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## Radio Warms to Podcast Phenomenon

Industry expanding into digital marketplace with on-demand, time-shifted content

BY RANDY J. STINE

The convenience of listening to podcast talk programming anytime and almost anywhere is drawing in a bigger audience and pushing more radio broadcasters to launch such initiatives.

The burgeoning digital podcast space saw "remarkable" growth in 2014, with the number of services expanding and time-spent-listening growing, according to studies conducted by Edison Research.

Industry analysts said radio broadcasters are noticing and are expanding bullishly into this digital marketplace, despite struggling with sponsorship metrics that they hope will make it a profitable endeavor.

The fall 2014 "Share of the Ear" study from Edison Research provides a glimpse of the steady growth of podcasting and the amount of time podcast devotees give to the auditory medium.

Podcast listeners spend an average of six hours and eight minutes each day consuming audio of some kind, according to Edison. Americans listen to over 21 million hours of podcast audio every

day, according to the report.

Podcasts, downloadable audio files that can be consumed on-demand by a user, now make up 4 percent of audio consumption on mobile devices, according to the Edison study.

Analysts say the podcasting space is filled with a range of podcasters, from novices — there is a "Podcasting for Dummies" reference book — who record in home studios, to some of the world's largest media corporations. The equipment essentials needed for podcasting are rather minimal, according to industry analysts, making it an affordable media

(continued on page 6)



Learn more about this trend in our new ebook: [www.radioworld.com/ebooks](http://www.radioworld.com/ebooks)

## Dashboard Roles of Google, Apple Discussed

Nielsen digital audio measurement also among big topics this spring

BY LESLIE STIMSON

about HD Radio is on page 10.

Radio's place in the connected car and in cellphones — including Apple devices — was big news at the spring NAB Show. So too were NextRadio and Nielsen's plans to launch a digital audio measurement service. What follows concerns these topics. News

### AM/FM STILL LEADS IN CONNECTED CAR

"Radio needs to be wherever people are consuming content," said

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Radio World Founded by Stevan B. Dana

Radio World (ISSN: 0274-8541) is published bi-weekly with additional issues in February, April, June, August, October and December by NewBay Media, LLC, 28 East 28th Street, 12th Floor, New York, NY 10016. Phone: (703) 852-4600, Fax: (703) 852-4582. Periodicals postage rates are paid at New York, NY 10079 and additional mailing offices. POSTMASTER: Send address changes to Radio World, P.O. Box 282, Lowell, MA 01853.

For custom reprints & eprints please contact our reprints coordinator at Wright's Media: 877-652-5295 or NewBay@wrightsmedia.com

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Printed in the USA



## DASHBOARD

(continued from page 1)

Roger Lanctot, associate director global automotive for Strategy Analytics, in an interview, whether it means streaming, broadcast or pre-recorded material.

"Whatever it is, radio's got to be in the game — now."

That being said, he continued, "The experience in the car is getting increasingly confusing" with a growing variety of options; yet consumers "keep coming back to radio" in the vehicle.

He presented data from a survey at an NAB Show session. Nearly eight in 10 respondents — 79 percent — described radio as a "must have" in the car. Seventeen percent said they were "interested" in having the feature, while 4 percent were not interested in having radio in the car.

Interest in CD players was second (58 percent), smartphone apps were in the middle at 37 percent, while satellite radio was 28 percent, Internet radio 17 percent and HD Radio was 12 percent. All figures in the study are for the U.S.

Those who listen to AM/FM daily also do so with other sources as well; for example, 84 percent of those who listen to HD Radio also listen to AM/FM. Internet radio is "not yet" poaching listening from broadcast radio, according to findings; 76 percent who listen to Internet radio also listen to AM/FM daily.

While CDs came in second, interest in them is falling off rapidly in favor of iPods or music played on the driver's smartphone, according to the data. RW reported from the winter CES show that the number of CD receivers shipping in new cars or as aftermarket offerings continues to decline, mirroring younger consumer's preference for music downloads.

Access to smartphone apps through the vehicle human machine interface is becoming increasingly important. In fact, 37 percent of respondents consider smartphone apps a "must have" feature for their next car.

Lanctot said the survey reveals that "radio is still the core, the backbone, the thing that people need to find out what's going on around them locally," like news, weather, traffic and sports.

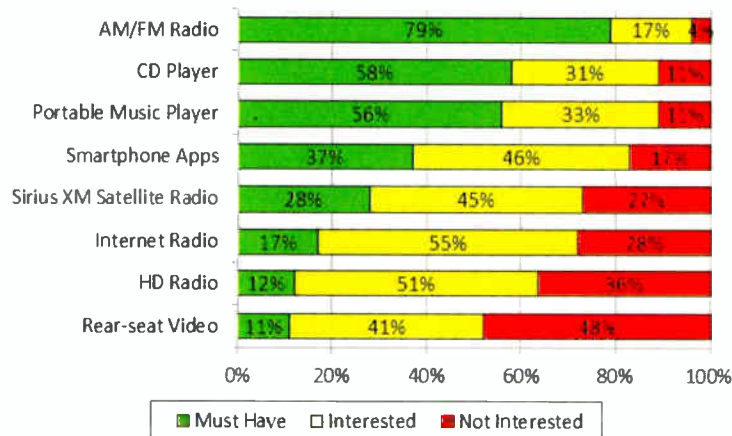
## APPLE, GOOGLE NOT TAKING OVER DASHBOARD

While many automakers and aftermarket manufacturers are accommodating Apple CarPlay and Android Auto infotainment system controls, the two tech companies won't dominate the dashboard, according to Lanctot. "They will not take over listening and content consumption in the car. They will play a role," he told Radio World.

That's because many automakers favor their own proprietary infotainment systems, like Chevy MyLink or Cadillac-Cue. Automakers want to provide "the user experience that is infused and enriched with contextual information about the consumer and the car," said Lanctot. An automaker provides tools to allow the customer to "manage the experience" and lets the car manufacturer "control the experience so that it serves their purposes, not Apple and Google's purposes."

He also predicted that tuner knobs will go away and be replaced by touchscreens.

## Interest in AM/FM Radio



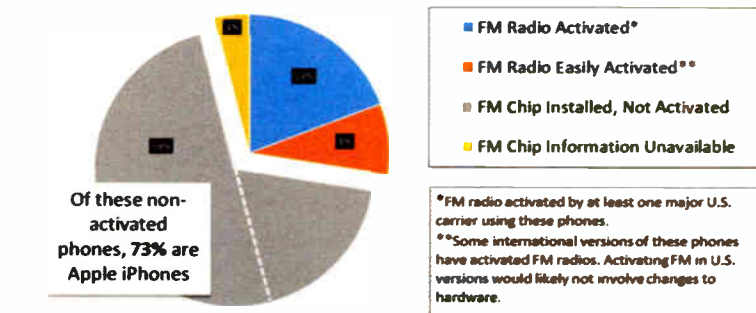
Nearly eight in 10 survey respondents described radio as a "must have" in the car, according to Strategy Analytics data.

## NAB: 20% OF U.S. SMARTPHONES ARE FM-ENABLED

While the number of smartphones available with FM reception capability in the U.S. is growing, the radio industry has a ways to go on this issue. Proponents believe radio must be on smartphones to remain relevant because of the ubiquity of those devices.

Close to 20 percent of smartphones sold in the U.S., as of the fourth quarter of 2014, were fully FM-enabled, according to NAB Senior Director New Media Technologies Skip Pizzi during a Broadcast Engineering Conference session. About 8 million devices with enabled FM chips were sold per quarter

## FM Radio Capability in Top-selling U.S. Smartphones (% of total sold), CY 2014



A graphic tweeted by NAB Labs. (The data points are updated and thus may differ slightly from those discussed in the accompanying text.)

last year, he said.

Around 67 percent, or two out of three, have an installed FM chip that is not enabled. Eight percent had the chip enabled in countries other than the U.S.; chip information was not available for the remaining 6 percent. The numbers are based on preliminary teardown data from NAB Labs and ABI Research.

Seventy-five percent of smartphones with inactive FM functionality are Apple iPhones, according to Pizzi.

Meanwhile, with funding from various broadcasters, the

(continued on page 5)

# Are You Bullish on Podcasts?

This content distribution platform is growing in popularity among consumers — and broadcasters

Radio is centered at the intersection of media and technology. As such, our industry is influenced by a variety of delivery and consumption trends that have a bearing on daily workflows and long-term planning.

Hardware designs, HD Radio, AM revitalization, programming fashions and more are familiar topics within Radio World's traditional purview. But as more broadcasters turn to burgeoning sectors of the digital marketplace, managers and engineers must consider the ramifications of those trends as well.

For example, podcasting may be more than a decade old, but in 2015 it is one of the scorching platforms in media. From the perspective of audio content creators/distributors (read: radio!), the interest is due to its low cost of entry, the participation of several big corporate players, the very visible success of "Serial" and the changing nature of consumer audio habits.

In an article on page 1 of this issue, we examine why the industry is bullish on this distribution method as well as

who have already thrown their hat in the ring.

Then we go into more depth about this hot topic in Radio World's newest free ebook, "Podcasting Comes Alive." This digital-only special issue offers voices from various aspects of podcasting:

- Ken Deutsch talks with Andy Bowers, chief content officer for Panoply at the Slate group, about its podcast offerings.
- Fred Jacobs interviews Norm Pattiz about his startup Podcast One.
- Tom Vernon reports on the goals of Play.it, the on-demand initiative from CBS Local Digital Media.
- Mark Phillips tells us about his audio work, scoring and mixing the first season of "Serial."
- And Tom Webster provides a thoughtful commentary on how media/radio companies can reach millennials more effectively with these audio offerings.

Not everyone is bullish on pod-

casts, of course. But the past year has proven that radio cannot ignore podcasts because of the competition — and opportunity — they represent.

**FROM THE EDITOR**

Paul McLane



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Photo by Jim Peck

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**DASHBOARD***(continued from page 3)*

Emmis-owned NextRadio industry initiative is paying Sprint \$15 million a year for three years to embed the NextRadio app in at least 30 million devices. Sprint has enabled FM on 38 device models to date. Emmis developed the app at the behest of NAB Labs.

"We need other carriers [as well as] Apple," to put FM capability in smartphones, Pizzi said. He noted that in most cases, if a phone doesn't come with FM capability enabled, the user can't do anything about it. The exception is the HTC One M8 from Verizon; consumers can download the NextRadio app to get FM on their phone with this model.

He cited other benefits of activating chips. FM listening uses far less battery life than streaming; it has no impact on data use, and it provides emergency alerts.

We've reported that NAB encounters pushback from carriers, who want customers to pay to stream audio. Hence, FM tends to be enabled on lower-end smartphones sold overseas to areas with limited streaming options.

**WHAT ABOUT APPLE PHONES?**

The Apple iPhone is a special case, Pizzi said. Whereas a number of phones do not have FM functionality enabled as a choice of the wireless carrier, the iPhone does not offer this functionality globally, per a decision by the manufacturer. NAB Labs' teardown analysis found that all iPhones since the 3GS use a connectivity chip that includes FM

receiver capability but FM function is not enabled in the hardware.

Apple has enabled FM on its iPod Nano to take advantage of HD Radio iTunes Tagging.

Asked about Apple's reluctance to embrace FM again, NextRadio President Paul Brenner said during a different session the tech company seems to view radio as a "very legacy, non-sexy medium."

who supported the concept of activation of FM on handsets, without mentioning the word "mandate." FEMA Assistant Administrator of the National Continuity Program Damon Penn reiterated the agency's support for FM-enabled cell-phones, saying the phone you're holding could be an "extremely valuable" tool during a disaster.

Roger Lanctot, associate director,

**The experience in the car is getting increasingly confusing.**

— Roger Lanctot, Strategy Analytics

Like other manufacturers and carriers, Apple worries whether the radio industry can unite and publicize the FM chip and NextRadio app, Brenner said. Radio needs "to walk in with a wheelbarrow full of innovation, and we bring a pail. ... We need to make them feel like we're not riding their back" to get that innovation. "It's on us, broadcasters, to make this happen."

He said talks with Apple and with other carriers besides Sprint are ongoing.

**NEXTRADIO MAKES RADIO SEARCHABLE**

The NextRadio app drew support from several speakers.

FM access in smartphones during emergencies struck a chord with FCC Commissioner Jessica Rosenworcel,

Global Automotive, Strategy Analytics, described the concept as a "game-changer" because the app enables "searchability."

"So now you have the ability to see what's playing on another station" in the market by looking at the album art or other metadata "without actually going to that station," according to Lanctot. Or the images might convince a listener to listen to the other station "as opposed to repeatedly hitting the 'seek' button," he said.

The average length of time someone listens to a station through NextRadio is now about 18 minutes, rising to 21 minutes on weekdays. People normally listen to more than one station.

NextRadio is currently on some 2.5 million smartphones. Emmis Chairman, President and CEO Jeff Smulyan reiterated to Wall Street analysts shortly

*(continued on page 6)*

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## PODCASTING

(continued from page 1)

outlet to pursue. A microphone, small mixer board, some sort of audio recording software and a laptop with Internet connection are the limited technical necessities.

Analysts point to the growth of PodcastOne, an ad-supported podcasts provider, as an example of why broadcasters now view the podcast niche as worth pursuing. PodcastOne hosts approximately 200 podcasts, including programs from talkers Adam Carolla, Dennis Miller and Larry King.

Podcast consumption is being driven by the convenience of on-demand and the desire for spoken word audio, said industry analysts.



Larry Rosin

makes sense. Podcasting is easily the most talked about part of audio at the moment and is likely to be at the forefront through 2015."

### PODCAST HUB

Meanwhile, NPR is making its digital podcast hub easier to use.

Its podcast directory ([www.npr.org/podcasts](http://www.npr.org/podcasts)) offers the ability to browse the catalogue by topic and discover similar podcasts within each podcast page. The upgrades also make it easier for listeners to use apps like Stitcher to listen to podcasts.

The medium has grown dramatically for the broadcaster, according to NPR, from 30 million downloaded NPR pod-

NPR's podcast directory has become a primary destination for people looking to discover podcasting and new programming, Nuzem said.

Many of the same sponsors that underwrite NPR's on-air programming have migrated to its digital platform. "Podcasting has developed a reputation as being a very effective means to reach an audience. We are seeing a lot of interest from sponsors. If we build an audience around the podcast directory, underwriters will come," Nuzem said.

NPR isn't driving listeners from radio to podcasting, according to Nuzem, who instead believes its digital properties are a parallel universe in which to grow NPR content.

**Podcasting has developed a reputation as being a very effective means to reach an audience.**

— Eric Nuzem, NPR

## PODCASTONE

"There has always been a lot of appeal for quality speech-based audio content. The problem is that it didn't always fit in with the modality of radio. Radio isn't really appointment listening," said Larry Rosin, executive vice president at Edison Research.

"Podcasting unleashes that problem. The on-demand capability of podcasting is the key component if its growth."

As part of its Infinite Dial study, Edison Research and Triton Digital conclude that podcasting is becoming increasingly mainstream. Nearly 90 million Americans, or about a third of the country, have listened to a podcast at least once. Monthly audio podcast consumption grew from some 39 million monthly users in 2014 to about 46 million in 2015.

It's "not a niche medium," said Edison Research Vice President of Strategy and Marketing Tom Webster, who adds that these affluent, well-educated listeners are increasingly harder to reach by advertisers because they do so much podcast listening. This "means podcasts will become more attractive to agencies and brands," Webster said during a webinar.

### AT THE FOREFRONT?

Rosin said the popularity of public radio's "Serial" is driving some growth — the program from the creators of "This American Life" and WBEZ(FM) Chicago, was the first podcast to win a George Foster Peabody Award — but overall interest in talk programming, he said, is also a big factor. And radio

broadcasters have a lot of that kind of content.

"The sheer density of podcast material broadcasters have available is formidable. I don't believe podcasting is disruptive to radio at all. Smart broadcast-

ers are utilizing their content to extend their brands."

Specifically, National Public Radio has done a good job advancing its podcasting presence and building-in listener loyalty, Rosin said. "It's not an exaggeration to say that NPR has done more [to promote podcasting] than all the commercial broadcasters combined," he said.

"Commercial radio has been slow and rather limited in their usage of podcasting and promotion of podcasting. The industry really hasn't been a major player in the space," said Rosin.

"I believe commercial broadcasters now see a revenue model they think

## DASHBOARD

(continued from page 5)

after the show that the figure will increase to 300 million, without specifying when.

### NIelsen PREPS DIGITAL AUDIENCE MEASUREMENT

Nielsen intends to launch a streaming audio measurement service "to measure the growing amount of activity on your stations" and "to make sure we measure the totality of your listening experience," said Nielsen SVP of Digital Jeff Wender.

The product will track over-the-air streaming audio, on-demand audio, podcasting and other forms of digital audio content like text or video.

"We've been asked how we would" measure all of a station's digital content, he said, adding that the service won't

casts in October 2013 to an average of 80 million downloads per month as of mid-May 2015.

NPR is ramping up plans to launch more podcasts on its digital podcast portal. The network's "Invisibilia" podcast, which launched in January 2015, ranked near the top of the iTunes listings of its top podcasts during May.

"Our philosophy is to make sure we have content wherever our listeners want it," said Eric Nuzem, NPR vice president of programming. "Whether that is through an app on their mobile phone, the work or home PC or FM radio, in real time or on-demand, we want to be where people want to find us. Podcasting is at the center of that."

use diaries or its Portable People Meter.

The audience research firm plans to use a Nielsen software development kit that the company uses now to measure online video consumption. Customers would place the Nielsen SDK measurement software into applications that stream digital audio such as the media player of their streaming app or web browser; the goal is to measure listening "as close to the consumer as possible," said Wender.

The Nielsen digital audio report would include four metrics: reach, including number of listeners, sessions or quarter-hours; demographics, including gender and age by daypart; duration, including time spent listening; and location, by Metro or DMA.

Discussing a smartphone displaying an ESPN Radio app as an example, Wender said when a listener presses the button for "98.7 MHz" and streams that audio, with this methodology, Nielsen captures the station ID, listening duration, a time stamp and an advertiser identifier.

Nielsen audio clients are integrating, certifying and receiving preview data. The system is Media Ratings Council-accredited and "the official launch is coming soon," he said.

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## PODCASTING

(continued from page 6)

engagement for NPR Digital Media. Podcast files are encoded and stored as audio assets within its content management system, according to Cooper.

"The system pushes audio to NPR's content delivery network and updates all necessary feeds, such as a podcast RSS feed. When a listener downloads a podcast episode, the listener receives the audio from the CDN, optimizing delivery and saving us significant serving costs," Cooper said.

Metadata — like episode title and images — is paired with audio that are useful to podcast distributors like iTunes and Stitcher, according to NPR.

### CBS RADIO'S PLAY.IT

Commercial radio is getting into podcasting, too.

Analysts said "time-shifted audio" is most commercial radio broadcasters' idea of podcasting. "Most of it is archival of on-demand content," they said. For example, many major broadcasters make podcasts of morning show highlights from its stations available for download.

CBS Radio and CBS Local Digital Media launched a podcast network called Play.it in January. The initiative brings together exclusive programming as well as content from CBS Radio shows, according to the broadcaster.

Play.it is a unified network that con-

solidates multiple sites and services, said Ezra Kucharz, president of CBS Local Digital. "We think on-demand audio is an important part of the radio ecosystem, and specifically the on-demand space for spoken word."

Play.it, which allows for listeners to stream or download content, is advertiser-supported and uses ad insertion technology, said Kucharz, so that advertisers can deliver targeted messages to specific fans of a particular show or across the network.

"We designed a robust advertising

# play.it

program that is completely measurable," Kucharz said.

CBS, which will consider a subscription podcast service in the future, took the simplistic approach when designing the interface for Play.it, Kucharz said, meaning any IP-based browser can be sued to access materials.

"Smart phone, tablet, laptop, PC ... we deliberately took the approach of ubiquity. It has an embeddable player with the ability to embed clips and the podcast into Twitter," Kucharz said.

Kucharz said diversity of content will be critical to the success of Play.it, which eventually will include archived CBS Radio programming from its radio stations along with original content. The podcast network also includes

other major brands, personalities and publishers.

CBS Radio engineers designed and built out a technological platform with infrastructure that archives and deploys material through Play.it, Kucharz said.

### LITTLE ENGINE

Whether podcasts are generating income yet is difficult to ascertain, according to analysts. For instance, the BIA/Kelsey Local Media 2015 forecast does not include podcasting data.

"I am beginning to wonder if we should include it. The challenge would be how stations allocate revenue to those podcasts, i.e., if a spot runs over-the-air first, does all of that revenue get ascribed to over-the-air broadcast," said Dr. Mark Fratrick, senior vice president and chief economist for BIA/Kelsey.

Corey Elliot, director of research at Borrell Associates, a research and consulting firm that tracks local advertising spending, said advertisers are beginning to take notice of podcast opportunities.

"Podcasting is like the 'little engine that could' of the digital audio space. It's a fascinating little niche of the digital space," said Elliot. "It's a relatively new space. Podcasting came around about 2005, and just plodded along, but now it is maturing a bit and radio broadcasters are noticing."

Podcasting, which doesn't have to abide by FCC rules for obscene language, is one-on-one listening, according to Elliot, so it "certainly isn't about scale." There is "limited monetization of podcasting by the major broadcast companies" to this point, he said.



Corey Elliot

"You can sell podcast ads, but it is really pennies to the dollar of what you can charge on-air. Is a company like CBS Radio interested in that?" he said. "But the attractiveness of podcasting [to some advertisers] is the ability to target certain types of listeners who are very engaged."

The "golden nugget" for podcasters is connected cars with their advanced infotainment systems, which will present these programmers even more opportunities to reach their audience, Elliot said.

For an in-depth discussion about trends and personalities of podcasting, read the new Radio World eBook "Podcasting Comes Alive" at radioworld.com/ebooks.

## NEWSROUNDUP

**FIELD AGENTS:** SBE members are concerned about the FCC's plan to restructure its Enforcement Bureau field offices. They want the agency to reconsider and give industry stakeholders a chance to provide input. In a letter to Chairman Tom Wheeler and copied to the other commissioners and House Communications and Technology Subcommittee Chairman Rep. Greg Walden (R-Ore.), SBE President Joe Snelson called the planned cuts of the field offices and agents "draconian." Snelson wrote that the agency can't prevent interference between stations and other spectrum users without an "active, visible commission presence." The SBE believes field offices should target "spectrum polluters, such as power utilities with noisy power lines, unauthorized RF lighting devices (most especially RF lighting ballasts that preclude AM broadcast reception throughout entire communities at once) and pirate broadcasting."

**CES:** The Consumer Electronics Association will cap attendance at the 2016 CES convention. It says turnout has grown so much the association is worried about exceeding capacity. Veris Consulting pegged attendance for the show last January at 176,676,

according to the association. When registration opens in July for CES2016, "enhanced credentialing procedures" will be in place to keep attendance at close to 2015 levels, according to CEA.

**PANDORA:** The FCC approved a waiver so that Pandora Media can exceed the 25 percent cap on foreign media ownership. The action clears the way for the Internet audio company to purchase KXMZ(FM), Rapid City, S.D. for \$600,000 from Connoisseur Media. Pandora has been operating the station under a local marketing agreement since 2013. The move was somewhat expected; Chairman Tom Wheeler had said he's in favor of loosening foreign ownership limits, potentially increasing investment in U.S. broadcast companies and vice-versa. Pandora seeks to become a broadcast station owner in order to reduce its streaming royalty rates. ASCAP objected to the deal, and the companies are involved in litigation. NAB didn't take a position on the merits of Pandora's petition but urged the commission to begin a rulemaking or otherwise relax the "outdated" standard for showing compliance with the foreign media ownership limits.

**RAB:** John Potter, senior vice president of professional development for the Radio Advertising

Bureau for 15 years, is retiring effective June 26. He created and developed the curriculum for RAB's radio sales and digital training and believes he's trained some 20,000 salespeople. Prior to RAB, he held a range of positions, from account executive to market manager, for various broadcasters including Great Trails Broadcasting, North American Broadcasting, Taft Broadcasting, Great American Broadcasting, Citicasters, Jacor, Clear Channel and Cumulus.

**FACEBOOK:** Former FCC Chairman Kevin Martin left Squire Patton Boggs to join Facebook's policy team. Martin was a commissioner from 2001 and 2009, and chairman from 2005 to 2009 under former President George W. Bush. Martin has been a consultant to Facebook for two years; the company has now hired him full-time as vice president of mobile and global access policy.





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# What Is That Odd Crackling Noise?

The problem shut down Ron Wilken's transmitter; here's how he solved it

## WORKBENCH

by John Bisset

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

**R**on Wilken, CET, is owner/operator of RGW Enterprises, Technical Solutions in Ontario. A few years ago, working as an engineer at CFCO(AM) in Chatham, Ontario, he encountered a fault on the main transmitter, a Continental 613 working at 10 kW on 630 kHz. The transmitter had shut down, and Ron transferred to the backup.

Outwardly all seemed to be in order, but when Ron turned the transmitter on into the dummy load, the output current went crazy. Ron could hear something "crackling," and with that, he shut the transmitter down. He opened the transmitter but could find no signs of burning or arcing anywhere. Ron "jimmied" the interlocks, and while someone else turned the transmitter on, he observed the back of the cabinet. With his hands in his pockets and standing well out of range, Ron could still hear the crackling, but saw nothing.

Standing behind the transmitter gave yet another clue. The sound was coming from above the transmitter.

Resetting the interlocks and closing the doors, Ron retrieved the wooden stepladder, and, having someone turn

the transmitter on, he ascended the ladder at the rear of the transmitter; there he found the problem.

The ventilation ducts in the building are wrapped in an insulation material that has an aluminum covering. The seams of the joints are also taped with adhesive aluminum tape. Over the years, the adhesive had dried out and pieces of this aluminum tape had fallen onto the top of the transmitter. One of the pieces had fallen across the open RF output connection and was shorting the

output to ground, as seen in Fig. 1.

Ron shut the transmitter down, and went back to town to retrieve a camera (this was before he had a digital camera or smartphone with a camera). Ron and his team came back to take pictures of a fault, which no one would have believed without this evidence.

Fig. 2 shows another view of the burned tape. Removing the tape and cleaning up the residue solved the problem.

Most modern transmitters have an RF connector termination, not open



Fig. 1: Insulating foil tape fell down and shorted the transmitter output.



Fig. 2: Another view of how the foil damaged the RF output.

terminals, in order to avoid this kind of problem.

Nonetheless, Ron's experience demonstrates the importance of routinely checking *all* components at your transmitter site.

**L**ike many readers, Lyle Wood was struck by our old-time studio image in the Feb. 1 issue, shared by Bruce Roberts. Lyle says he can imagine a young country singer visiting that radio station to, shall we say, "encourage" the jock to play his record.

He also shared this anecdote.

For 30 years, Lyle did a three-man morning show by himself, playing three parts. He used eight cart machines, four turntables and a cassette recorder on which he recorded the other two characters during records and spots — all in a day before computers.

Since there was no automation, while Lyle, in character, was recording telephone calls on audition during a break, he was firing off the carts that made up the break.

Some of Lyle's material came from "Jock's Jokes" but most of his content was off the top of his head. He was writing and performing in real time.

Anyone who has done air work can appreciate Lyle's biggest sense of accomplishment: He would attend remotes and personal appearances, only to hear from fans who were genuinely ticked off because the other two members of the morning show hadn't shown up!

Lyle Wood is a principal with Broadcast Producers, a division of Hold On America.

(continued on page 14)



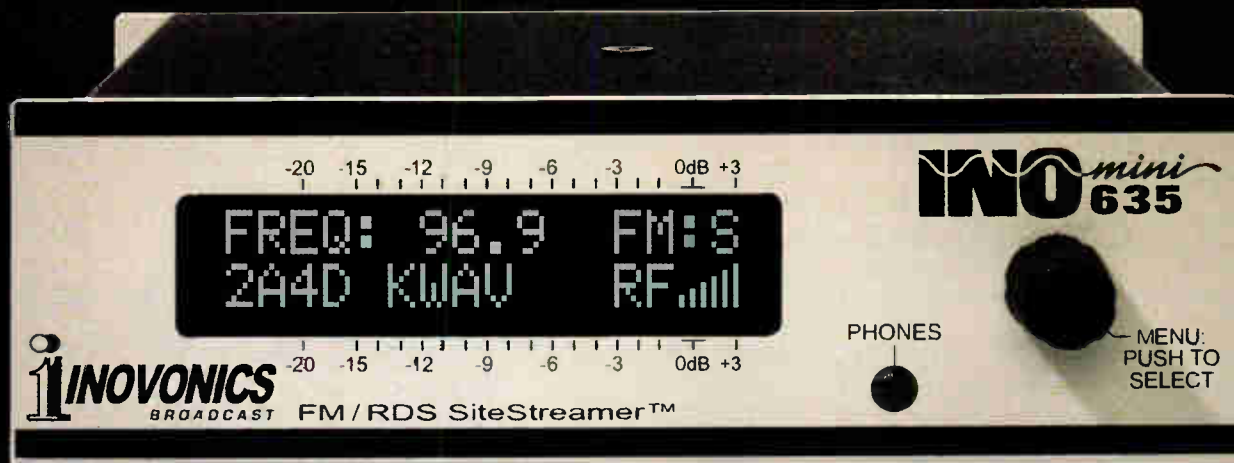
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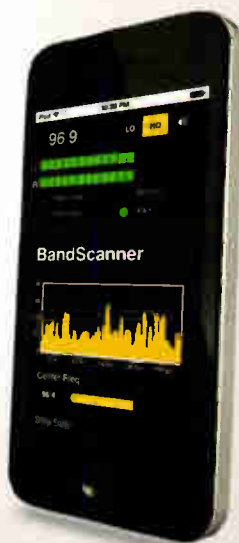


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# The End Is Not Near ... But the Battle Continues

Jacobs Media's Techsurvey11 has some good news for radio, as well as a challenge

## LISTENING TRENDS

BY TOM VERNON

New media advocates like to proclaim that the end is near for traditional radio. But recent research shows that 92 percent of those surveyed listen to radio for an hour or more every day. The recent release of Jacobs Media's Techsurvey11 has good news for radio, even as the number and size of radio's competitors are increasing.

### METHODOLOGY

TS 11 includes two "pyramids" that track the ways in which consumers are using their new media entertainment and information options. The traditional Media Usage Pyramid consists of gadgets such as smartphones and smart TVs, along with big media activity, including TV-viewing and radio-listening, as well as key activities (social media, audio- and video-streaming).

New to this year's Techsurvey11 is a Brand/Platform pyramid, which provides broadcasters with a visual look at

the specific channels their audiences are using regularly, ranging from SiriusXM to Pandora to YouTube to Twitter.

The Web-based survey polled some 41,000 respondents spanning four generations. They comprise listeners from 220 stations in the United States and Canada, representing 13 radio formats. Some of the results gave numbers and structure to well-known trends, but there were a few surprises.

Techsurvey11 suggests that beyond playing the hits and personality, radio provides many strong emotional benefits to its listeners, including local information, companionship, mood boosts and an escape from life's pressures. "And localism really matters," said President Fred Jacobs. "Eighty-one percent of respondents agree or strongly agree that one of radio's primary advantages is its local feel."

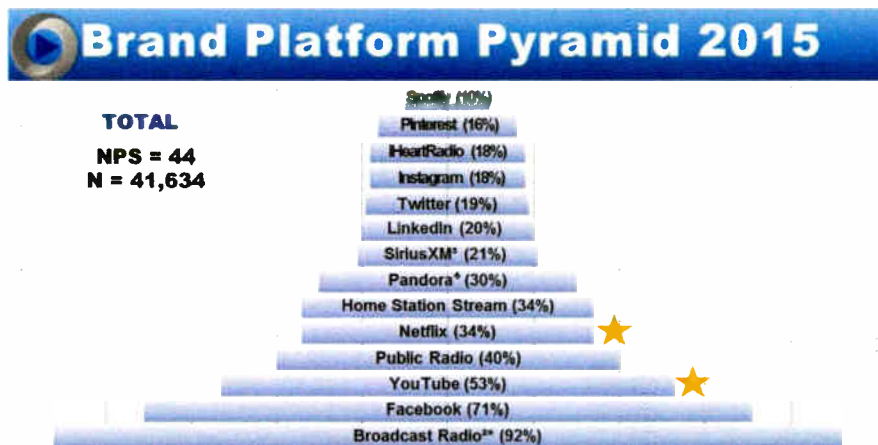
Use of smartphones continues to rise, with ownership topping 75 percent. One third of those owners admit to being addicted to the devices. The bad news for radio is that only a quarter of respondents know about the FM chip included in smartphones. If activated, it would enable consumers to listen to local FM stations free of charge. And nearly six

in 10 say an FM radio smartphone chip would lead to a little/lot more listening.

Pandora remains the dominant smartphone app among those who download radio applications on their smartphones

and that it's boring.

When it comes to wake up calls, radio is losing ground. Just as many people awaken to a mobile phone as they do to a clock radio. These results



All based on weekly use unless otherwise noted 1+ hour per day<sup>1</sup> Paid & trial users<sup>2</sup> Excluding Canada<sup>3</sup> Any Platform/Device<sup>4</sup>

**Despite the competition from new media, radio remains a strong choice for most listeners.**

and tablets, and nearly half of streaming listeners choose it at least weekly. But complaints about a lack of song skips and annoying commercials continue to grow. Other cited disadvantages include no local information, too predictable

track with reports of slumping sales figures for clock radios. Not surprisingly, there is a breakdown by age; waking up to a mobile phone is the preferred option for Millennials.

The car continues to be an important

## WORKBENCH

(continued from page 12)

**M**ark Voris, CBRE, is chief engineer for Spirit Catholic Radio Network. He often has great tips to share with Workbench readers.

For working on equipment, Mark wanted to protect both his gear and the top of his workbench. He found an easy (and cost-effective) solution by repurposing old mouse pads.

We all have these lying around. The rubber cushioning protects the equipment, and the rubber keeps the gear from slipping. Placing the cloth-side down on the workbench top also protects the surface.

Keep your equipment in pristine condition using Mark's idea.

*Contribute to Workbench. You'll help your fellow engineers and qualify for SBE recertification credit. Send Workbench tips to johnpbisset@gmail.com. Fax to (603) 472-4944.*

*Author John Bisset has spent 45 years in the broadcasting industry and is still learning. He handles West Coast sales for the Telos Alliance. He is SBE certified and a past recipient of the SBE's Educator of the Year Award.*



**Fig. 3:** Place the mouse pad rubber side down, to keep equipment from slipping.



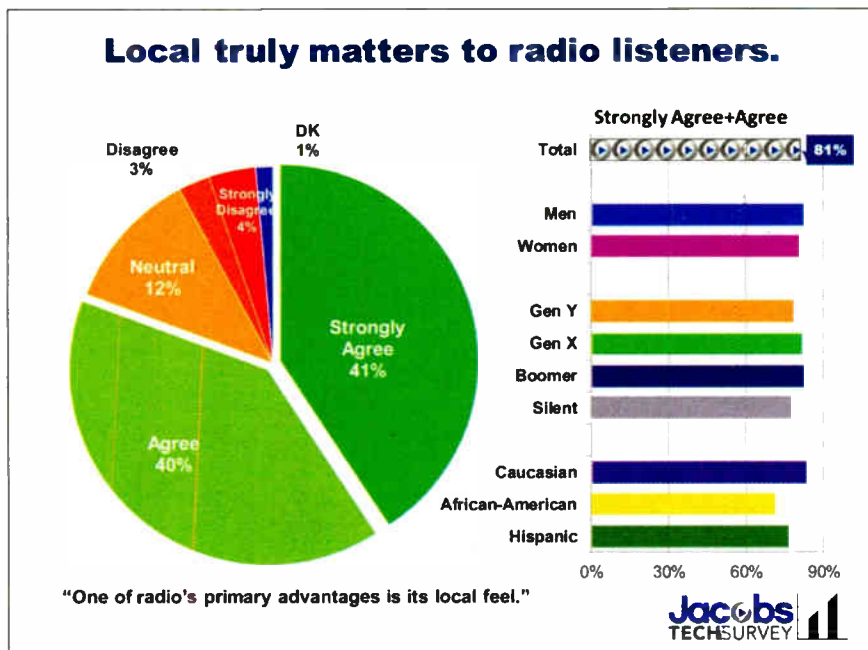
**Fig. 4:** Rubber side up; the equipment is cushioned yet can be moved easily.



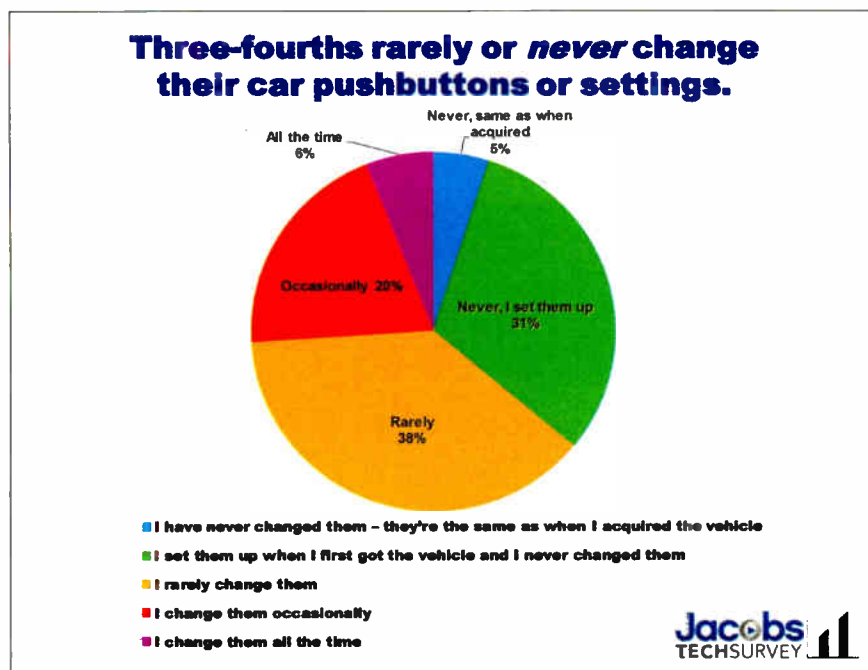
**Fig. 5:** Two mouse pads are the ideal size for most equipment.



**Fig. 6:** The pads permit easy movement without scraping or scarring the workbench or the gear.



Techsurvey11 confirms that localism is an important competitive edge that radio need to leverage.



Changes in format or new personalities need to be promoted heavily, as listeners seldom, if ever, change the presets on their car radios.

location for radio. Half of respondents say that most or all of their radio listening takes place while they’re in their vehicle. However, 62 percent are also able to connect a smartphone or MP3 player in their vehicles. Out of the 18 percent of the total sample who have a connected car, satisfaction with these systems is very strong — three-fourths love or like their in-car media systems.

**UNEXPECTED RESULT**

One of the biggest surprises in Techsurvey11 came when respondents were asked about their listening choices in the automotive environment. Three-fourths say they rarely or never change their car pushbuttons or settings.

What does this mean? Jacobs says there are two implications.

“First, it speaks to the type of training and education that customers get at the local dealership when they purchase a new car. How much they embrace the features of a connected car, including the media, depends on that first experience.

“Second, it demonstrates how firmly people become set in their ways, and live with the choice they make initially. The days when listeners tuned up and down the dial searching for something different to listen to are pretty much over. It also means that if you’re changing format or hiring a new personality, you need to promote the daylights out

of it with billboards, social media and other channels — because people aren’t going to discover you by accident.”

An interesting contradiction that surfaces concerns the use and importance of AM/FM radio in the car environment.

“Dealers think [over-the air radio is] no longer important because no one asks about it,” says Jacobs. “Yet our survey says that nine out of 10 prospective

## AM/FM radio is essential but expected.

new car buyers say it’s very important to have an AM/FM radio.”

He adds that this disconnect is probably because, for new car buyers, AM/FM radio is essential but expected, and people don’t request what is taken for granted.

Jacobs believes that these results underscore the importance of the relationship between the local radio station and the local car dealerships. “When we talk to car dealers about their experi-

ence with local radio, the response is all over the map. This is a huge opportunity for radio to take control of the conversation and educate the dealership.”

But the education process should be a two-way street. The average vehicle is 11 years old and was manufactured before the advent of connected cars. Many of those who work in radio drive one of these older cars. Jacobs said that station employees need to be proactive in learning about the connected car.

“You may not be ready to buy a new vehicle, but go to the dealership and ask for a demonstration and test drive. The next time you travel, rent one for a few days.”

Another surprise from Techsurvey11 is the influence of television. “We imagine that traditional radio competes with Pandora, iHeart Radio, SiriusXM and of course, other radio stations,” said Jacobs. “But television is steadily gaining ground, especially in terms of music discovery. Among Gen Y, 8 percent are discovering new music through YouTube.”

He adds that television slightly edges out radio on the media usage pyramid, with 93 percent, while 41 percent own a smart TV.

*Tom Vernon is a longtime contributor to Radio World. Find more of his articles by searching keyword “Vernon” on radioworld.com.*

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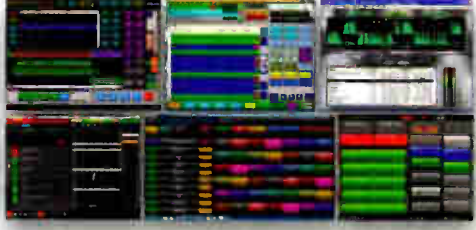

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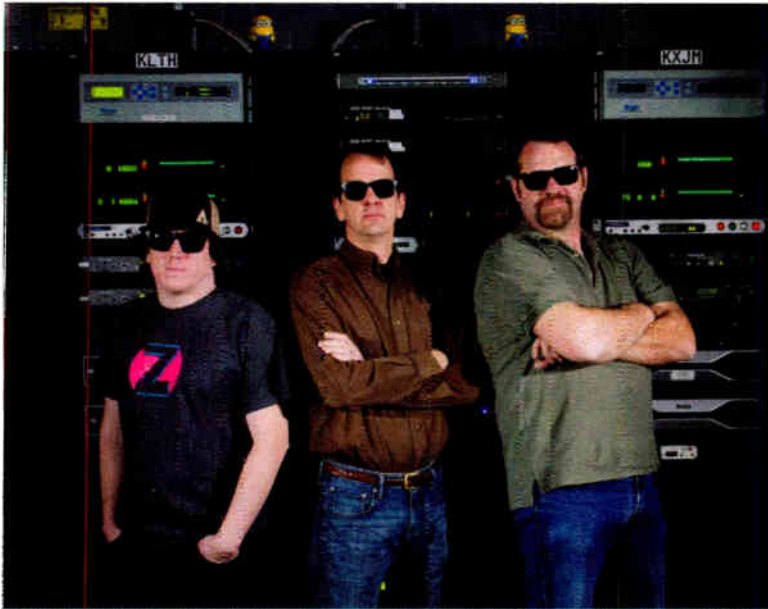
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### Checking in with iHeartMedia Portland

**Numbers don't lie. That's what your friendly police officer will tell you when he clocks you going 70 in a 35 mph zone. But, this isn't entirely true when it comes to the speed of Gigabit Ethernet networks.**

We dropped in on iHeartMedia in Portland recently to revisit a WheatNet-IP audio network that has been in operation since the seven-station cluster moved to Tigard, Oregon, in September 2012. Director of Engineering Chris Weiss showed us around the 17-studio, 25,000-square-foot facility and talked about life with audio over IP.

For the entire story...

Go to: [INN21.wheatstone.com](http://INN21.wheatstone.com)

### Gigabit Ethernet. Just the Facts.

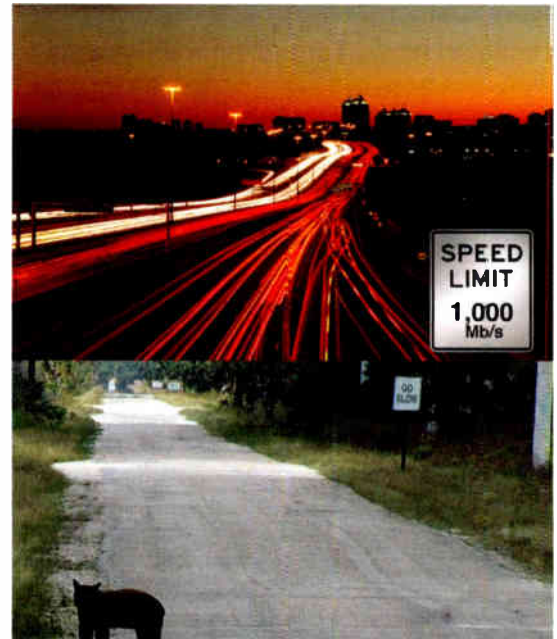
**Numbers don't lie. That's what your friendly police officer will tell you when he clocks you going 70 in a 35 mph zone. But, this isn't entirely true when it comes to the speed of Gigabit Ethernet networks.**

Most of us assume that Gigabit Ethernet links transfer data at one gigabit/second, or 10 times faster than 100Mbps Fast Ethernet.

But, in fact, a Gigabit Ethernet cable contains four twisted pairs of wires that are each clocked at 125 Mbps. What the "Gigabit" actually means is that a gigabit of information (data payload plus overhead) can travel across the cable in one second. Because of the efficiency of the modulation scheme and the use of all four pairs in both directions, instead of a pair each way as is the case for Fast Ethernet, Gigabit Ethernet is effectively 10 times faster than 100BaseT (Fast Ethernet).

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### The Curious Behavior of Radios

**Louder is better! Crank it up! Well, not so fast...**

Ever wonder what your listeners' FM radios sound like when your station is knee deep in the loudness race and the modulation monitor is always pegged? Our audio processing development guru, Jeff Keith, wondered about that too. So, during one quiet week at the Wheat processing lab, he decided to find out. Here are his surprising findings.

For the entire story...

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Bud Walters teaches during the KBA WKU Radio Talent Institute.



## They Build Radio's Farm Team

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### CONTINUING ED

BY DICK TAYLOR

Every major sport has a farm system. The minor leagues are a place where new talent can be tested and trained for bigger and better things.

Dad, Vallie wondered: Why didn't radio have such a system in place?

Vallie is a 44-year broadcast veteran. He rose to programming prominence when he worked as the national director of programming for Art Kellar's EZ Communications, which oversaw 26 AM and FM radio stations in the United States. Vallie would later get the itch to form his own company and founded

Vallie-Richards-Donovan Consulting in 1988 with Kellar's EZ Communications as his first client.

After Art Kellar had merged his company with American Radio Systems following deregulation of radio station ownership in 1996, Kellar's company walked away with \$655 million, helping to create what was the country's second-largest radio broadcaster at that time. Kellar retired shortly thereafter and started the Kellar Family Foundation with his wife.

#### TALENT INCUBATOR

Vallie approached Kellar with his vision of creating a National Radio Talent System. They had talked of creating just such an incubator system many times, and Kellar gave the concept the thumbs up.

The Kellar Radio Talent Institute was born at Appalachian State University in Boone, N.C., in the summer of 2007. Unfortunately, the man who provided the financial support to launch this college-to-career connection system passed away shortly before the kickoff of the first institute that bears his name.

After six years of running the Kellar Radio Talent System at App State and seeing a success rate with over 70

percent of the graduates securing solid careers in radio or a related field, Vallie decided it was time to take the concept national.

**Broadcasters embrace** and see the importance of bringing young talent into the industry, and many come to teach sessions.

In 2011, Vallie approached NAB Joint Board Chairman Steve Newberry with his plan, and Newberry, a native and resident of Glasgow, Ky., immediately said that he knew the next university to adopt the program: Western Kentucky University.

Newberry, Vallie, WKU's School of Journalism and Broadcasting's new Director Loup Langton and I met to discuss the program. Everyone was enthusiastic about the concept and plans were set in motion to launch the KBA WKU Radio Talent Institute in July 2013.

The Radio Talent Institutes are funded by individual broadcasters, broadcast companies and broadcast organizations.

This year, the cost of attendance is \$365, and it includes a meal card for lunch and dinner.

#### FURTHER EXPANSION

With Western Kentucky University's successful first institute under his belt, beyond the Kellar Radio Talent Institute at App State, Vallie continued to expand his concept with the creation of the Confer Radio Talent Institute at Bloomsburg University of Pennsylvania and the GAB Radio Talent Institute at Grady College of Journalism and Mass Communications at the University of Georgia.

Each branch uses radio industry professionals to teach courses at individual institutes; for example, Erica Farber, president/CEO of the Radio Advertising Bureau, is scheduled for the 2015 KBA WKU Radio Talent Institute.

Broadcasters embrace and see the importance of bringing young talent into the industry, and many come to teach sessions, including George Beasley of Beasley Broadcast Group; Dan Mason, president of CBS Radio; Bud Walters, CEO of The Cromwell Group; Steve Newberry, CEO of Commonwealth Broadcasting; John Dickey, executive vice president of Cumulus Media; Kerby Confer, the namesake of the Confer Radio Talent Institute; and Stu Epperson, CEO of Salem Communications.

WKU's School of Journalism & Broadcasting is a Kentucky Program of Distinction recognized by the state legislature of Kentucky for special rec-

ognition and funding.

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Each institute features a live radio morning show that originates from the classroom. Following the broadcast, in which students participate, the show is dissected and analyzed to better understand the elements that go into creating great morning radio.

(continued on page 21)



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# “Come In, See the Music”

Public radio collaboration VuHaus highlights music discovery

BY PAUL MCLANE

VuHaus is a video platform and mobile app, the result of a collaboration of several public radio stations that specialize in music discovery.

“VuHaus showcases gorgeously shot, in-studio live sessions best experienced in wide screen with the volume on high,” the organization promises, plus features like artist of the week, local spotlights and playlists. It was supported by a \$750,000 collaboration grant from CPB, and the app is available on iTunes and Google Play.

I emailed President Erik Langner.

**RW:** How did the concept take shape?

**Langner:** Public radio’s music discovery stations are incredibly prolific producers of high-quality video, and as

a community, there is a strong ethos of cooperation and collaboration amongst these stations. A few years ago at a public media conference in Atlanta, Mike Henry and I were both socializing the concept of aggregating all of these great music videos with several stations and with the Corporation for Public Broadcasting.

At that time, Public Media Company had just constructed Channel X, a digital platform that allows public broadcasters to more easily share, preview, license and broadcast new independent news and music content, so the backbone for the service was already built. Shortly thereafter, the five founding stations (KCRW/Los Angeles, WFUV/New York, WXPB/Philadelphia, KUTX/Austin, and KTBG/Kansas City) committed to collaborating. CPB signed off, and we were off to the races.

**RW:** Where will additional funding come from?

**Langner:** We envision continued philanthropic support as we build a premiere destination for new music and artist discovery, and we will be working with a select number of sponsors to help support our non-profit mission.

**RW:** Why is the concept of music discovery important in public radio?

**Langner:** Non-commercial stations play a very important role in breaking new artists. All of the VuHaus stations have their own programming slants, but the main thing they all share in common is a real passion for sharing new

music with their audiences. In the past few years, so many of the new artists that are getting attention today got their first radio airplay at non-commercial radio. ...

**RW:** What is Public Media Co.?

**Langner:** As PMC’s managing director, I will serve as VuHaus’ first president, and PMC will sit on the VuHaus

board with the five founding stations and will be managing the VuHaus operations. PMC is a national non-profit organization that has advised more than 275 public broadcast organizations in planning for and executing



a wide range of strategies, partnerships and transactions aimed at growing audience, local impact and financial capacity. As part of this work, PMC has helped to acquire, finance and launch a number of Music Discovery stations around the country, including KTBG in Kansas City, Mo.; KUTX in Austin; WXPB in Harrisburg, Pa.; WNKN in Cincinnati; Open Air in Denver; and KXT in Dallas.



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# Content Marketing Belongs on Radio

The industry has been in the storytelling business from the beginning

Storytelling is suddenly very much in vogue for retailers.

Advertising agencies, once the kings of creating commercials, are now shifting to “content marketing” campaigns, focusing on the lifestyle of their clients’ products or services. Rather than creating 30-second spots for radio or television, agencies are hiring journalists, public relations executives and social media “influencers” to write in-depth articles, capture amazing pictures and shoot video to tell cohesive stories.

This original content creation is supplemented by user-generated content and through a process known as “curation.” If you guessed that curation often means liberally re-purposing content created by others, give yourself two points.

How long has radio been in the content business? Since our beginning. For argument’s sake, let’s call it 1922.

Yet even with that depth of experience and amazing ability to tell a story inexpensively through audio, our industry is sitting on the sidelines, for the most part, while these campaigns run through other media.



Strangely, I’ve mentioned it to several colleagues and have received shrugs and blank stares. Maybe I’m just not stating my case clearly enough, so I’ll take another shot at it.

## POWERFUL AUDIO

Content marketing is indeed the latest trend in advertising. Millions of dollars are being invested in storytelling, which is a method to sell products and services

## PROMO POWER



Mark Lapidus

to customers. Our medium largely is not discussed as a viable medium for this type of product marketing.

This bothers me immensely because I believe that, when done well, storytelling via radio can be more powerful than articles, pictures and even video. Over the airwaves, storytelling sparks the imagination in a way not possible on any other medium. After all, our grandparents and great-grandparents weren’t mesmerized by that box in the living room for nothing.

I don’t claim to have all the answers as to how the radio industry can break this barrier, but I’d at least like to spark a dialogue that could move radio into content marketing’s future consideration.

First, we should consider what we have to offer content marketers.

Let’s start with inventory. Perhaps a company will need two or even three minutes to tell a story. Can we stop thinking solely in 30- and 60-second units and offer more time to lay out a story? Yes, we can — especially if it’s

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## FARM TEAM

(continued from page 18)

"It's what the industry has said for years it needs," said Vallie. "It's a radio talent farm system, a talent incubator of young talent that can be hired today and become the leaders of our industry tomorrow."

The 10 days are intense, sunrise to sunset. In addition to the class sessions, students get together with industry leaders for a social hour each evening before heading home to do their homework for the next day. The social hours really bond the students with the broadcasters. Stories are shared that pull back the



curtain on our exciting industry. Students and broadcasters come away from the experience energized.

If you would like to bring this concept to your area of the country, you can learn more by going to NTRS website: [www.nationaradiotalentsystem.com](http://www.nationaradiotalentsystem.com), or by contacting Dan Vallie at (868) 262-1502.

If you need talent for your radio operation, you'll find full student biographies, air checks and more at the NTRS website. If you know talented interns at your radio station who want a career in radio, encourage them to apply to one of the radio talent institutes.

*Dick Taylor is a Certified Radio & Digital Marketing Consultant and assistant professor of broadcasting at Western Kentucky University in Bowling Green, Ky. He is director of the KBA WKU Radio Talent Institute and remains on the board of the New Jersey Broadcasters Association. He receives a small stipend for serving as the director of the institute from NTRS and WKU's School of Journalism & Broadcasting for coordinating this program at the university.*

interesting — and many content marketing campaigns must be in order to work. There's no reason we can't utilize an entire stop-set to tell a story.

How about creative production? There are already lots of companies capable of creating demos to remind

**Radio's reach, frequency and cost are highly competitive against this playing field.**

agencies of radio's powerful audio storytelling ability. Want to bring out the big guns? Hire recognizable actors for voice-over work and use a cinematic approach to audio production.

Once we've scored with amazing creative, we have the job of reminding agencies about the unmistakable reach and frequency of radio. While agencies will tout content marketing videos that have reached hundreds of thousands, or even millions of views, these are the exception in the world of content marketing. More commonly, campaigns are driving tens of thousands of video views and similar stats for article pageviews. Time on page for content marketing campaigns frequently is measured in just a few seconds, up to a couple of minutes. Radio's reach, frequency and cost are highly competitive against this playing field.

Nonetheless, we have our work cut out for us because we have allowed our industry to paint us as old-fashioned, boring and even irrelevant. At the end of the day, advertisers are interested in one thing: results. Radio can deliver action for content marketing campaigns, but advertisers won't ever know it if we don't manage to get ourselves back into the game.

*Mark Lapidus is president of Lapidus Media.*

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# The Evolving Face of Radio Production

The digital revolution makes the world smaller and the production opportunities greater

## TRENDS

BY BRETT MOSS

There was a time, not too long ago, when the word “production” in the radio world had a fairly tight definition: radio program and commercial creation (often in-house). But as the radio industry has changed over the last decade, so has the meaning of production. New business pressures, new prospective revenue streams, new “content” ideas and changing expectations in management and clients have broadened the definition of “radio production.”

Radio World talked to a number of people and industry entities about their “production,” and we found many facets.

*Pete Presnel is creative director for Crawford broadcasting’s Detroit cluster, WMUZ(FM), WEXL(AM) and WRDT(AM).*

**Radio World:** Have you ever cut tape with a razor blade?

**Presnel:** Of course! That was one of only two ways to edit recordings (the other being building a composite of a track on a multitrack machine). Those of us of a certain age remember “rocking the reels” to find edit points, grease pencils to mark them, little short bits of tape hanging off the edge of a counter (trying to remember which piece had which bit on it), edit blocks, and having to carefully remove editing tape from the audio tape when the edit wasn’t exactly right.

**RW:** Are you/your department doing more production or less these days?

**Presnel:** Where we’re at, we are a production factory, especially commercials, but also imaging pieces for programming, promos and long-form programs. With modern digital tools, how-

ever, we’re able to be considerably more productive — editing of voice tracks, for example, is quicker, easier and more accurate by orders of magnitude. A single edit that can be accomplished in the



Pete Presnel hard at work in the studio with a new Wheatstone E-6 console and Blade 3 system.

space of a couple of mouse clicks today might have taken a minute or more back in the “old” analog days.

**RW:** What programs or elements are you providing more of?

**Presnel:** In our case, the bulk of our production is in the creation of commercials for our direct retail clients. And although our spot load had remained more or less constant over the years, working digitally means we’re able to have more time to, on the one hand, do more commercials, work on more complex productions, spend more time get-

ting nuances of performance right, and so on. On the other hand, we have more time to spend on client service, developing strategies of campaigns, meaning we have the luxury of being able to have more time to think about campaigns, commercials and such so they have the best chance to do what are clients are paying us to do: Achieve a measurable

result for the money they invest in us.

**RW:** What’s the biggest change in the production job over the last 5/10 years?

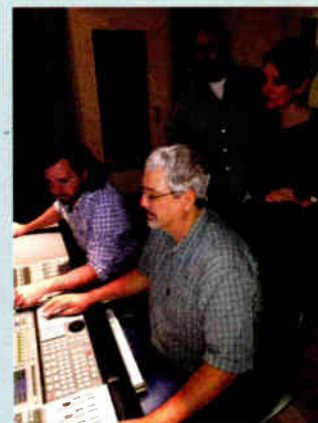
**Presnel:** Pretty obviously the productivity and creativity you get with digital production tools (we favor Adobe Audition here). There are things you can do with a piece of software you might pay a few hundred dollars for that runs on an off-the-shelf computer that simply could only be imagined in a room full of analog boxes that might have cost hundreds of thousands of dollars 20 years ago.

*One traditional source of production, outside the radio station, is the “jingle house.” TM Studios has long been known as a top-flight producer of jingles, station imaging packages, branding elements, music libraries and commercials. Technological advancement has opened a new door for them.*

*Greg Clancy is GM/VP of creative at TM Studios, and Ryan Drean is creative director.*

**RW:** TM Studios is famous for its jingles going all the way back to founder Tom Merriman. He’d get the singers around the mic and create the harmonic magic (with a little post-production help). While that’s often still done, how has technology expanded your toolkit?

**Greg Clancy:** With recent technology advancements, we have unlimited capacity to work from our Dallas headquarters with musicians in Nashville and New York or singers



Making a living at TM Studios — (L-R) Collin Gouldin, producer; Dave Giangliulo, chief engineer; Ryan Drean, creative director; and Carly Reign, production director.

*Andreas Sannemann, CEO and co-founder of international production house Benztown in Stuttgart, Germany, offered thoughts on dealing with multiple markets now that technology has made the world smaller and the international opportunities for work larger.*

**Andreas Sannemann:** There are massive differences considering markets, countries, cultural background. For instance, German CHR listeners prefer a more musical, real, natural, maybe hip and relaxed



Andreas Sannemann of Benztown in his element.

approach ... For Russia we do super-long, super-musical, mini-song-types of jingles up to 30 seconds (such as the package we did for Europa Plus Brigada U). This is compared to our U.S. operation where their clients are wanting everything short and quick due to PPM. The U.K. is very content-based, especially with the BBC formats — an example would be BBC 6 music. Australia has a massive density of huge talents working in the imaging sector.

in L.A. and London ... Our writers, producers and talent are trading charts and creating music as if they are all actually working together in our renowned Studio A, when in fact there might be 5,000 miles of geographic separation. So not only can we utilize talent around the world, but we can produce that talent live from anywhere, as well.

**Ryan Drean:** By utilizing technology like ipDTL and/or Source-Connect Now, there is effectively no barrier between us and worldwide talent. We Skype or [Google] Hangout with our talent face to face, and we no longer rely on archaic ISDN technology to record, as we now have that level of connectivity over the Internet ... Couple all of that with the staggering advancements in simply transferring sizable data, we now have an instantaneous connection to our creative talent, our remote support staff and most importantly, our clients.

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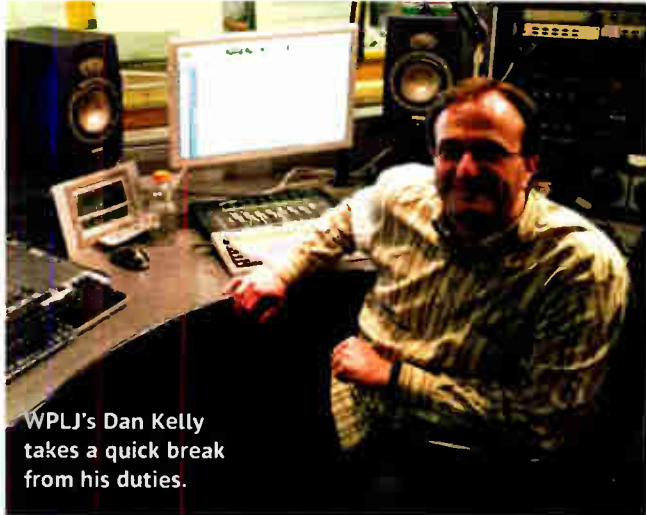
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# STUDIO SESSIONS

*We asked a number of production managers and personnel: What's the biggest trend or change that you are seeing these days? Dan Kelly is creative services director, WPLJ(FM) and Nash-FM, New York. Dan Stone is creative services director for Cumulus Chicago.*

**Dan Kelly:** Due to PPM, many stations tend to run a lot of elements over music. That's been a major factor over the past few years, yet the purpose of imaging is still the same. Brand the station, relate to the audience and have fun. As always, writing



WPLJ's Dan Kelly takes a quick break from his duties.

is the most important thing. When your elements are playing over music, there's little use of FX, so you really need to get your point across in words, and as few of them as possible to fit over intros. Hopefully we always spend lots of time writing fun, concise copy that connects with listeners!

**Dan Stone:** If I were to pick one thing it would be the release of Pro Tools 12 and Avid's new subscription plan.

Ideally the subscription and lower cost of entry, which will cost you more over time, could act as an incubator/pipeline for younger, less established (read: broke) producers who have other less expensive options.

Cloud Collaboration and the Avid Marketplace in PT12 could be a game-changer. Beyond the ability to share and work on projects across different workstations, producers will have the option of selling, buying or sharing content within the DAW.

*A syndicated news service isn't a new thing, even if the individual players might be new. It would also seem to be a programming format that doesn't change much in its production and should be simple to produce. However, technological change has reoriented working practices and opened opportunities. Bart Tessler is EVP for news and talk, Westwood One:*

**RW:** *Syndicated news would seem to be a pretty straight-forward product. What could be new there?*

**Tessler:** The trend is hypercustomization, localization, service; and Westwood One News was launched to meet these needs. After our research and discussion with program directors, we took a new approach by launching a non-branded network news product to allow affiliates to fully integrate into their local news and branding. Meeting this goal included development across a number of fronts, down to testing of a news sounder with various station imaging so that it would announce a network newscast but also integrate seamlessly. We provide 24/7 newscasts, special reports, and other network services but the station is the brand.

**RW:** *Traditionally syndicated news segments were delivered on a regimented clock and either aired as an unedited whole or small clips would be cut out for use by a local anchor. However, news budgets have shrunk and local sta-*

*tion news departments have disappeared in so many markets.*


**Tessler:** A big part of developing Westwood One News was a focus on live, custom reports direct to stations. Westwood One News correspondents in D.C., N.Y., L.A. and Dallas do numerous daily reports and two-ways with affiliates. And with support from CNN, we have arranged many direct live appearances on local stations from reporters in places like Nepal, following the recent devastating earthquake; Havana, immediately after the announcement of a change in U.S. policy toward Cuba; and Tehran, after the signing of the preliminary U.S.-Iran nuclear agreement. We've also arranged CNN correspondent Q&As from Nigeria and Chad on Boko Haram and from Paris right after the Charlie Hebdo shootings.









Westwood One News' Bob Constantini uses a laptop computer in his remotes.

*(continued on page 24)*

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**STUDIO SESSIONS****PRODUCTION TRENDS***(continued from page 23)*

*Jeffrey Schwartz is the EVP of corporate strategy at Yahoo Sports Radio. While it has programs that need to be produced, much of its content is bare-bones sports talk punctuated with phone interviews and calls from listeners. New is its outside-the-box approach to the overall concept of programming — at one point making the studio part of the programming.*

**RW:** *Yahoo! Sports Radio has put an on-air studio into a restaurant at The Palazzo hotel and casino in Las Vegas. That is certainly not your typical location for a broadcast studio. What was the thinking behind that?*

**Schwartz:** Las Vegas is where our audience (mostly men) goes to play. Vegas is an ultimate destination for the sports fan — their home away from home. Placing a studio in Lagasse's Stadium [a restaurant in the hotel] gives Yahoo Sports Radio greater opportunity to interact face-to-face with our listeners, as well as extend our valued partnership with the Palazzo Las Vegas, which includes on-air integration, a nightly show live from the stadium with Ken Thompson's "Sports X Radio," and our annual Super Week that

brings together all of our hosts in one location for an entire week. It also opens doors to new opportunities and engagement events in the market, like becoming a key media partner for the first-ever National Fantasy Football Convention, presented by Dallas Cowboys quarterback Tony Romo.

**RW:** *So the studio gets regular use. Is it a significant part of the YSR broadcast strategy?*

**Schwartz:** We broadcast "Sports X Radio" from the studio nightly, Monday through Friday, and our afternoon drive program, "Prime Cut" with Sean Salisbury and John Granato enjoy going there whenever they can ... We also try to be on-site for major sporting events like the Super Bowl and Final Four ... It's definitely a significant part of our strategy in advertising partnerships, access to listeners, fun giveaways, and our goal to have our 24-hour lineup of shows originating from a variety of major markets around the nation. We want to represent our listenership across the country.

**RW:** *Traditionally, sports talk radio is a pair of guys in a studio yacking at each other and fielding calls. Taking the show on the road to sports events to do remote*



**Yahoo! Sports Radio's Ken Thompson, right, interviews Manny Pacquiao.**

*broadcasts used to be a special treat reserved for events like the Super Bowl but now shows seem to move more often and stay longer. What do you get out of these? Are you planning more of these?*

**Schwartz:** Naturally, there is always financial consideration; don't forget, at the end of the day, we need to make money to pay the bills. But, also, talent loves going different places to meet

the people who make this fun opportunity of radio possible. We meet with affiliates, listeners, advertisers — it just changes things up a little. A change of pace once in a while is a good thing and benefits everyone, plus it keeps the programming exciting.

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# FM-55 Targets Analog FM

New processor sounds "delicious" and impresses with its approach to multipath

## PRODUCT EVALUATION

BY STEPHEN POOLE

Wheatstone's Jeff Keith, Steve Dove and Mike Erickson have been busy in their Processing Cave at New Bern, N.C., and this time, they've targeted traditional analog FM with a unit that's within the reach of most station budgets (\$2,999 list). The FM-55 is a sweet-sounding processor with many of the features of its big brothers, including the top-of-the-line AirAura.

This is a five-band processor that isn't dumbed down or stripped of key features. You can use the provided presets, or you can tweak like a madman (cackling all the while) to squeeze the last ounce of goodie from it. The provided GUI software is good, easy to use and intuitive.

It's not a standalone FM+HD processor; all of the outputs have the same program. You can add up to 10 seconds of delay, but you'll need a separate processor for the HD component.

But again, the FM-55 is targeted to

analog FM. By eliminating HD radio-specific stuff (dual limiters, dual outputs and so on), they're able to give a real bargain to the analog-only broadcaster.

### FIRST IMPRESSION

The physical package is a single-rack unit with a solid feel. The Wheatstone pedigree shines through: the case feels rock-solid and the finish is resistant to scratches.

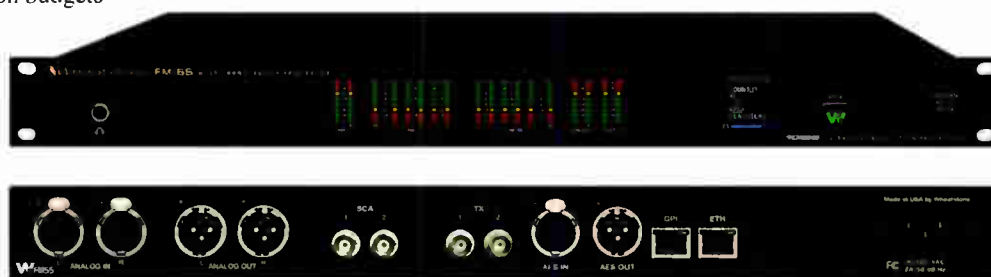


Fig. 1: Front and rear panels of the Wheatstone FM-55.

The front panel contains a full bank of LED meters, an OLED "smart" display, a jog wheel for adjustments and a "back" button. I found the controls easy to use.

The rear has six standard XLR 3-pin audio connectors. There are stereo analog ins and outs, as well as AES ins and outs. Four BNC connectors provide two SCA inputs and two MPX outputs,

using the built-in stereo generator. The second multiplex output can be switched to provide only a 19 kHz pilot for syncing outboard equipment such as an RBDS generator.

The AES output supports the AES192 standard. If your exciter will accept a digital MPX input, you can feed composite-plus-subcarriers entirely in the digital domain.

You can select analog or digital inputs in the menu. With the latter, you can choose standard AES or WheatNet-IP. Automatic input failover is provided: If one input is lost, the FM-55 automatically will select the

other within no more than 30 seconds.

As with most processing equipment, there is no power switch. I've finally gotten used to the idea of unplugging a processor to switch it off or reboot, but it still makes me itch. There are arguments for and against, though, so we can move on to more important matters.

Speaking of power, I recommend

### PRODUCT CAPSULE

#### WHEATSTONE FM-55 FM Audio Processor

##### Thumbs Up

- + Sounds "absolutely delicious"
- + Well-built, rock-solid feel, rugged finish
- + Excellent, comprehensive GUI
- + Multipath correction with stereo enhancement at the same time

##### Thumbs Down

- No printed manual
- Needs a UPS: 30-40-second boot time

Price: \$2,999

For information, contact Jay Tyler at Wheatstone in North Carolina at (252) 638-7000 or visit [www.wheatstone.com](http://www.wheatstone.com).

that you put the FM-55 on a good UPS. Not only will this protect the unit from power events, it needs a good bit of time to boot up (over 35 seconds in my tests).

### SWEET SPOT PART DEUX

Most Wheatstone processors nowadays have what's called "Sweet Spot Technology" or SST. This is an intelligent algorithm that helps deal with different audio densities. The FM-55 has a newer version called iAGC, for "intelligent AGC." This is exclusive to the FM-55 and, based on my tests with various source material, does a good job of maintaining a consistent sound.

(continued on page 26)

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## WHEATSTONE FM-55

(continued from page 25)

The FM-55 also has the Bass Management System to correct for low-frequency intermodulation. I was impressed with the deep, rich and tight-sounding bass. You can use the GUI to tweak this to taste.

All in all, the processor sounds fabulous. The audio was clean and clear, with tight bass and sweet, silky highs.

It also uses Wheatstone's standard approach to changing presets: The FM-55 "slews" (i.e., crossfades) from the old to the new smoothly over several seconds. Your listeners won't be baffled and annoyed by abrupt changes when you're experimenting with different presets.

### MULTIPATH

This is by far the best feature, in my opinion; I'm not aware of another processor in this price range that allows you so much control.

First, a refresher. In the old days, with multipath, a typical receiver would simply toggle madly between stereo and mono (the stereo light would flicker). This was disconcerting to the listener. Newer receivers try to mask this by smoothly "blending" from stereo to mono. Unfortunately, with wide stereo separation, there is a perceived loss of volume and/or brightness when this occurs.

To help correct for this, many processors let you reduce the separation by some fixed amount (typically  $-3$  dB or  $-6$  dB). The downside, obviously, is that this reduces the total separation across the board and in all stereo receivers — including those that might be getting a strong, clean signal.

The FM-55 addresses this by allowing you to enhance the separation within limits. You can boost the apparent separation at some frequencies, giving a dramatic spatial improvement at the listener's ear. In Fig. 2, I've added 3 dB of enhancement to the mid-high frequencies, and have reduced the separation on the deep bass.

Normally, this would make "blending" sound even worse, but the FM-55 adds an intelligent multipath limiter (see Fig. 3). This limits the maximum L-R signal, never allowing it to "run away" or become excessive. Thus, material with average separation will be enhanced, but audio with lots of separation will be gently limited. The net result is a much less problematic "blend" effect on most stereo receivers.

One annoyance appeared when I was diddling with the multipath limiter. With most of these numerical values in the GUI, you can either use the up/down buttons, or you can click on the value and use an edit box to enter numbers manually. In this case, the edit box was labeled "dB" instead of percent, and it



Fig. 2: Using the stereo enhancement feature in the provided GUI.



Fig. 3: The Multipath Limiter intelligently controls the L-R energy.

hated whatever I entered. It would reset to the previous value when I clicked "OK." Not a big deal; I used the up and down buttons and moved on.

### THE GUI

The free GUI software provided with the FM-55 is intended for Windows, but I discovered (with much joy!) that it would run perfectly in Linux on Wine. This may not mean anything to you, but it tells me that it's written with well-known, reliable calls to the operating system.

I had to select "metering data over TCP/IP" in the GUI, probably because my network path was blocking the default metering. The GUI remained fast and responsive, even over a remote connection and with this option selected.

The layout is intuitive. You don't just get the usual "click button, turn virtual knob" interface. The virtual sliders in the FM-55's GUI are side by side. Real-time metering is overlaid on the sliders so you can see what your changes are doing.

settings. If you're not into tweaking, you can choose a preset, set your levels and you're good to go. If you like to play and tweak and squeeze the last drop out of your processor, the FM-55 will let you do it.

### SUMMARY

Truthfully, I haven't been this impressed with a processor in a long time. The box is for those who love good audio, who love radio and who want loud but clean sounds. The fact that it lists for under \$3,000 makes it even more amazing.

There were a few glitches.

I mentioned the issue with directly editing the multipath limit value in the GUI.

Also, the included manual is PDF only; there is no printed version. This is becoming common, of course, but old-timers like me would prefer a dead tree reference in our laps while we tweak.

Second, Wheatstone has always been a bit ... geeky. I love 'em for it, but honestly, instead of devoting two or three pages to the correct way to make cables, I'd rather see more practical, real-world advice on how to tweak this thing for a given format and/or service area.

In particular and most especially, I'd rather have a nice, step-by-step and detailed walkthrough for the multipath limiter vs. the stereo enhancement. This is one of the FM-55's strongest features and it only gets about a half-page's worth in the manual.

But that really is a quibble. This is an excellent-sounding box. While it manifestly is not just for small-market stations, those folks, in particular, should immediately take a close look at this processor. For example, I can imagine a Class A broadcaster in a small town, 30 miles away from a city with several FMs.

## The Multipath Limiter allows you to use stereo enhancement without increased problems with multipath and blending.

Referring back to Fig. 2 — the top half shows the available control over the iAGC section. You can adjust the crossover frequencies and the coupling between bands. This is typical for the entire processor.

Because of the level of control provided, I suggest that you password-protect the unit and keep everyone else away from it. Otherwise, you're likely to tune in one sunny morning and hear Sister Betty's daily devotion sound like a Monster Truck commercial.

The manual describes each of these

The "little guy" needs to compete, but can't justify the \$10,000–15,000 price of a top-flight processor. I can heartily and without reservation recommend the FM-55 to this broadcaster, especially if that FM is in a hilly area and struggles with multipath.

*Stephen M. Poole, CBRE-AMD, is market chief engineer for the Crawford Broadcasting Co.'s five-station AM/FM cluster in Birmingham, Ala. He has over 30 years of experience with twirling knobs and making radio sound as good as it can.*



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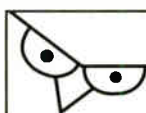
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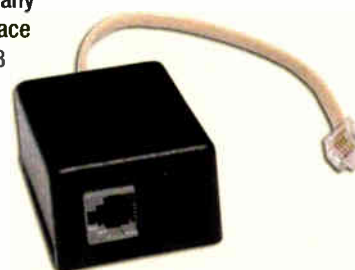
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# Keep Radio Free and Vibrant

Free Radio Alliance advocates for copyright reform protections

## COMMENTARY

BY PEGGY BINZEL

Water fountain talk about the latest and greatest band, hit song or undiscovered artist is fun. Everyone has an opinion.

But bring up the topic of the copyright laws that govern how Americans access music and your colleagues will quickly beat a path back to their desks.

Copyright laws date back to the birth of our nation, enacted both to protect the works of creators and to advance the common good. For musical works, copyright started with sheet music, followed by player pianos and eventually changed to accommodate recorded music. As with any law in any industry, businesses and business models in the music industry have adapted to the copyright laws that exist to enable agreements, contracts and the flow of money to compensate all sectors of the industry. It's a complex ecosystem that has evolved over decades.

Now, enter the music labels who want Congress to change just one part of copyright law to their benefit by imposing hundreds of millions of dollars in new fees on radio stations in order to create a new revenue stream for them. This is in addition to the hundreds of millions of dollars that radio stations and other businesses that play recorded music already pay annually.

Remember the game pick-up sticks? The object was to remove a stick from the pile without disturbing the remaining ones. Similar to pick-up sticks, the record labels' attempt to make a one-sided change to copyright laws by shifting hundreds of millions of dollars from local radio stations to their own coffers will have unintended consequences. It's undeniable.

In the end, radio stations that serve local communities and their listeners will lose.

Supporters of the change like to tout the legislation's exemptions or caps on fees for small or non-profit radio sta-



Peggy Binzel

tions. To that we say, "Camel's nose under the tent." Once a new fee is enacted, there is only one direction the fee will go and that is up.

Moreover, it's not just about the money.

Think about the record keeping that would be required for a college broadcast station, for example. These stations



are often freeform and their playlists may be written on scraps of paper. Yet, the hundreds of college radio stations in America do a great job of bringing local bands and artists to their listeners. That's serving the common good.

The Free Radio Alliance was formed to serve as the voice for radio stations of all sizes and types, from single stations to college radio stations to farm broadcasters and beyond — many of whom don't otherwise have a voice in Washington. In fact, more than 40 percent of the organizations that have joined the Free Radio Alliance are not members of any other organization that is speaking out on the issue.

The FRA is not only an advocate for radio stations, it also represents other businesses that understand that put-

ting a new fee on radio stations is the perilous first step in extending the new fee to all businesses that play recorded music.

In a world where more and more music sources are pushing consumers toward pay models, radio stands out as the exception whose model is to provide listeners the best in music, all for free.

The Free Radio Alliance is a coalition whose mission is solely to oppose the imposition of a performance tax. We are a member-driven organization and do not have a director or president. While many of our members are also members of the National Association of Broadcasters, approximately 40 percent, by organization, are not NAB members.

NAB has provided the seed money to re-launch the Alliance and is likely to provide on-going support. The positions taken by the organization are determined by the membership as a whole.

*Peggy Binzel is spokesperson for the Free Radio Alliance, a coalition "advocating to keep radio and other businesses that play recorded music strong for communities across the nation by opposing a performance tax." Its website is [www.fradioalliance.org](http://www.fradioalliance.org). She is also principal at the Podesta Group.*

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## Distinguish Pirates From Part 15 Operators

Broadcast engineer defends hobbyists and hopes FM dial won't turn into Wild West

## COMMENTARY

BY BILL DEFELICE

The announced closing of almost half of the FCC field offices has many in the engineering community concerned and worried about the future of the broadcast bands.

Based on my own four decades and more in the industry, it comes as no surprise that many pirate stations had longer life spans due to the lack of FCC manpower to investigate, confirm and prosecute the operators. My own concern comes for those who operate legal, license-free broadcast operations under Part 15 regulations yet have been unfairly targeted by field agents for a variety of reasons.

### TARRED WITH ONE BRUSH?

Besides having served as a consultant and staff engineer for a variety of commercial and non-commercial AM and FM stations, I'm the creator and webmaster of [HobbyBroadcaster.net](http://HobbyBroadcaster.net), an online reference for radio hob-

byists, educational institutions and businesses who want to utilize Part 15-compliant broadcasting. The site was created as a result of building a high school campus-limited station in the district that serves as my 9-to-5 employer.

The feedback I've received from my website's visitors and forum participants is that FCC field agents rarely discern the difference between blatant FM pirates and persons who make a concerted effort to operate within the bounds of Part 15.

For example, it's all too common that pirates purchase those sub-\$100 Chinese-manufactured FM transmitters riddled with spurious emissions on venues such as eBay Inc. In contrast, many Part 15 operators purchase FCC-certified AM transmitters costing hundreds of dollars, with a few models approaching close to \$1,000. I sincerely doubt a pirate would buy such an expensive transmitter if their sole intention were to break the law.

One individual was visited by an FCC field agent who had been called on him by a group whose motives were strictly spiteful. He used a factory-fresh i.AM.Radio transmitter that is easy to install and operate; with this transmitter, it would be virtually impossible *not* to comply with Part 15.219, the applicable regulation for which it was certified.

The operator felt that this agent made some attempt to intimidate his landlord during the visit. The inspector has a reputation for being particularly aggressive, often treating

*(continued on page 30)*

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## CLOSURE

(continued from page 29)

Part 15 enthusiasts with the same disdain as blatant pirate operators.

Part 15 operation on the FM band is pretty much limited to in-home or perhaps "yardcasting," with the limit on field strength dictated under Part 15.239. This also was explained for the layperson in a 1991 FCC public notice, "Permitted Forms of Low-Power Broadcast Operation." An unlicensed FM signal that reaches beyond a few hundred feet, at best, is likely out of Part 15 compliance. FM pirates push this tens, hundreds or even thousands of times past the FCC limit.

eters). Field intensity measurements were recorded using a Potomac FIM-41 and off-air reception judged using various portable and automobile receivers. In spite of a local ground conductivity of 1 millisiemen per meter, the signal of the best performing transmitter was receivable out to nine-tenths of a mile away using a car radio.

I only know of two individuals in the engineering community who have a vitriolic response when it comes to anyone who willingly participates with Part 15 experimentation on the AM or FM broadcast bands.

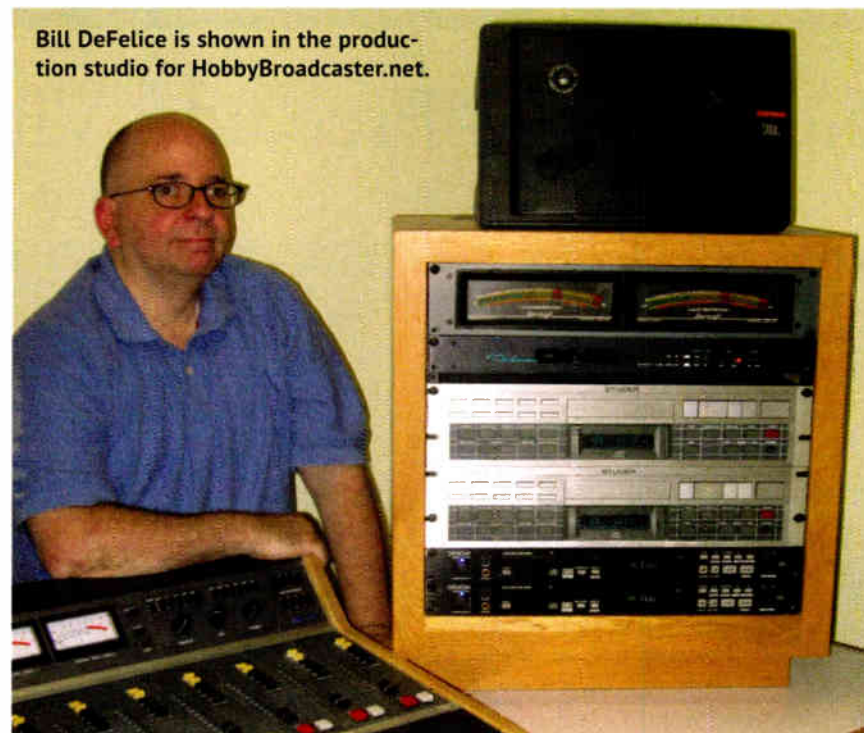
Some hobbyists and educational institutions have described their experiences when field agents find non-com-

### Field agents rarely discern the difference between blatant FM pirates and persons who make a concerted effort to operate within the bounds of Part 15.

Some in the engineering community may be under the impression that the range of a legal Part 15 AM signal is limited to 200 feet due to the aforementioned public notice. I personally disproved this while performing an "AM Transmitter Challenge." This side-by-side operational comparison of five popular Part 15 AM transmitters was performed utilizing a by-the-book, ground-mounted Part 15.219-compliant installation (i.e., 100 mW final stage input power combined with antenna and ground length not exceeding 3

pliant installations. Some inspectors will simply instruct an operator how to correct the installation for compliance, sparing them from a notice of unlicensed operation. But others may take a harsh no-latitude stance, instructing the operator to shut it all down — or else. This dramatic outcome, appropriate to a pirate, is unfair when applied to a small, well-intended operator who does not intend to violate the rules.

With corporate, group-owned station clusters now engineered by outside contractors, will licensed stations blindly



sue Part 15 operators if Commissioner O'Rielly's plan is implemented? Will dispatched FCC "Tiger Teams" be able (or willing) to differentiate between a Part 15 AM operator who may have unintentionally strayed out of compliance and an obvious pirate FM station, causing harmful interference or sporting a coverage area grossly beyond Part 15 limits?

I contacted both Chairman Tom Wheeler and Commissioner Ajit Pai but have yet to receive any response to my queries. I have also sent a query to Commissioner O'Rielly because my concerns appear topical in light of his blog post, "Consider a New Way to Combat Pirate Stations."

As a broadcast engineer, I understand the impact of pirate stations, having recently discovered one interfering with the first lower adjacent of a licensed station with which I'm associated.

My hope is that any change in spectrum enforcement doesn't turn the radio dial into the Wild West, making every Part 15 radio enthusiast or campus-limited signal a potential target for unjustified legal actions simply because it rubs some licensed station the wrong way.

*Bill DeFelice is former chief engineer of WMMM(AM)/WCFS(AM) in Westport, Conn., and webmaster of the History of Westport Connecticut Radio. His Part 15 website is HobbyBroadcaster.net.*

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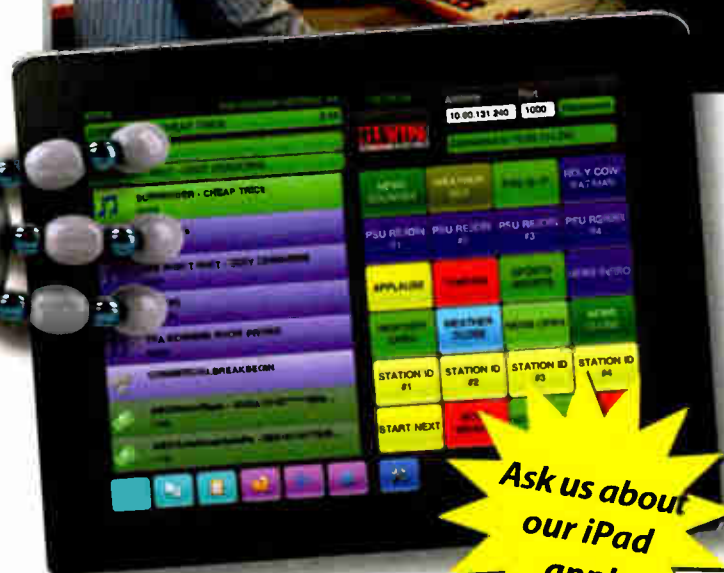


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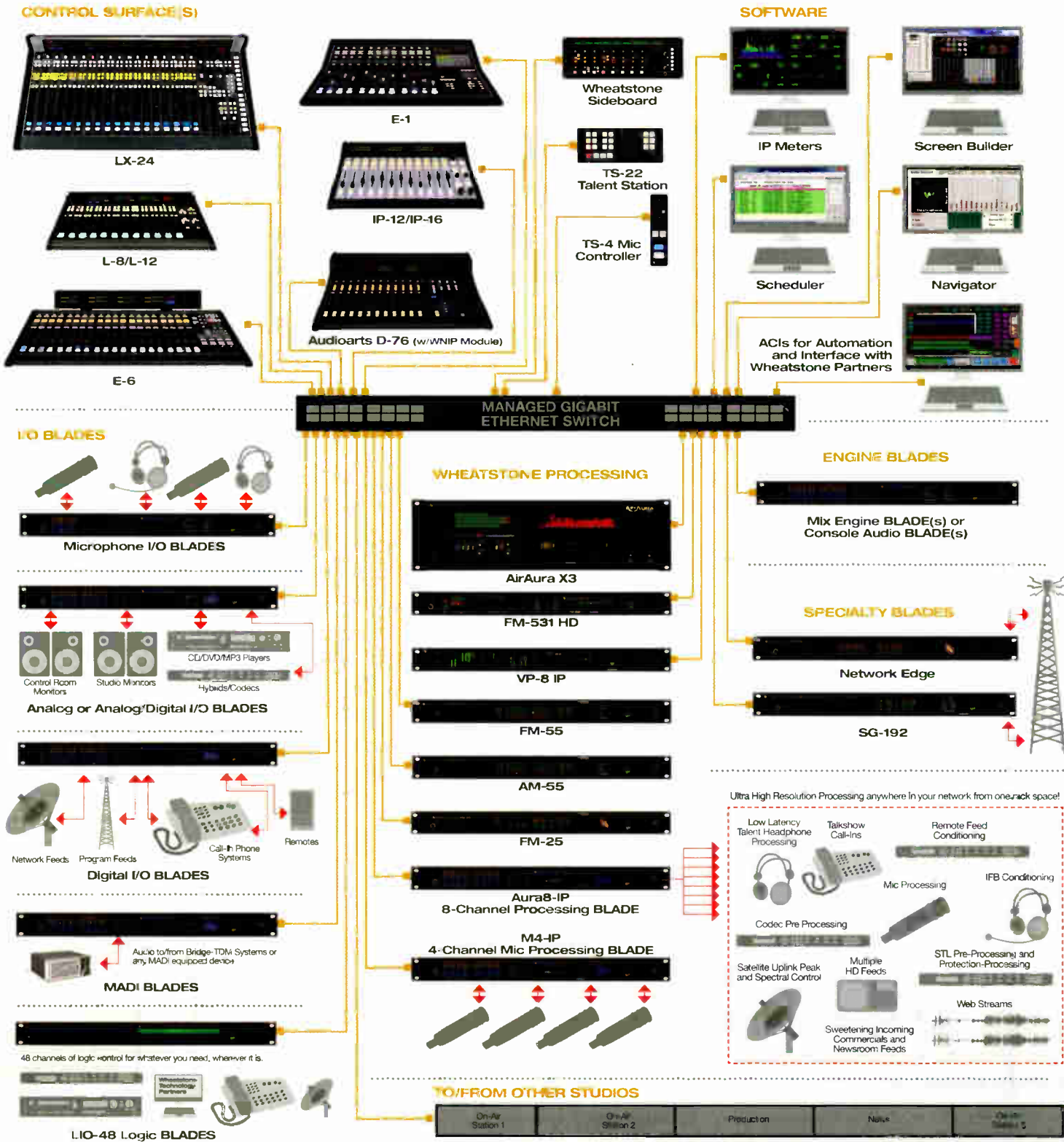
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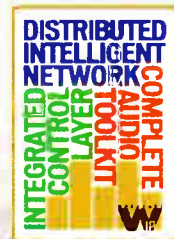


THE INTELLIGENT NETWORK



## The Complete IP Audio Network Ecosystem

It's all here. Everything you need (or will) for your IP Audio Network system. Gigabit distributed intelligent network, a comprehensive audio toolkit complete with mixers, dynamics, processing, clip players and much more, PLUS an integrated control layer that provides full, interactive control between all gear - everything on the network - including our partners' equipment. And it's AES-67 compatible. Plug and play with CAT-6 cable and you are ready to go. And go. And go....



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