadcast 3.0."



◀ Tim Wu was the featured speaker at the Technology Luncheon. He tweeted on the same day, "Chairman Pai, apropos of nothing, will try to kill Net Neutrality, in a classic example of trying to fix that which is not broken." Wu is credited with coining the term network neutrality.

The PantronX Titus II software-defined radio is seen on display in the Kintronic Labs booth. For RW's recent story on this, see [radioworld.com](http://radioworld.com), search keyword "PantronX."



Photo by Al Powers



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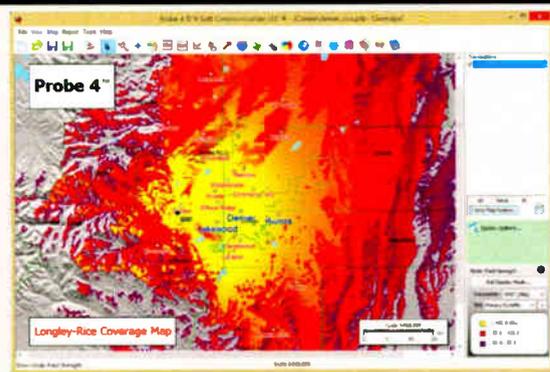
▲ Happy 35th anniversary to Henry Engineering. Hoisting their cupcakes, from left, are friends and colleagues John Casey, Kyle Magrill, Steve Gordon, Jon Shute, Bud Aiello, Henry's Hank Landsberg and Radio World founder Steve Dana.



Photo by Jim Peck

▲ Chuck Kelly of Nautel hosted Jeff Jury of Xperi in a booth event. They're shown with Nautel's HD Multicast+, a combined HD Radio Importer and Exporter. Xperi also highlighted its Connected Radio hybrid radio solution, which pairs broadcast radio with an IP connection in the vehicle, as a "global ecosystem for broadcasters."

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2" plastic "spot" reels 6.5 or 8" diameter, as used for quad video. Wayne, Audio Village, 760-320-0728 or [audiovlg@gte.net](mailto:audiovlg@gte.net).

Equipment Wanted: obsolete, or out of service broadcast and recording gear, amplifiers, processing, radio or mixing consoles, microphones, etc. Large lots preferred. Pickup or shipping can be discussed. 443-854-0725 or [ajkivi@gmail.com](mailto:ajkivi@gmail.com).

I'm looking for San Francisco radio recordings from the 1920's through the 1980's. For example newscast, talk shows, music shows, live band remotes, etc. Stations like KGO, KFRC, KSFO, KTAB, KDIA, KWBR, KSF, KOBY, KCBS, KQW, KRE, KTIM, KYA, etc. I will pay for copies... Feel free to call me at 925-284-5428 or you can email me at [ronwtamm@yahoo.com](mailto:ronwtamm@yahoo.com).

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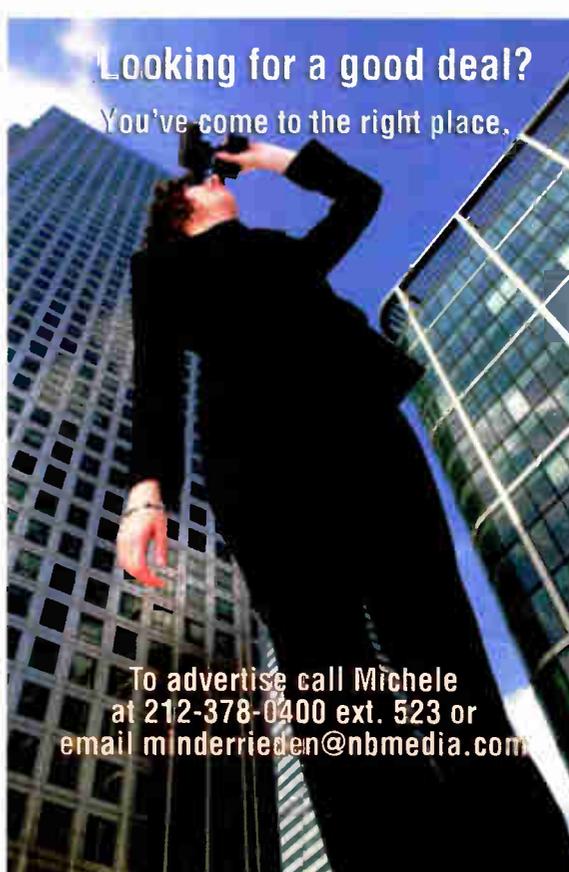
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# Why the Main Studio Rule Must Go

The commission has already eliminated most of the primary justifications for the Main Studio Rule

## COMMENTARY

BY BRAD DEUTSCH

*The author is owner at the law firm Garvey Schubert Barer.*

For more than 50 years, the Federal Communications Commission has required radio and television stations to maintain a “main studio” within or near their communities of license. This requirement may have made sense decades ago, but today it imposes unjustified costs, while doing nothing to ensure the original goal of the law — local content and programming.

That’s why we filed a petition with the FCC a few weeks ago asking the commission to get rid of the Main Studio Rule, and now the FCC chairman himself has announced that he agrees and plans to launch a rulemaking at the commission’s May 18 meeting.

Here are three reasons why the Main Studio Rule must go:

*There will be no impact on broadcasters’ “bedrock” public interest obligations.* Eliminating the Main Studio Rule will not reduce or remove broadcasters’ “bedrock” obligation to serve the needs and interests of their local communities. Instead, the commission must recognize the technological and

economic realities of today’s broadcast marketplace — stations can serve their communities while realizing substantial



Storefront of KCLD(FM)/KNSI(AM) in St. Cloud, Minn.

and necessary cost savings; and that most listeners and viewers contact their local stations by telephone, email or online.

Furthermore, the commission has already eliminated the underlying local program origination requirement and, more recently, has provided that licensees must make their public files available entirely online, thereby further

undermining any rationale for maintaining a local main studio location.

*Getting rid of the Main Studio Rule will help small stations remain competitive.* As the commission acknowledged as far back as 1987, the broadcasting

neling of public access.”

*Modern technology makes the rule obsolete.* Commissioner O’Rielly has pointed out that the justification for the Main Studio Rule has been “significantly weakened” due to the public’s virtually universal choice to contact their local stations via telephone or online. In fact, this change in consumer preference has been recognized by the commission in rulemakings since at least 1987.

The modern reality of, and overwhelming preference for, remote communication will allow stations to continue to be responsive to local interests and concerns — and to do so without the added regulatory cost of maintaining a main studio.

Normal competitive marketplace forces will ensure that stations remain accessible and responsive to their audiences, but will do so through today’s modern communications channels.

As the FCC noted when it moved the public inspection files online, the “evolution of the internet and the spread of broadband infrastructure have transformed the way society accesses information today. It is no longer reasonable to require the public to travel to a station

**This requirement** may have made sense decades ago, but today it imposes unjustified costs, while doing nothing to ensure the original goal of the law.

industry continues to face challenges from dramatic changes, including radical competitive, financial and technological transformations.

The current rule places a significant financial burden on small stations, which must devote scarce resources to maintaining their main studios during business hours and employing full-time managerial and staff personnel. Also, many co-owned stations are unable to realize efficiencies that would come from collocating their operations and offices.

At NAB Show in Las Vegas, Chairman Pai singled out the main studio rule as “outdated” and acknowledged that “technical innovations have rendered local studios unnecessary.” And Commissioner O’Rielly recently commented that eliminating or severely modifying the rule could not only “allow for cost savings that could make a real difference for some stations,” but also could provide stations “a security dividend through more efficient chan-

or headquarters’ office to review the public file and make paper copies when a centralized, online file will permit review with a quick, easy, and almost costless internet search.”

The commission has already eliminated most, if not all, of the primary justifications for the Main Studio Rule — including the program origination requirement, public inspection file location and the local correspondence file rule.

All that remains is an arcane requirement that has come unmoored from its underlying policy rationales, and therefore no longer serves the public interest. When the commission launches its rulemaking proceeding on May 18, every broadcaster should strongly consider filing comments to let the FCC know — loud and clear — that it’s finally time to eliminate the Main Studio Rule.

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

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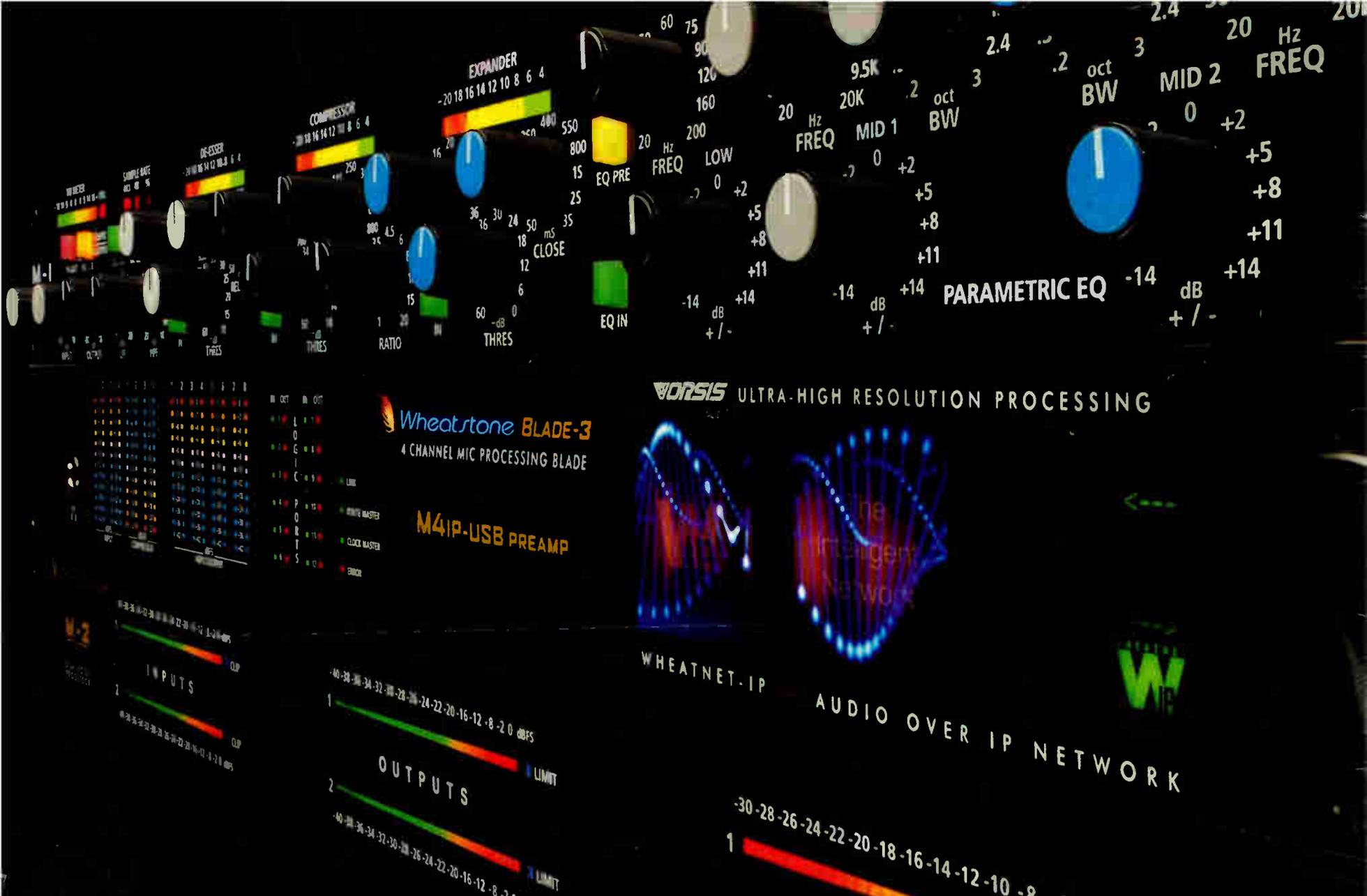
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