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SERVING THOSE #1 FANS

• HD Radio multicast channels seem to lend themselves well to 24/7 sports in die-hard cities like Philly, Pittsburgh and Dallas. — Page 26

BBG'S CHANGING LANDSCAPE

• Board member Michael Meehan details priorities in the 2014 FY budget, now before Congress. — Page 38

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Dielectric's Planned Closing Affects Radio

SPX is seeking a buyer for the company's intellectual property

BY RANDY J. STINE

RAYMOND, MAINE — SPX Corp.'s planned closing of its Dielectric broadcast and wireless antenna division this summer could leave radio broadcasters with fewer options in an ever-shifting equipment manufacturer marketplace.

Still to be determined is whether any of Dielectric's lines of broadcast antennas, filters, switches or transmission line products will be sold to other parties. Radio World has confirmed that SPX is seeking a buyer for Dielectric's intellectual property.

In a letter to customers, Dielectric General Manager Mark Fichter said the company would remain open in a limited capacity through June and then close "due to extremely difficult global economic conditions in the broadcast marketplace." Broadcast customers of Dielectric received a letter from SPX subsequent to the closure announcement that said the company intends to honor outstanding warranty obligations through a combination of dedicated SPX personnel and subcontracted services (see sidebar after the jump).

The domestic broadcast FM antenna market has been flat and improvement is expected to be slow, industry observers told Radio World.

Dielectric's departure is expected to have a more profound impact on TV than on radio, they said. A review of FCC records by consulting firm Cavell, Mertz & Associates shows that Dielectric had become a dominant provider of television RF systems, with more than 60 percent of the market, according to the commission data. FM radio had become a very small part of their operation, according to Gary Cavell, a broadcast consulting engineer and president of the consulting firm.

"I feel that Dielectric's vulnerability was that so many of its eggs ended up on the TV side, so when that market demand abruptly shrank, it was hard for the radio division to sustain the whole company," Cavell said.

Most observers believe the application filing freeze imposed in April by the FCC on full-power and Class A TV station modification proposals to increase coverage in any direction most likely moved SPX to lose patience waiting for an economic turnaround in the broadcast industry.

Hammett & Edison Senior Engineer Stan Salek was not overly surprised at the April announcement.

"Dielectric had a long history of excellence so it's difficult to see them go out of business. However, there were many signs that the business was not going well," Salek said. "For the past

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A high-power FM multi-station system in Monterrey, Mexico, consists of a Dielectric DCCP antenna on the tower mast, plus a combiner in the base building.

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World Radio History

Fixes for Common RDS Problems

Monitor your data displays and tweak them when formats change

RADIODATA

BY ALAN JURISON

In a previous article in this series about RDS ("RDS Displays Should Make Sense," March 13), I wrote about techniques that can be applied to all of your metadata delivery platforms to ensure your RDS displays make sense.

Here, I'll discuss common RDS problems and remedies.

PTY, or Program Type, is defined in the RDS standards as a "descriptor" for your radio station formats; for example, the numerical value 1 describes the format "News." (Note that these numbers involve one of the small differences between Europe's RDS and the U.S. RBDS standards. For example, a PTY of 5 in the European RDS standard means Education, while in the U.S.



This Classic Rock station is transmitting an incorrect PTY code of 10 for Country instead of 6 for Classic Rock on the author's RDS receiver.

Section D.7. In many cases, the PI code for your station can be based based off of your call sign; for example, using

The PI issue is complicated in these situations, so the NRSC in the G-300 guideline recommends that receiver

Aw, everybody orders that boring beer. Let's get a couple of codecs instead!

June is Codec Month at BSW!

RBDS standard PTY 5 is Rock.)

Make sure that when you are setting up an RDS encoder, you have consulted with the programming management of the station and selected the PTY that most closely represents the station format.

If the format changes over time, be sure to update it. I cannot tell you how many times I have seen the wrong PTY set on a station. Often PTY is set to the station's previous format. While your particular receiver might not display the PTY, may do.

There are many newer program formats that do not have current PTY codes. The newly released National Radio Systems Committee-G300 offers recommendations in this area; see Section 4.2 and Table 2.

PROGRAM IDENTIFICATION

PI, or Program Identification, is a unique four-character hexadecimal identifier. In the United States, this value is determined by NRSC-4-B

NRSC-4-B Section D.7.1. WHTZ would have a PI of 692B. Make sure when setting up your RDS encoder that you have set PI properly as per the applicable RDS/RBDS standards.

Many hardware manufacturers have improved their setup programs to help with this, but ultimately it is your responsibility to set the identifier correctly and unique to your service area. Note that because of the use of RDS Traffic Message Channel (TMC) in the United States, the NRSC has issued revised guidance in NRSC-4-B in Section D.7.4; and NRSC-G300 section 4.1 further clarifies the issues. Using the example above, because WHTZ is an RDS TMC station in North America, its PI code becomes 192B. For some older receivers that use the NRSC-4-A standard to "back-calculate" the call sign, this may display as KDMH. NRSC-G300 Section 4.1.1 also issues guidance for PI codes on FM boosters, translators and simulcasts.

manufacturers no longer display PI call sign back-calculations. The NRSC recommends manufacturers instead use RadioText + StationName.Short. Thankfully, most radios do not display or back-calculate call signs.

One potential problem related to the PI being set incorrectly is that some radios use the PI to determine alternate frequencies for your station. While tuned to your station, the radio is scanning other frequencies on the FM band with the same PI.

If your main signal becomes weak and the other one is stronger, the receiver will flip to the other station with the same PI. This is a great feature, but I have seen cases in which some clusters have never calculated the PI and simply used the factory default on all of their stations. Listeners then called and complained that the radio would flip randomly to another station in the market.

The stations had been set up inprop-

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WRLR Sets Out on Route 66

Low-power station joins forces with UK's Forest FM to travel part of the 'Mother Road'

BY EMILY REIGART

The 1950s was an iconic era, a representative slice of Americana when poodle skirts, cross-country road trips and the beginnings of rock'n'roll coexisted.

LPFM station WRLR of Round Lake Heights, Ill., "The Voice of Lake County," celebrates the decade each week with "The Fabulous 50s Radio Show," produced by not-for-profit community radio station Forest FM in East Dorset, England. The program is offered free to stations and is heard in the Falkland Islands, Hungary, Malta, New Zealand, Alaska, Illinois and elsewhere in the United States.

WRLR President Bish Krywko said that when "Fabulous 50s" hosts Paul Peters and Geoff Kemp, who are based in the United Kingdom, announced their retirement from their day jobs — they co-owned a department store in Lymington, England — the two organizations decided it would be appropriate to sponsor a road trip on Route 66. It was dubbed the Mother Road Tour and

would be heard on WRLR and Forest FM, as well as on the Dave Cash weekend show heard on the BBC in Britain.

Krywko said Peters was keen on seeing the famous cross-country route and "the radio stations and people who had a role in what listeners in automobiles heard while traveling."

Peters said, "Since I was a small kid back in the '50s and '60s I have been mad about radio, and I've always wanted to get over to the States to see, with my own eyes, a real American radio station, and to meet up with radio DJs that know their stuff and who might be able to teach me a few things."

They originally hoped to have Peters, Kemp, WRLR's morning drive host Paul Lepek and technical staff, including WRLR's Steve Sandman,

travel from Illinois to Santa Monica, Calif. However, Krywko says they opted to keep the trip within Illinois, and they may try to complete the trip as originally conceived in the future.

The trip began June 6 at Lou Mitchell's restaurant in downtown Chicago, which has been in business since the 1920s, and the last major stop was in Atlanta, Ill., at the Palms Grill



'Fabulous 50s' hosts Geoff Kemp (left) and Paul Peters (right) broadcast live with WRLR morning drive host Paul Lepek (middle) in Atlanta, Ill.

FROM THE EDITOR



Emily Reigart reports this week on how one low-power FM station took to the road.

— Paul McLane

Krywko says, was promotional: to bring attention to stations like WRLR and Forest FM, which have an old-fashioned but successful take on radio.

Krywko says their kind of radio is informative, entertaining and relevant. "Yes, we want to know what's going on across the nation and around the globe,

Photos by Bish Krywko



Café across from the Bunyon Giant, a giant statue mascot for the restaurant Bunyons, on June 11.

Along the way, they stopped in Joliet, Lincoln, Pontiac, Bloomington and Springfield, Ill., and spoke with Route 66 historians and enthusiasts. A highlight of the tour was a broadcast from Pontiac Route 66 Museum's recreated studio exhibit, which features working '60s radio equipment.

"It's going to be great fun presenting a show from the old 1960s studio at the museum in Pontiac," Peters said prior to the tour. "When I came back into radio a few years ago, after a break of about 20 years, I just could not cope with CD players and computers playing the music. 'Where are the record decks?' I asked the manager at Forest FM. [He said], 'We don't have them these days, in fact we don't like to use CDs, but you can, as your show is what we call a special.' I used to hold my hand on the CD player, just as I used to with the slip mat on the old decks!"

From a business perspective, the Mother Road Tour was both an opportunity and a challenge. The opportunity,

but it is really down the street and across town that listeners want to know about."

THE TECH

The WRLR team is accustomed to doing remotes for all kinds of events, but "on this tour we decided to approach

(continued on page 5)



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Comrex and asked them to loan us equipment too expensive for us to own," Krywko said. "We felt such a unique tour filled with many once-in-a-lifetime remotes required the quality and reliability found in professional gear that is easy to use. They said yes. This is especially important for volunteer, non-professional air talent at stations like ours."

For remotes on a smaller scale, Krywko said the station uses software such as EdCast or Simulcast, digitizes the audio and shoots it out on a cellular service (without the aid of a T1) through the Internet back to the station, where similar software picks up the feed. They then monitor and control two computers, which serve as backups, at the station using software such as LogMeIn or TeamViewer.

Krywko says this method is more than adequate for their usual needs. "We can send CD-quality (stereo 128 bits) while on remotes. We have actually had our engineers say it sounds too good, and folks won't think it's a remote, and we should add some hum or hiss!"

But for the Route 66 tour, Comrex loaned WRLR a portable Access Stereo BRIC IP audio codec for remote use, as well as a rackmount unit for the studio. Krywko says the codec connected to the studio uses the "path of least resistance" — users selected the best available route, whether that be cellular, broadband Wi-Fi, 3G, 4G, satellite, POTS or otherwise.

Chris Zeman, WRLR's Web and automation manager, said prior to the tour that he was concerned about Internet connectivity for the trip's duration.

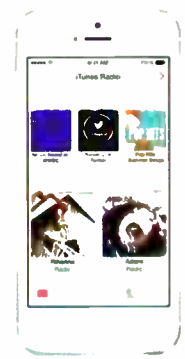
"Cellular coverage can be difficult to predict even with coverage maps from providers," Zeman said, explaining that their accuracy can be greatly affected by "a building between your phone or data card and the tower, [which] can reduce the signal strength to virtually nothing. The odds are even higher of having little-to-no coverage if you're indoors. Ideally, we'll be able to work with our partners along the route to access a broadband connection (i.e. cable or DSL) without outgoing ports or protocols blocked, quite common for remotes at high schools. It's preferable to have mobile broadband available as a backup plan: not your only plan."

When Radio World caught up to the tour on June 10, Krywko confirmed that they had been able to primarily use Wi-Fi for the remotes, although when necessary "Verizon cell service worked great" as a backup.

"This tour has been great as a way for me to see 'Americana' through the eyes of my British co-hosts. They really have an appreciation, a fascination for this way of life and Route 66," said Lepek.

NEWS ROUNDUP

APPLE: Tech developer Apple unveiled its new streaming music discovery service, called iTunes Radio. Apple engineers created a set of featured stations; users can listen to those or design their own, including selecting songs that are trending on Twitter. The service is seen as a competitor to streaming music services like Pandora, Spotify and Slacker. The free service is ad-supported, or ad-free with an iTunes Match subscription. It's set to launch this fall.



FCC REGULATORY FEES: Comments are due this month on the FCC's annual regulatory fees. The commission has proposed modifying how it assesses and collects fees to account for advances in the communications industry, as well as its own staff changes over the years. Depending on whether the agency keeps the current process in place for 2013, or changes how it determines the fees, radio stations could see either a modest increase or a large one compared to 2012. Submit comments to MD Docket 13-140 by June 19 and replies by June 26.

SLACKER: Web aggregator Slacker says Top 40 charts "were designed for your mom." That's why it modernized its music charts to show how listeners are engaging with the music they're streaming. Called the "Slacker EQ Score," the charts will show the number of times a song was started and how many times it was listened to completely. The number of skips, changes and bans is shown as well.

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DIELECTRIC

(continued from page 1)

two years at the Dielectric breakfast meetings at NAB, company management discussed how difficult the business environment had been."

Salek said he had also heard rumors of SPX investor dissent. SPX is a publicly held Fortune 500 company with diversified operations in 35 countries, according to its website.

'UNFORTUNATELY THE PERFECT STORM'

Electronics Research Inc. is a competitor of Dielectric. ERI President Tom Silliman said Dielectric's core business clearly had become more television-centric over the years, with the company enjoying tremendous success during the transition to digital TV.

"Dielectric was still number one in top-mounted or stacked UHF horizontal dual polarized slot antennas," he said.

Silliman said the FCC's freeze on processing TV broadcast applications "was the straw that broke the back of SPX/Dielectric. It was unfortunately the perfect storm."

The freeze has put a strain on the television broadcast transmitter and antenna manufacturing market generally, he said.

"[Dielectric's closing] is a sensitive topic for us because we have partnered on a lot of projects with Dielectric over the years," said Silliman. "We have a lot of skill sets here at ERI where we collaborate with a lot of different companies." Now, he said, ERI has "been getting calls from people who would never talk to us before."

Dielectric's sales were "probably half of what ours were in the global market," Silliman said. "Dielectric had been losing money."

Silliman said SPX is reaching out to potential suitors attempting to sell the company's intellectual property, which includes the Dielectric name.

"They really don't seem to want to sell the company as a whole," Silliman said. "We were somewhat interested in Dielectric, but we are not actively pursuing Dielectric."

ERI, which also manufactures UHF and VHF antennas and has about 160 employees at two facilities in Indiana, now views Shively as its top remaining competitor, Silliman said.

DIELECTRIC WARRANTY INFORMATION

Radio broadcasters are being assured by SPX that the company intends to honor any and all outstanding warranty obligations. In a letter to customers at the end of April, Dielectric General Manager Mark Fichter said SPX plans to use SPX employees and subcontracted services for repair or replacement obligations.

"We will inform customers of the new warranty notification process when we have finalized the specifics," Fichter wrote in the letter.

Dielectric customers are asked to contact the same customer service resources they always have to request warranty services.

At least one engineer expressed apprehension. "Long-term, I have a concern about the availability of replacement parts for existing Dielectric products in the field," said Jim Stanley, owner of Stanley Broadcast Engineering.

Shively manufactures FM antennas, filters, combiners and transmission line. The company sees the market as improving, said Angela Gillespie, sales manager for Shively. "Our sales have increased this year and we had a great NAB. Our backlog is strong and we are all feeling confident that this will continue," she said.

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DIELECTRIC'S RICH HISTORY

Dr. Charles "Doc" Brown founded Dielectric in 1942 and based his earliest products on research he conducted developing transmission lines for early radar systems used during World War II. Dielectric, which took its name from a non-conductive electrical insulator, applied that technology in the new civilian field of radio and television broadcasting.

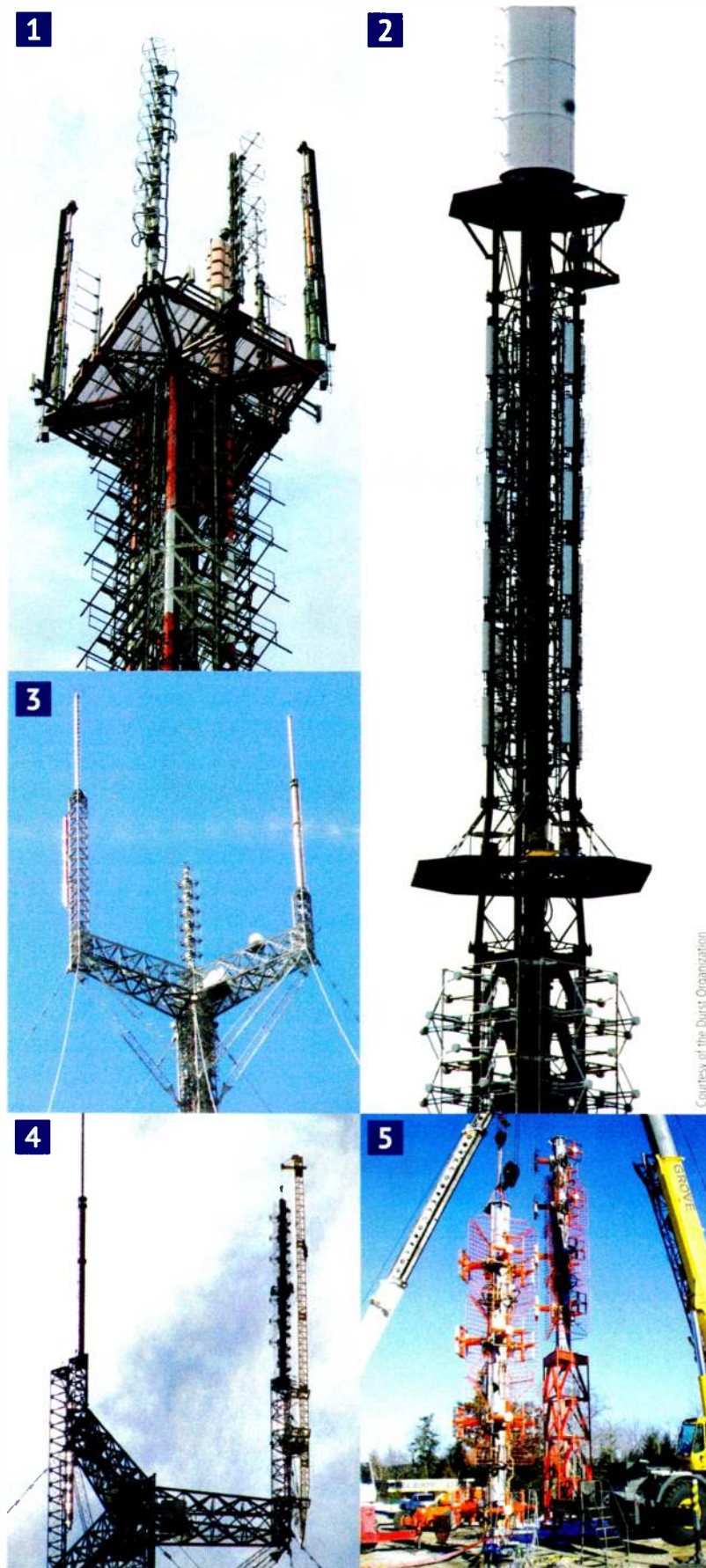
Dielectric became a part of General Signal Corp. in 1977, and then a division of SPX in 1998. The company made some notable acquisitions through the years, including RCA's TV Antenna operation in 1986 and Harris Corp.'s Antenna Products Division in 2000.

Some 57 employees at Dielectric's Raymond, Maine, headquarters will be affected by the closing. They were encouraged to apply for new positions at other SPX divisions.

Dielectric was perhaps best known for its major TV antenna projects, which include systems at the Sutro Tower in San Francisco, 4 Times Square in New York City and the Empire State Building.

Also notable in Dielectric history were photos of first responders hanging an American flag from the destroyed Dielectric TV antenna mast emerging from the rubble of the World Trade Center on Sept. 11, 2001.

At one time Dielectric had facilities in five states, which covered more than 340,000 square feet and employed 600 full-time employees, according to a company bio.



Courtesy of the Durst Organization

1. Mount Royal, Montreal has several FMs on Dielectric DCR-M antennas.
2. This single antenna is the Dielectric VHF antenna at 4 Times Square.
3. Three Cox Radio FMs, three Clear Channel Media and Entertainment FMs, and one non-commercial FM share this Dielectric FMVee master antenna in Riverview, Fla.
4. A Dielectric FMVee master antenna in Tampa, Fla.
5. The top section of the Dielectric FMVee master antenna in St. Louis. Ten stations operate on this system with a Dielectric combiner, with dual 6-1/8-inch transmission lines and dual 3-1/8-inch feedlines for the analog.



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Dan Jackson, engineer for 92.9 FM in Perth, Australia was faced with a unique challenge. Breakfast hosts Paul Hogan and Lisa Fernandez would be cycling for hours in strong winds and pouring rain as part of the 92.9 Kids Appeal for Telethon.

The unique solution was to equip Dan's bike as a mobile production facility. The talent wore wireless mics AND in-the-ear monitors which communicated with receivers and transmitters in a rack bag on Dan's bike.



on-air feed as the trio traversed the winding roads of Perth. How did it all work out? Absolutely flawlessly – the show went on without as much as a speed bump!

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COMREX

RDS

(continued from page 3)

erly with the same PI code. Do not let this happen to you! Each station in the market needs to have a unique PI code.

ALTERNATE FREQUENCIES

AF. Alternative Frequencies, data is helpful for stations that have multiple frequencies, such as a translator or simulcast partner.

If this does not apply to your station, make sure the list is empty.

If this does apply, make sure the frequency entries are accurate. If you do not pay attention to this setting, you are opening yourself up to a situation as described above, in which the receiver may tune to an undesired station if your station's signal becomes weak.

PS CENTERING

Program Service Centering is a popular method used to make the eight-character PS look good on a receiver. If the PS contains fewer than eight characters, RDS hardware and software vendors have had the ability to "add" spaces to the field to make it appear centered.

I was a big proponent of this until Insignia introduced the NS-HD01 portable HD Radio with analog FM RDS support. It has a bug; the PS will not display if the first character has a space. It seems to the user that PS frames are being dropped.

While I am not usually a proponent of catering to a specific receiver issue, I think it is in the best interest that we make the user experience good on this radio, seeing how monumental it was to our industry. Newer versions of the receiver have corrected the issue.

With PS becoming less visible in new products, PS Centering and PS Scrolling have started to lose their relevance.

FORMAT CHANGES

Don't forget RDS when you change station format. This might seem obvious, yet I have seen stations overlook it. Plan to migrate RDS (and other data services) as appropriate. Include these migrations in your project checklist.

If you cannot dedicate resources to switch your RDS during the format change, at least make sure the RDS encoder is offline and not injecting the subcarrier on the air. Revisit the RDS as

soon as possible.

Note: Stations leasing RDS bandwidth or providing traffic information via TMC should not disconnect their encoders due to a format change, because you are required to always be transmitting RDS TMC data.

Items to inspect and review during a format change are the Program Type (the format), Program Identification (did the call sign change?) and default Program Service/RadioText messages. Make sure that you replace all references to reflect the new format.

I have seen stations that display the old station name and format information not just for hours but sometimes weeks. Likewise, if you do plan your RDS for the new format, be sure it does not get on the air before the format does. That could be a spoiler to your surprise launch.

MONITOR YOUR STATIONS

When I am travelling, I periodically scan the FM dial to see what other stations are doing. I have seen problems with a station's RDS implementation and contacted the station; the people there typically have no idea the problem exists.

Did your automation system lose its data link to the encoder? If so, you might be stuck displaying old song data, although some solutions are in the marketplace to address this and similar issues. There are also some monitoring systems on the market to alert you if

your RDS data has a failure.

Not all of us have these tools available to us, but there are some simple offerings that every station should be able to afford to help keep an eye on RDS data and its performance. In many situations where I observed problems, I found that the station engineer did not have an RDS radio. Get one. There are many on the market, some now under \$50.

Ask your GM to buy a few inexpensive RDS-capable receivers for you and other key personnel.

Ask your GM to buy a few inexpensive RDS-capable receivers for you and other key personnel. Does the PD have a radio? He or she should be watching. Consider getting a unit to mount in the air studio so the personalities can keep an eye on the data.

If you do not have RDS in the car, consider getting a radio that does. Do your homework though; it can be difficult to find in the aftermarket automotive receiver space these days. If you are buying a new car, it is relatively easy to find a factory installed radio with RDS.

DIELECTRIC

(continued from page 6)

Since Shively's main focus is on FM, Gillespie said, the manufacturer has been able to adapt to the changing international market. "Maybe it's a TV issue, but we haven't felt a major impact," she said. The company, based in Bridgton, Maine, is a division of Howell Laboratories.

She declined to discuss whether Shively is looking at purchasing any of Dielectric's components.

Jampro Antennas Inc. officials declined to comment on Dielectric's decision to cease operations. Products include FM, UHF and VHF antennas, combiners, filters, patch panels and towers. On its website, Jampro calls itself "the oldest broadcast antenna company in North America."

An SPX spokesperson declined to comment on a possible sale.

WILL THE NAME LIVE ON?

Dielectric's demise means radio broadcasters will now have fewer choices for their FM antenna design and manufacturing needs, according to several broadcast engineers. Clear Channel Media & Entertainment has used Dielectric in the past, according to Jeff Littlejohn, executive vice president of engineering and systems integration.

"While we were disappointed to see Dielectric's announcement, there are still options for FM broadcast antenna manufacturers to choose from," Littlejohn said.

Clear Channel typically selects antennas based on their fit for each individual project, according to Littlejohn.

"I don't expect this will have a major impact. However, we hope that someone will purchase the Dielectric line and

continue manufacturing," Littlejohn said. "Dielectric has provided some good solutions that we'd like to see continue and of course, we'd like to retain support for past purchases."

Greater Media Vice President for Radio Engineering Milford Smith said Dielectric's absence will have a huge impact on TV but considerably less on radio broadcasters. "We have not purchased a Dielectric FM antenna product lately. I don't believe we have any Dielectric products currently in use at Greater Media, save a few power monitors," Smith said.

Greater Media, which has a long-time relationship with ERI and uses those products almost exclusively, has some major projects in the pipeline, but the Dielectric news should not make an impact on those, Smith said. "I don't see it as a big deal but I am always sorry to see a competitor in any area of broadcast equipment go away. Competition generally makes for sharper pencils and a better marketplace," Smith said.

All of the experts contacted for this story think the move will affect TV broadcasters more than radio station operators.

"I see them as more of a TV supplier," said Mario Heib, a consulting engineer and occasional RW contributor. "An orphaned company [like Dielectric] will sometimes be absorbed by another company to support its product. That might happen here."

Grabbing additional FM broadcast antenna market share will likely be ERI, Jampro, Shively, SWR, Kathrein and possibly a few low-power manufacturers, said Bill Godfrey, engineering associate with Kessler and Gehman Associates, an engineering consulting firm.

Cavell, from Cavell, Mertz & Associates, said, "I rather expect that the relative radio market positions of ERI, Jampro and Shively will not materially change. I believe the key for each of these companies is to continue to show customer focus and to concentrate on service and support."

GET THE MOST OUT OF RDS

This is the last in a series of occasional articles to help you get the most out of RDS. Read them all at: radioworld.com/RDS. We will continue to update readers as new uses of the technology evolve.

You can spend as little as \$50 or as much as a few hundred dollars getting access to RDS radios.

I have several at my desk that I use to listen to my stations while I work. I have RDS in my car, as well. You do not have to watch it constantly, but keeping your eye on it and being aware is better than ignoring this popular feature.

Remember, when your station is not transmitting RDS properly, your station's credibility and image suffer. For those who are selling advertisements via RDS, or if your station is leasing RDS bandwidth for traffic or other uses, this can cost you money. You probably listen to your stations on a daily basis; just make sure you are using a radio with RDS.

Alan Jurison is a senior operations engineer for Clear Channel Media and Entertainment's Engineering and Systems Integration Group. He holds several SBE certifications including CSRE, CBNE, AMD and DRB. His opinions are not necessarily those of Clear Channel or Radio World.



SIX REMOTES IN EVERY BOX



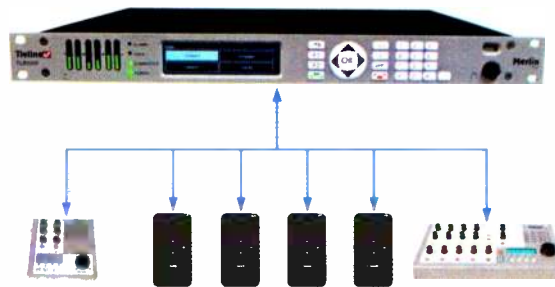
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SUMMER of PRODUCTS

KINTRONIC LABS HAS NEW PHASOR CABINETS

A new family of antenna phasor cabinets is available from Kintronic Lab s. The company describes them as light and economical for "budget-minded" AM owners.

Also new from Kintronic Labs is an antenna tuning unit series. The company describes these also as economical but adds that they will have the same functionality and typical wide audio bandwidth performance as higher-priced models, but without as many features.

The company also offers FM antenna repair and rework along with field service, including FM antenna system sweeps to identify transmission deficiencies.

INFO: www.kintronic.com



BROADCAST BIONICS SHOWS INTERACTIVE FEATURES FOR PHONEBOX4

Version 4 of the PhoneBox talkshow system from Broadcast Bionics now features the On Air Social Interaction System, or OASIS.



PhoneBox4 with OASIS brings interactivity to the radio studio by managing Twitter, Facebook, Google+, phone calls and codecs in one piece of talkshow software. The result is a telephone system that incorporates social media.

The system enables smart filtering of tweets, blogs and posts as well as call routing. PhoneBox4 ties to the broadcaster's play-out system, giving users access to artists' official Facebook and Twitter pages. Equipped with features to control phone calls, the company says that PhoneBox4 sports a new user interface with touchscreen capabilities.

PhoneBox4 lets broadcasters be a part of what's going on outside the studio — follow hot topics, search celebrity tweets, use for readouts, and tweet back from the studio, for example. It also features SMS and email.

INFO: www.bionics.co.uk



DVB-T2 AND DAB ANTENNAS FROM ALDENA

The new AQP040442x VHF band III panel antenna from Aldena is equipped with four dipoles and can be configured for vertical, horizontal, circular or mixed polarization. Able to broadcast two simultaneous services, such as DTV and DAB, the antenna is described as suitable for any climate.

Also new from the Italian firm is the ATS antenna series. ATS antennas have an omnidirectional pattern over the entire UHF band, are top-mounted and plug-and-play, with low VSWR, weight and windload. ATS antennas are available with various max power and gain (from 1 kW up to 5 kW and from 5.5 dB up to 8.5 dB).

Aldena's EMLAB antenna system design software now supports the ISDB-T standard. EMLAB aids users in the planning of SFN/MFN networks

(analog or digital signals) by providing area coverage calculations, interference analysis and SFN problem detection.

INFO: www.aldena.it

BURK UPGRADES ARC

Burk Technology, maker of remote control systems, is offering a new touch-screen controller, the ARC Plus Touch.

The transmitter remote control (shown) features a full-color LCD touchscreen for on-site monitoring and control. It includes built-in macros, virtual channels, Web/smartphone interface and all Version 3 ARC Plus software upgrades. Burk says it is compatible with Plus-X and PlusConnect Ethernet I/O devices. A voice/DTMF dial-in and dial-out is available with ESI Plus optional telephone interface hardware.

Also new for Burk is the Plus-X RP-8 Adapter. This adapter connects up to eight existing Sine RP-8 interface panels to an ARC Plus Touch or an existing ARC Plus system via LAN/WAN. The company says that it allows an easy, cost-effective upgrade to ARC Plus from Sine by eliminating rewiring.

INFO: www.burk.com



IP. It's the new ISDN.

Meet Z/IP ONE: The "Z" stands for Zephyr.



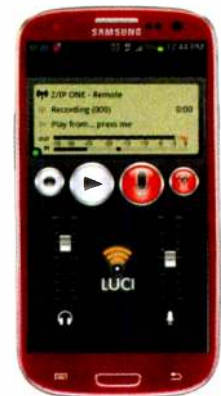
It's the question on everyone's lips: "What comes after ISDN?" The answer: Z/IP ONE, the Telos Zephyr for IP connections. Broadcasters fell in love with the original Zephyr for its rock-solid reliability and superb audio; Z/IP ONE brings those same qualities to IP remotes.

Is IP reliable? TV networks say so - they use it for HD video backhaul. And Z/IP ONE is packed with IP-codec "smarts" to ensure reliability, even over the public Internet. Agile Connection Technology adapts to network conditions, delivering audio quality as good or better than ISDN despite packet loss and jitter. Genuine, high-performance MPEG codecs from Fraunhofer for exceptional fidelity — no lame knock-off codecs. No latency build-up, re-negotiation or fiddly adjustments: Z/IP ONE just works.

There's more: Z/IP ONE incorporates SIP, N/ACIP, and IPv6 standards. The worldwide Z/IP Server connection service helps traverse NAT routers and tricky firewalls. And now, you can do great-sounding handheld remotes using LUCI LIVE smartphone and tablet apps. All of which makes Z/IP ONE perfect for live remote broadcasts, whether concerts, talk show remotes, off-site talent — even full-time STL links or RPU backhauls.

Experience the convenience and flexibility of IP.
Z/IP ONE: the best way to hear from there.™

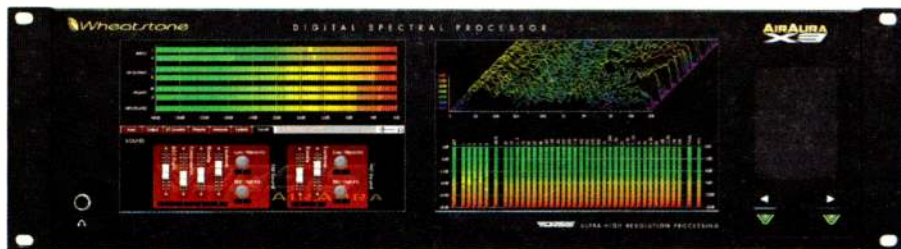
High-quality remotes are right in your pocket.
Z/IP ONE now connects to LUCI LIVE smartphone apps for wideband audio on-the-go.



WHEATSTONE ROLLS OUT THIRD-GEN PROCESSOR

The audio processing arm of Wheatstone has debuted its third-generation AirAura X3 spectral audio processor.

The new final clipper is said to create extremely competitive loudness while minimizing listener fatigue. Another technology helps extend perceived stereo coverage; a third helps hide coding artifacts that might be present in stereo source material.



"Some audio processors precondition audio to make it more favorable for a codec's input, but no on-air processor had ever been developed with features specifically designed to help already coded stereo audio sound better after the fact," Wheatstone states. AirAura X3's PostCode Tool helps minimize audibility of coding artifacts in stereo material without degrading the listening experience. "By reducing the swishing, swirling, grainy artifacts of coded audio, listeners will be able to listen as long as they like with no fatigue."

Among features new or improved are five-band AGC with Sweet Spot Technology tuning capabilities; 31-band limiter algorithms; left/right analog output routing for FM and HD processing; and an equalizer that offers both parametric and Baxandall-style shelving EQ.

The company highlights a new bass management system with enhanced tuning features; new stereo generator with DSB and two SSB encoding methods; new Guru GUI tuning capabilities; and several other features.

Also in processing, Wheatstone introduced the FM-531HD, an FM/HD on-air processor that includes the multiband selectivity of the company's 31-band AirAura but in a smaller, more affordable package.

INFO: www.wheatstone.com

SOUND TREATMENT FROM ACOUSTICAL SOLUTIONS

Whoever said that acoustical treatment was boring? Certainly not the folks at Acoustical Solutions, whose offerings this summer include new Whisperwave "Clouds" (shown).

Whisperwaves are designed to be suspended from a ceiling. The company says that their curved design adds to movement and style to any space while absorbing noise from above. They have a Class 1 fire rating and 0.85–0.95 NRC.

Sizes range from 2 feet x 4 feet x 2 inches to 4 feet x 8 feet x 3 inches and in basic white or light grey or HPC coating colors — almond, black, ivory, light blue, light grey, medium grey or white.

The company also offers AcoustiArt sound absorbing panels, customized panels that can have most any hi-res graphic or photo screened onto them. They are flexible in the size and shape of the panel. The panels have a Class 1 fire rating and an NRC of 0.85–1.15.

INFO: www.acousticalsolutions.com



AUDIOSCIENCE ADDS HD RADIO/DAB TO TUNER CARDS

AudioScience Inc. has added HD Radio and DAB/DAB+ functionality to its ASI8821 and ASI8921 tuner cards series.

The ASI8921-5500 (PCI) and ASI8821-5500 (PCI Express) contain eight tuners that may be programmed independently to receive analog FM, HD Radio FM or any channel from any DAB/DAB+ multiplex in Band III (168 to 240 MHz).

President Richard Gross said in the announcement, "HD Radio is getting increased visibility in the marketplace and the multi-program capabilities make it a compelling option for many consumers. In Europe, Australia and various Asian countries, DAB and DAB+ continue to make inroads and are in some instances already displacing analog FM broadcasts."

In HD Radio mode, each tuner can decode and stream the HD Radio Program-Associated Data and RDS/RBDS data for analog FM. HD Radio multicast is supported, allowing the audio and PAD stream to be switched between the Main Program Service (MPS) and Secondary Program Services (SPS) under software control.

In DAB/DAB+ mode each of the eight tuners can decode and stream a channel from any available digital multiplex including associated Service ID, Component ID, Ensemble ID and available PAD data.

Recording formats include PCM, MPEG-1 layer2 and MP3. Using MRX, the company's Multi-Rate miXing technology, each stream can be recorded at any sample rate between 8 and 48 kHz.

INFO: www.audioscience.com



OMB RAISES ITS EFFICIENCY

Transmitter maker OMB Broadcast introduced a new, more efficient, 5 kW FM transmitter at the spring NAB Show.

The company says that the new higher efficiency transmitter was designed around and is made with three independent power supply units of 3 kW each, with the idea of overprovisioning this part of the amplifier and adding additional protection with internal transient or surge arrestors built into the amplifier.

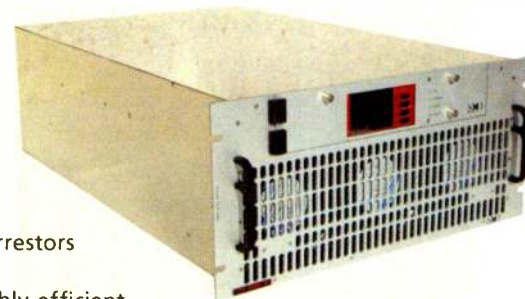
The RF block is made of six highly-efficient 1,200 W amplifier modules, with ratings of up to 80 percent RF efficiency, according to the company.

The modules are fed with individual DC circuit breakers. A low-pass filter reduces the harmonic and spurious emissions to levels lower than those required by international standards such as those defined by the CCIR, FCC and so on. The protection and control system is made to log all working events in real time. The amplifier also has analog and digital telemetry, foldback protection and very fast power shutoff in case of an alarm.

The TFT color display screen allows monitoring and control of working parameters like power input and power output, reflected power, the six current levels and voltage of the power supply units.

The variable speed air cooling system was designed to react to the temperature and thus consumes less energy and reduces noise.

INFO: www.omb.com



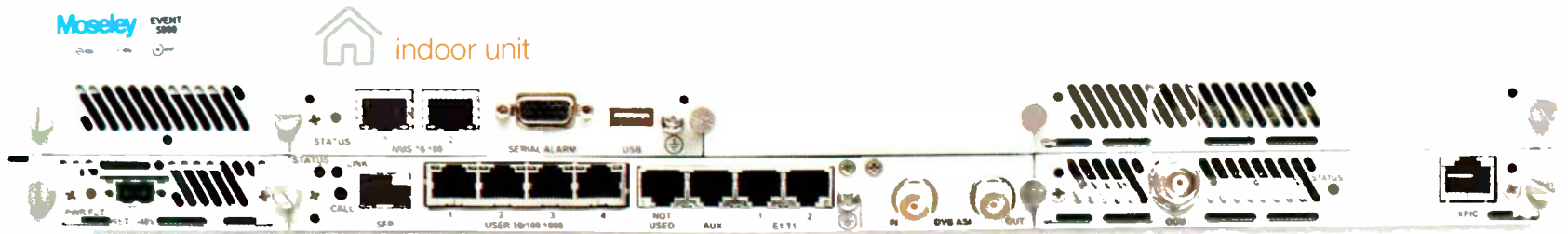
HIGH CAPACITY EVENT STUDIO TRANSMITTER LINKS



TAKE ADVANTAGE OF WIRELESS HIGH PAYLOAD STL/TSL CAPACITY

Moseley EVENT STL/TSL systems provide up to 155 Mbps combined IP, T1/E1 payloads. Multi-station clusters can convey multiple linear uncompressed audio pairs for a truly cost-effective STL/TSL link. Connect your existing T1/IP audio hardware directly into the EVENT system, or use Moseley Rincon for your audio payloads. An optional DVB-ASI module is available for full duplex video.

EVENT systems are fully bi-directional including a Software Defined Indoor Unit (SDIDU) and Outdoor Unit (ODU), eliminating the need for costly waveguide hardware. The ODU is available in the license free 5.8 GHz band, or licensed 11, 18, or 23 GHz bands. Appropriate external antennas are selected based on path length.



INTELLIGENT SYSTEM DESIGN

Spectrum-scalable digital radios with user-selectable data rates enable broadcasters to have greater flexibility in STL planning and future growth. The integrated T1/E1 and Ethernet interfaces allow for a combination of T1/E1 and IP packet data.



IP APPLIANCES AND APPLICATIONS

Offer IP transmitter control, surveillance security, and site monitoring to reduce downtime, and protect valuable station assets while saving travel time to the site.

REMOTE MIRRORED SERVERS

From the transmitter site, offers backup of business records and programming content to get you back on the air quickly in the event of a studio outage.

EMAIL AND INTERNET ACCESS FROM THE TRANSMITTER SITE

Saves engineers time accessing manuals or technical support from manufacturers during maintenance sessions.

SIMPLE NETWORK MANAGEMENT PROTOCOL (SNMP)

Full SNMP package with GUI provides easy monitoring and configuration changes.

Contact The Moseley Sales Team to Custom Configure Your EVENT STL/TSL Today!

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TELOS DEBUTS HX6 PHONE SYSTEM

The Hx6 made its North American debut. The six-line phone system from Telos Systems offers Digital Dynamic EQ, ACG and caller audio processing by sister company Omnia. The company highlights its "stellar" audio quality, Livewire connectivity, VSet phones with high-resolution color screens and twin hybrids for high-quality conferencing.



The Hx6 system works with POTS (analog) or ISDN (digital) phone lines.

Digital Dynamic EQ and adjustable smart-level AGC are said to provide spectrally consistent audio from call to call, even on calls from "notoriously tough" mobile handsets. Telos also highlights its studio adaptation and a subtle, inaudible pitch shifter that work together to prevent feedback in open-speaker studios. Caller override improves performance and allows precise adjustment of the degree to which the talent audio "ducks" the caller audio.

Also at Telos, the Z/IP One broadcast codec for remotes over IP now works with Luci Live smartphone software. This makes high-quality field remotes possible with Android or Apple smartphones, including iPod Touch, over WiFi, 3G and 4G connections.

And Telos is expanding its Z/IP Server service, adding server nodes online in multiple locations, among other things; it said this will improve the reliability and availability of the free service.

INFO: telos-systems.com

VIDIGO HELPS CREATE APPEALING VIDEO CONTENT

VidiGo says its offering called Visual Radio enables engaging radio content for multiple platforms like TV, Web and mobile. Features include automatic camera switching, dynamic digital video effects (DVE) and graphic overlays with real-time XML updates and audio control.



"Visual Radio turns radio broadcasting into an entertaining and compelling visual show," the company promises. "It is a full software-based workflow that automates an entire video production. The advanced automation possibilities, like automatic camera switching based on measured audio levels and the Sync Video Clip Starter, allow radio stations to create professional video without the need for extra staff."

The company calls itself the only supplier offering a completely software-based product line for live video production based on standard IT hardware.

UK station Fire Radio is among those using the system to reach smartphones, tablets and connected TVs with content.

INFO: www.vidigo.tv



DAVICOM EXTENDS YOUR CONTROL

Davicom is out with Version 5.50 of its firmware/software for use with remote monitoring, alarm and control products.

Features include an iOS app for Apple devices; on-board SNMP V3 Manager and Agent; direct Web access to on-site peripherals; PPP-to-IP bridging for backup communications; DTMF macros; and resizable workspace screens. The image shows Davicom Direct Web access to on-site peripherals available in the new firmware and software version.

Also new is Davicom's DADS-01, an AES/EBU audio detector switcher designed to be used as an automatic or manual switch for AES/EBU digital audio signals.

The company says that it offers all the necessary inputs and outputs to be controlled and monitored by other equipment such as the Davicom remote site monitoring and control systems. The DADS-01 has advanced audio level detection algorithms that enable thresholds with delays to be programmed on each of its three input sources — two digital, one analog.

INFO: www.davicom.com

LOGITEK MOSAIC POWERS UP

Logitek Electronic Systems released an updated version of the Mosaic console, first introduced in 2005 and used in radio and TV on-air and production.

President Tag Borland called the update "a substantial improvement of our flagship product," with improved user look and feel, and easier access to new features of streaming consoles and networked audio systems.

The Mosaic now features OLED screens throughout; screens have been added to the Softkey module along with Selector functions; overall functionality was updated, with easier access to multicolor on/off and selection buttons and better illumination of controls.

Frame sizes are available from four to 24 faders; the consoles now feature table-top enclosures that can be placed anywhere or moved when not needed. Logitek said the new model consumes about a third less power. Two styles of meter bridges may be used along with the new vMix+ utility.

Also new is an update to the AE-32 Audio Engine platform to allow operation via AoIP. The card enables networking of the AE-32 with JetStream AoIP systems and allows the AE-32 to communicate with hard-disk systems using the JetNet network conduit. Contact the company for details.

INFO: www.logitekaudio.com



The Perfect Translator.



bw broadcast

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RBRX1 FM RE-BROADCAST RECEIVER

Sensitivity and selectivity like never before gives superior reception even at the toughest translator sites. Radio World's 'Cool Stuff' winner, the RBRX1 has set new standards for FM reception around the world. This box is the industry standard and for good reason.

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V2 FM TRANSMITTER RANGE

Radio 'Pick Hit' winning V2 FM Transmitters are packed with features to improve sound quality & reliability. Built in 4-band DSPX audio processing, Ethernet control and FSK IDer in every transmitter eliminates the need for any additional equipment.

Our customers think so too.

"Our receiver continues to perform exquisitely in a difficult translator application. It out performs every other receiver we know!"

Ian Perry, USA

"A top of the line relay receiver for a translator in a congested signal area."

Robert Reymont

"Our RBRX1's are fantastic. We have some very difficult sites and these are the only receivers that pull in the signal and give a clean re-broadcast."

Juan Turner, Energy FM

Contact SCMS for more information

1-800-438-6040

www.scmsinc.com sales@scmsinc.com



BROADCAST ELECTRONICS LAUNCHES NEW TRANSMITTER, EXCITER

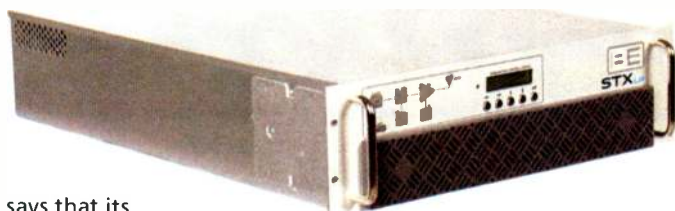
Broadcast Electronics says its new STX LP Generation II FM transmitter is the first in the world to broadcast a DRM+ and an analog FM signal simultaneously through a single transmitter.

The STX LP Generation II promises better performance, flexibility, reliability and value than previous transmitters, the company says. This second-generation STX LP includes enhancements to provide more redundancy options and more value such as an integrated digital exciter, improved audio performance equal to the company's FXI



Series, improved AC to RF efficiency, SNMP Level 3 Control, HD and DRM+ capability, quieter fans, and

a fan mute option in main/alternate or N+1 configurations.



The company says that its new STXe exciters have a small footprint and are operational in FM, FM+HD Radio, HD Radio only, DRM+ only or HD Radio+DRM+ modes. They range in power from 100 mW to 250 W. The STXe exciter is now standard in BE's S and T Series FM transmitters.

INFO: www.bdcast.com

GLENSOUND TAKES UP HD VOICE

GlenSound's Recce HD broadcasters' mobile phone uses the 7 kHz HD Voice spec to provide greatly improved voice quality. It is a mixer combined into a small, portable, battery powered unit. Three announcers can connect, for portable sport and news reporting remote unit for TV and radio. GlenSound notes that T-Mobile is supporting HD Voice in its 3G network.

Also new from GlenSound is the GSNAKE 400M, a 16-channel modular analog/digital audio snake. GSNAKE channels are paired and can be in any combination of sends or returns, in both analog and AES. Configuration is by moving the modular cards around; no PC is required. The audio link is 48 kHz/24-bit digital and can be via coax (1,640 feet or 500 meters), Ethernet on Cat-5 (328 feet or 100 meters) or fiber.

GlenSound says the Solo is a simple announcer's interface providing a switched microphone input with compressor/limiter and a headphone output from a single external input. It gives the user independent control of the headphone level and the outgoing microphone on/off or on/cough.

The TopHAT M3 is a portable headphone mixer with multiple headphone outputs. Used for talent and camera monitoring in OB environments, it has four inputs that feed two separate mixers. Each of the two mixers has three separate 6.35 mm headphone outputs. The unit includes a switched talkback mic input and can be battery or external DC powered.

INFO: www.glenSound.co.uk



USB AND CONDENSERS FROM AUDIO-TECHNICA

Audio-Technica has new a range of microphones for the summer, from project studio USBs to high-end studio models.

The AT2020USB+ (shown) is a USB cardioid pattern condenser USB mic; if the name sounds familiar it is. The AT2020USB+ is an upgrade of the AT2020USB. It has a USB output with a 16-bit, 44.1/48 kHz onboard digital converter. A headphone output allows for monitoring. A built-in mixer allows for basic mixing. It is compatible with Mac OSX and Win XP/7 software. It also ships with a desktop tripod stand and USB cable.

The AT5040 cardioid pattern side-address condenser is the "ultimate studio microphone," according to Audio-Technica. It's hand-built, with four large rectangular diaphragms that A-T says totals approximately two inches. Internal shockmounting isolates the element. It ships with an external shockmount and a carrying case.

INFO: www.audio-technica.com



BARIX DEBUTS PS1 INTERCOM

Fresh from the NAB Show is the Barix Annunicom PS1 (shown), an IP-based intercom system.

The PS1 is designed for simple intercom jobs where IP connections are available. Its hardware includes an onboard mic and speaker, along with power-over-Ethernet. Its controlling software immediately locates itself and other Annunicoms on a network. With two or more PS1s, no other equipment should be needed to set up an intercom network.

PS1 supports MP3, PCM, G.711, G.722 encoding and adds AACplus and Ogg Vorbis decoding. It also has a headphones output and mic input.

Barix also has its new Real-Time Clock. This self-sustaining reference clock plugs into any device with an RS-232 serial port, including but not limited to Barix IP audio and control products. The Barix Real-Time Clock (RTC) maintains time independent of a network-based time reference and provides that time information immediately after a device startup. Even when disconnected it maintains time independently.

INFO: www.barix.com



BURLI UPGRADES NEWSROOM OFFERINGS

Burli Software has updated its newsroom software.

Recently-released updates include expanded Twitter support, podcast subscriptions, improved GPIO integration with Axia systems and support for a greater range of audio formats — including audio formats used by iOS and Blackberry 10 mobile devices.

Burli this spring also showed expanded Virtual Newsroom tools to help broadcast chains and groups manage news content across markets and bureaus with greater ease and improved single sign-on tools for newsrooms.

The company says that Burli Software has been producing its Newsroom System — which has helped journalists manage, edit and broadcast the news on traditional and digital platforms worldwide — for more than 15 years.

INFO: www.burli.com



Look for more Summer of Products coverage in upcoming issues.

AFTER A DEMO, GMS FIND THE BUDGET FOR AN OMNIA.11



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Design a Backup STL ...

... and get what every engineer wants: happy customers

WORKBENCH

by John Bisset

Read more Workbench articles online at radioworld.com

The call came in at about 2 p.m. The station was off the air. A quick listen confirmed that the transmitter was on, yet the station was broadcasting no audio.

The STL to this transmitter site is via telco lines, so the staff placed a call to AT&T. The chief then headed to the transmitter while contract engineer Jim Schultz went to the studio, just to make sure it wasn't a failed audio processor.

Over the years, "disaster recovery" is something to which Jim has accustomed himself. He says their first idea was to connect an MP3 player, pre-preprogrammed with some IDs, generic PSAs and music, at the transmitter site until

AT&T could scrounge up someone who had a clue about program circuits.

Of course, that wouldn't happen quickly. With afternoon drive only a couple hours away, it was time to come up with a more immediate solution.

Turns out the station's stream was up and running just fine, so why not use a 4G smartphone to feed audio to the transmitter?

One TRS (tip-ring-sleeve) mini plug and two XLR connectors later, the station was back on the air, with the smartphone's output feeding the audio processing at the transmitter. And the station sounded pretty darn good.

Five hours later, AT&T replaced a power supply in one of its central offices, and the program lines were back in business.

A smartphone is certainly not the ideal STL, but the station didn't miss a spot and the GM was quite happy. Isn't that what every engineer wants: happy customers?

As for the commercials: It seems that you can legally air the stream but not stream the air. There were only two



Fig. 1: Dave Radigan uses a switcher to select backup feeds to his transmitter.



Fig. 2: A streaming receiver provides backup audio should the main STL fail.

EVEN THE BEST PERFORMING CLASSICS DESERVE TO RETIRE.



Upgrade your ARC-16 to ARC Plus Touch in less than an hour.

We all love the ARC-16, but there's new technology it just wasn't designed for – like Burk's exclusive **smartphone app** that lets you dial-in, diagnose, and resolve problems remotely.

Switchover is painless: Swap plugs and run a quick configuration program. **Existing wiring stays put.**

SOLUTIONS YOU CAN USE. EXPERIENCE YOU CAN TRUST.

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advertisers whose spots were missing from the stream blacked out, and the GM cleared any spots from those two advertisers during the time the station aired the stream.

Jim is not the only engineer who has thought about using streaming as a backup STL.

Dave Radigan, president of WEBO (AM) in Owego, N.Y., took his backup system a step further. Using an audio switcher, pictured in Fig. 1, Dave can select from his stream, a utility feed or the phone. Fig. 2 shows Dave's streaming radio, which feeds the switcher.

You can't have too many backups!

Jim Schultz also stumbled across a handy item for his "bag of tricks."

He had purchased a Tascam DR-40 recorder but was disappointed that its mic level input was fixed at -19 dB, which was sufficient for use with normally hotter condenser microphones, but way too low to give a decent signal-to-noise ratio with popular dynamics like the EV RE50, EV 635 or Shure SM58.

Two products that correct this problem are Cloudlifter and the Fethead. Each offers 20–25 dB of gain and run on phantom power. Originally designed to help low-output ribbon mics, these are a perfect solution to the gain issue. Their websites can be found at radioworld.com/cloudlifter.

Jim writes that he has no idea why a mic level input would be set at -19 dB; perhaps the designers felt the recorder would be used mostly for recording loud music. Jim has a Tascam recording codec that has the same issues on the Mic input.

Reach contract engineer Jim Schultz at schultzcomm@optonline.net.

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 44 years in the broadcasting industry and is still learning. He handles West Coast sales for the Telos Alliance. He is SBE certified and is a past recipient of the SBE's Educator of the Year Award.

MONITOR LIKE A PRO WITH INOVONICS



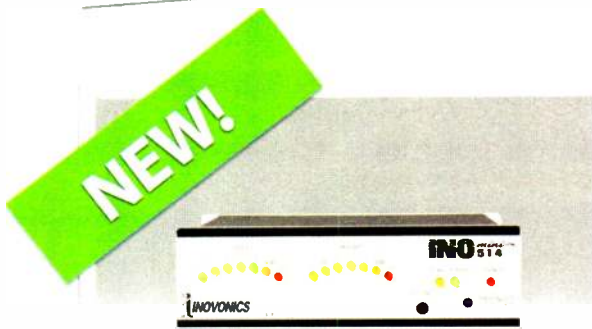
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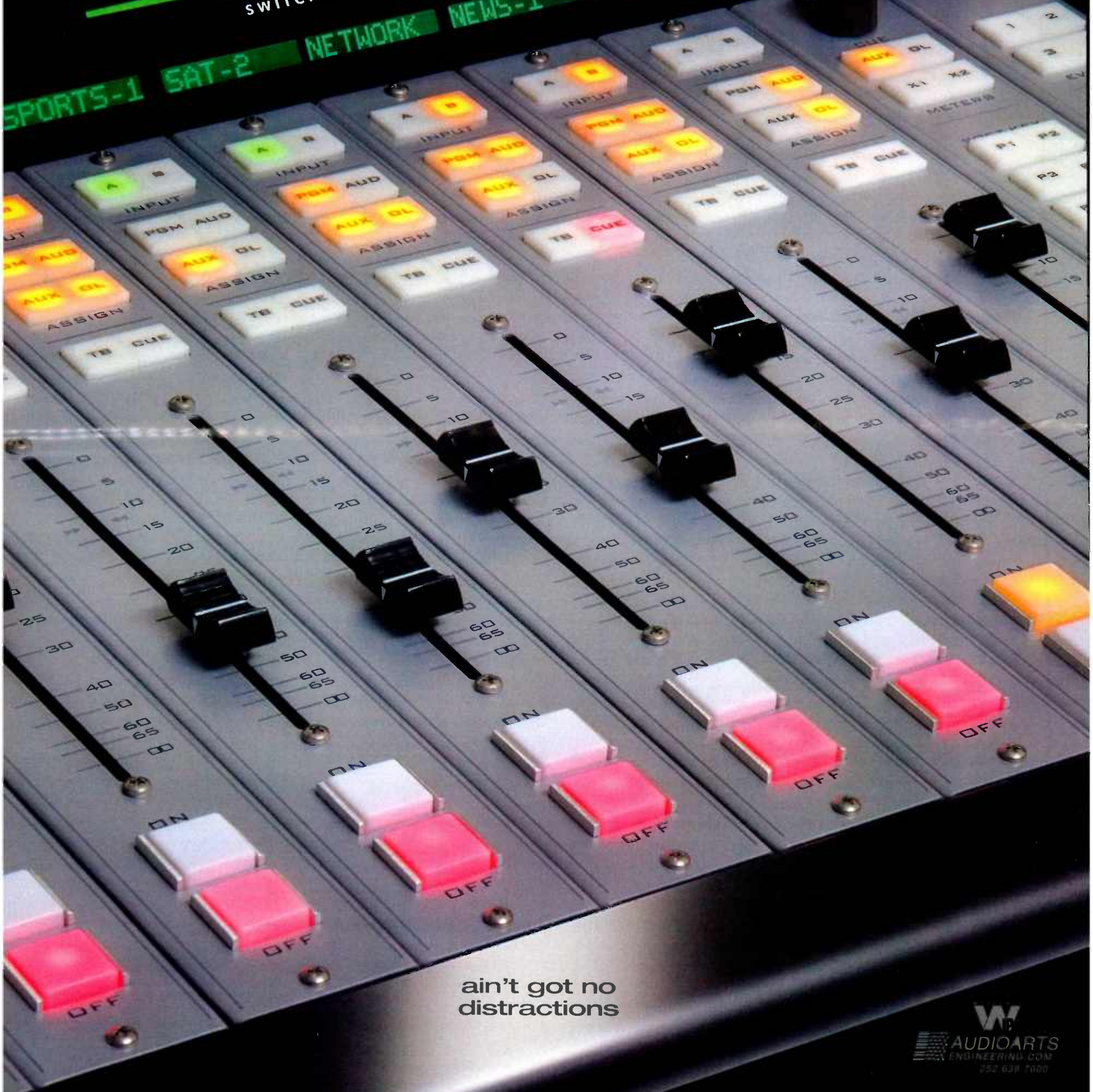
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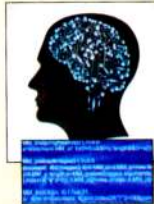
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World Radio History



Conference Asks, 'What Is Radio?'

Academics, journalists and radio vets explore the existential question

BY JENNIFER WAITS

Radio practitioners, theorists and fans convened in Portland, Ore., in April to investigate the theme, "What is Radio? Exploring the Past, Present & Future."

Unlike many radio conferences I've attended, "What is Radio?" had an academic focus. Hosted by the University of Oregon School of Journalism and Communication, the conference largely comprises panels of academics from all over the world, with journalists, writers and working radio professionals speckled in.

The event was accessible to a non-academic, radio-loving audience, though. It was part of an ongoing series of "What is?" conferences (the first two focused on film and television); and the topic of radio was chosen, according to co-organizer Janet Wasko, "because of changes going on with radio, lack of attention given to the medium, and the intense interest and expertise of ... colleagues, Peter Laufer and Michael Huntsberger."

For me, it was an incredible few days of in-depth, intellectual conversations about a wide array of radio-themed topics.

AUDIO THAT CRAWLS INSIDE YOUR HEAD

The conference, held at the George S. Turnbull Portland Center, kicked off with an evening keynote by reporter and talk show host Charles Jaco. He discussed the role of storytelling in radio and asked the audience to consider what makes a news story a "radio story" vs. a "television story."

As an example, he cited the famous example of the 1960 Kennedy-Nixon presidential debate. Among radio listeners, Richard Nixon was generally thought to have won, but among television viewers, John F. Kennedy was pronounced the debate winner.

Jaco explained that on television, Nixon "appeared shifty-eyed" and that this "visual narrative" is what caused him to fail among viewers. According to Jaco, how stories are told on radio is key. Without a narrative, radio isn't much more than what we get with an iPod.

Narrative, Jaco continued, is everything to religious stations, talk stations and sports stations; but he feels it has fallen by the wayside at many commercial radio stations. He argued that much of today's great storytelling on radio occurs on noncommercial stations.

A feature of great storytelling is that the listener is an active part of the process. In television, on the other hand, "nothing is left to the imagination." An absence of visuals can actually be a strong suit because "radio storytelling crawls inside the head of the listener."



Crowd at the 'What Is Radio' conference.

Photos by Jennifer Waits

A MULTI-FACETED MEDIUM

During the bulk of the conference, several simultaneous panels competed with one another, including sessions about radio in India, economic and regulatory issues, radio for education, Spanish-language radio, college radio, the impact of the 1996 Telecommunications Act and the future of radio. Presenters were asked to begin their talks with an anecdote about their first experience with radio, so throughout the conference we were treated to personal stories about why radio can be alluring.

University of Wisconsin-Milwaukee lecturer and broadcast veteran Christopher Terry shared a harrowing tale about his refusal to leave his college radio station during a tornado, telling the crowd that campus police dragged him away kicking and screaming.

At least two presenters mentioned an early fascination with Dr. Demento.

One of the more riveting panels covered the development of a national prison radio network in Britain. Phil Maguire of the Prison Radio Association talked about how the network's award-winning programming helps to rehabilitate prisoners. Although its programs are heard only within the confines of prison, we learned that one program, "The Victim's Voice," was rebroadcast over BBC Radio 4. More information about the network can be found at www.prisonradioassociation.org.

WEIRDOOS, MISFITS AND MAD GENIUSES

On a less serious note, Phil Oppenheim gave a fascinating presentation about the aesthetics of trash radio. He admitted that he's not a radio scholar but confidently stated, "I know a lot about trash." In his talk, Oppenheim drew connections between radio and the

John Barber and his students shared the output of a class that focused on exploring the concept of Internet radio as a new form of media. Students created radio drama, radio art (including a piece called "Portland Soundscape" that captured ambient sounds of the city) and an audio social network. Projects can be heard on the Radio Nospace website, <http://radionospace.net/>.

NOSTALGIA AND FORECASTS

The conference delivered on its promise of covering the "past, present and future of radio," with many panels honing in on particular periods of radio history.

Thea Chroman chronicled the early history of Oregon radio station KOAC(AM). Looking at the station's programming between 1923 and 1958, Chroman described the format as "profoundly practical," as KOAC aimed to provide extension education and agricultural information for its rural listeners.

Another historical paper, Aidan Moir's presentation about radio print



John Barber's students present their Internet radio projects.

world of cult and exploitation film.

According to Oppenheim, trash often is aligned with camp, "losers and misfits," and "mad geniuses." Translating that to radio, he delved into the category of "psychotronic radio" and also profiled some "weirdo" DJs who could be considered a part of trash culture.

Some of Oppenheim's subjects were connected with the beatnik scene, like Al "Jazzbo" Collins, and others were pranksters and free-form radio pioneers, often experimenting during late-night radio shifts (including talk show host Long John Nebel).

A few panels looked at experimental radio. Daniel Gilfillan discussed radio as an "artistic medium" and talked about some intriguing live performances and broadcasts, including one in which hypertext triggered sounds over the radio so that home listeners could influence the broadcast by clicking on Web links.

advertisements, took a look at how radios were marketed to consumers from the 1920s through the 1960s. I was charmed by her description of early ads for radios, which she said portrayed a "sublime, enchanted fantasy world."

As far as the future, panelists offered mixed outlooks.

John Anderson, whose forthcoming book "Radio's Digital Dilemma" outlines the history of digital radio, took a stance heavily against HD Radio, calling it a "technology of hubris, developed out of fear and self-interest."

August Grant and Jeff Wilkinson gave a "Radio 2030" presentation, in which Wilkinson alluded to the myriad definitions of radio that were bandied about throughout the conference, giving a nod to radio's enduring nature, saying, "radio is a shape-shifter."

Grant and Wilkinson offered a few potential visions for the future of radio,



Signage for KBOO(FM), Portland's listener-supported community radio station.



John Anderson discusses the future of digital radio.



OPB's David Miller interviews Love Canal activist Lois Gibbs in front of a live audience.

including both pessimistic (radio is irrelevant, so it stagnates and is terminated, etc.) and optimistic (radio reinvents itself, adapts and survives, etc.). They suggested that radio in the future might become more local, with "innovation at the fringes."

AN ETHEREAL NATURE

The conference concluded with a trippy plenary presentation by John Durham Peters, titled "Radio's Nonhuman Penumbra." In case you're scratching your head, as I was, here's the skinny: Peters described radio as "one of the most existential media." "highly poetic."

"deeply philosophical" and possessing a "wonderful non-human dimension."

According to Peters, the magic of radio is connected with the temporal nature of sound, and since sound has to "vanish instantly" and is "always disappearing," it has been challenging for humans to document it. His presentation took a cosmic turn when he began to talk about radio signals in meteors, thunderstorms and the Milky Way.

As I tried to wrap my head around all of the possibilities, I was struck by one particular comment of his, that "alongside the spectrum, there are specters." It

may have been the best thought to leave the conference with, as it captured the mystery, magic and mythology of radio.

Although the conference allowed for participants to explore myriad definitions, uses and futures for radio, perhaps what it all came down was the intersection between radio's human and inhuman qualities. From its earliest days, radio captured our imagination as music, news and entertainment magically drifted across the miles through speakers in one's own home.

Radio has been an educational tool, a portal to distant lands, an escape, a friend

and a lifeline during times of crisis. For radio practitioners, it can also be a lot of fun. The conference left me with a profound sense that radio is dynamic, ever-changing and multi-faceted. Its fans, a fraction of whom populated the conference, are passionate evangelists for its ongoing relevance.

Jennifer Waits is a writer, college radio DJ and independent radio scholar; she presented a paper about the history of student radio at Haverford College at the conference. She contributes to the blogs *SpinningIndie* and *Radio Survivor*.

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A 1960s Remote Broadcast

ROOTS OF RADIO

BY JOHN SCHNEIDER

Today's radio folks have it easy when it comes to remote broadcasts. Just grab a wireless codec and microphone and head out the door. But it wasn't always so.

In the early years of radio, line amplifiers weighed hundreds of pounds and ran from external storage batteries. Even the microphones themselves needed their own power supplies. Also, broadcast phone lines had to be ordered days or weeks in advance. To accomplish a remote broadcast, many hours of planning and equipment installation by several people were required.

Even in the 1960s, studio equipment was still bulky, and few specialized remote products were available. In this undated photo, Jim Boynton, the production manager of WILZ(AM) in St. Petersburg, has his hands full as he heads out the door. But the items of particular interest to our eyes in this photo today are the two iconic pieces of broadcast equipment Jim is carrying.

The Ampex 600 "portable" reel-to-reel tape recorder was a mainstay in the radio industry for two decades. It was reasonably priced, fit easily into a crowded control room and at "only" 28 pounds could be hauled out of the station for on-the-scene recordings.

The model 600 was introduced in 1954. It ran at a single speed of 7-1/2

inches per second, full-track mono, and played 7-inch tape reels. Its audio quality was excellent — 40 to 15,000 Hz — and it was ruggedly built and easy to use. Over the years, 80,000 Ampex 600s were manufactured in several configurations, including the stereo model 602 and the 620 portable amplifier/speaker.

Its main drawback was its difficulty of editing because of limited head access. By comparison, it was a lot easier to cue and splice tape on a Magnecord PT-6 — the other widely used radio tape recorder of its day.

Even today, 40 years after production ceased, the 77 series is still the stereotypical image of a professional microphone.

The second beloved item in Jim's hands is the 77-DX ribbon microphone, which was manufactured in various versions by RCA from the late '40s until 1973.

Even today, 40 years after production ceased, the 77 series is still the stereotypical image of a professional microphone. Its smooth sound quality, adjustable pickup patterns and stylish appearance made it the perfect studio microphone. Today, original specimens are sought after and highly prized by both collectors and recording engineers.



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and often sell for even more than the best modern microphones. AEA and a few other companies are again producing new ribbon mics based on the original RCA designs.

A ribbon microphone derives its name from the corrugated metallic ribbon, which is suspended between two poles of a permanent magnet. When sound air currents flow past the ribbon, it causes an electrical current to flow through the ribbon. This is sometimes also referred to as a velocity microphone because it relies on the velocity of the airflow across the ribbon, instead of the generation of sound pressure against a diaphragm.

WILZ today is known as WRXB (AM) Praise 1590. Jim Boynton is now the program director of KGUD(FM) in Longmont, Colo.

John Schneider is a lifelong radio history researcher. Write to him at jrschneid93@gmail.com. This is one in a series of photo features from his collection. See past images under Columns/Roots of Radio at radioworld.com.

PEOPLENEWS

Dial Global promoted **Charles Steinhauer** to chief operations officer. Based in New York, he most recently served as the company's president of operations. The company also added **Shari Sterenbuch** as its senior director of marketing and **Christina Albee** as chief marketing officer.



Charles Steinhauer

named new President and CEO **Doug Lowther** to the corporation's board of directors.

The **Broadcasting Board of Governors'** interim presiding Governor **Michael Lynton** stepped down in May. The board as of press time was down to four members instead of the intended full complement of nine; and one of those four is Secretary of State John Kerry,

who serves as an ex-officio member.

Ginny Hubbard Morris, chair of **Hubbard Radio LLC**, will receive the National Radio Award during the Radio Show Luncheon, Sept. 20.



Ginny Hubbard Morris



George G. Beasley

Beasley Broadcast Group Inc. Chairman and Chief Executive Officer **George G. Beasley** received a doctor of humane letters, Honoris Causa, at Appalachian State University's May commencement.

Auralex Acoustics has added to its leadership team. **Mark Henderson** has been appointed CEO. **Dave Brune** has been selected for director of sales. **Andy Symons** has

been named director of operations.

Digital music service **Slacker** named **John Hayase** as chief product officer. He will oversee the development of Slacker's digital music service across the Web,

smartphones, tablets, cars and consumer electronics devices.

International Datacasting Corp.



Tracy Gilliam

will oversee LDR's affiliate sales and station sales support. For three years, she has managed LDR's sales support initiatives.

Cumulus Media has made key appointments for its San Francisco radio station cluster. **Steve Sklenar** joins Cumulus as market manager and **Kevin Crespo** comes on as national/regional sales manager.



Christina Albee



John Hayase

WHO'S BUYING WHAT

Logitek reported recent orders from **WSJM(AM/FM)** in Benton Harbor, Mich. (JetStream); **Journal Broadcast Group** in Nebraska (JetStream); **Radio America** in Arlington, Va. (JetStream and ROC-12); the University of Kentucky's **WEKU(FM)** (JetStream and ROC-12); **AVI for Veterans Affairs** in St. Louis (two JetStreams and a ROC-18); and **Salem Communications** in Tampa, Fla. (AE-32). **KCUK(FM)** in Chevak, Alaska, also added two ROC-12s to its AE-32 setup.

CJRT in Toronto, or "Jazz.FM91," added four **Lawo** crystal digital consoles and a Nova 17 digital router as part of a recent renovation.

Wheatstone reported that **Leighton Broadcast** in St. Cloud, Minn., added three SideBoard control surfaces. Processing products were also purchased by **Fisher Productions** (Chandler, Ariz.); **Univision** (Houston); and **Entercom Communications** in Austin, Texas.

WFMT(FM) in Chicago, a commercial radio station with a classical and fine arts format, utilizes **Shure** microphones and wireless technology. WFMT has also added Shure PSM 1000 personal monitoring systems, which it uses in and out of the studio.

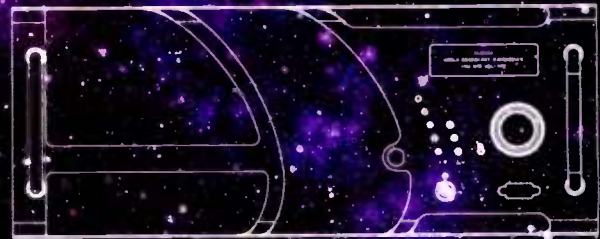
Omnia reported several recent sales of Omnia.11 FM on-air processors. Users include **KFNS/KSLG Grand Slam Sports** in Moscow Mills, Mo.; **KSEG(FM)** in Sacramento, Calif.; and **Univision Radio** in Dallas. Also the CBS operation in St. Petersburg, Fla.; **WAYM(FM)** in Franklin, Tenn.; and **WWST(FM)/Journal Broadcast** in Knoxville, Tenn.

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HD Channels Go Long on Team Coverage

In Pittsburgh, Dallas and Philly, sports fans can tune in any old time

BY SCOTT FYBUSH

Not every city boasts fans as rabid as those who passionately follow the Phillies in Philadelphia, the Penguins and Steelers in Pittsburgh or the Cowboys in Dallas. So it makes sense that for fans in those markets who own HD Radio receivers, there's a new way to keep tabs on their teams: Full-time subchannels devoted exclusively to team coverage.

Tim McAleer, market president at Clear Channel Radio in Pittsburgh, says the idea was born in Steel City. It "started back in 2009, when the Penguins approached us," McAleer says.

The NHL team's play-by-play runs on the main channel of Clear Channel's WXDX(FM) 105.9, which otherwise runs modern rock. But "Penguins Radio 24/7" launched during the 2009-2010 hockey season on 105.9-HD2.

The channel's programming runs in a six-hour loop, with three hours produced by the team and three hours produced by Clear Channel.

WHAT'S ON?

"The programming can be anything," McAleer says. In addition to his regular afternoon shift on "105.9 the X," veteran Pittsburgh sports host Mark Madden hosts a daily, hour-long Penguins show on Penguins Radio 24/7.

"Then, the other two hours we either take from our ancillary shows on our ESPN station, WBG(AM) 970, or we'll be as creative as taking Sidney Crosby's iPod and we'll play what's on it."

The Pens' three hours can be even



more creative. "They'll broadcast live from practice during the season," McAleer says. "They used to pull some material from the NHL Network, and they have some of the radio people that they pay doing call-in shows." Even the fans get a chance to participate, with selected fan audio blogs appearing on Penguins Radio.

Down the hall at Clear Channel Pittsburgh, the Steelers are a staple at top-rated rocker WDVE(FM) 102.5. Since the fall of 2011, "Steelers Nation Radio" has been heard on 102.5-HD2, carrying a similar split of team- and station-produced coverage, including a heavy diet of classic Steelers games.

It's the second NFL-specific subchannel, following the all-Cowboys channel that CBS Radio launched in Dallas in 2009 over KRLD(FM) 105.3's HD3.

MAJOR LEAGUE, TOO

The 2011 season also brought the first baseball-specific HD subchannel to the airwaves. "Phillies 24/7" is part of the rights agreement that puts the Phillies on CBS Radio's WPHT(AM) 1210 and WIP(FM) 94.1, and it makes its home on another CBS signal, the

HD4 channel of WOGL(FM) 98.1.

"Is it a niche program? Absolutely, but there's no better niche content than the Phillies," says WIP program director Jeff Sottolano.

"A couple of years ago, there was a lot of conversation about these things," recalls Robert Brooks, manager of broadcasting for the Phillies. "CBS came to us when we were renegotiating and said,

mational than confrontational," Brooks says, noting that there's plenty of the latter style of programming on the city's traditional sports-talk outlets.

This year, Phillies 24/7 added another new feature: instead of simulcasting live Phillies games with CBS Radio's other outlets, the subchannel now carries the Spanish-language broadcast produced by Spanish Beisbol Productions, extending the reach of that coverage beyond the limited signal of Spanish-language flagship WTTM(AM) 1680.

"We reached out to Bill Kulik at SBP and Bill had an interest in expanding

Is it a niche program? Absolutely, but there's no better niche content than the Phillies.

— Jeff Sottolano

"This is something we could do for you, since we have the bandwidth."

With 162 games a season to draw from, Sottolano says there was no problem filling a 24-hour schedule in-house at CBS, though it took some negotiating with Major League Baseball.

"MLB is somewhat unique in that MLB Advanced Media has a lot of oversight over what the local market teams can and can't do digitally," Sottolano says. CBS worked out a deal that allows Phillies 24/7 to rebroadcast the team's games several times, including full-game replays at 6 a.m. and 9 a.m. on the day after the game, as well as "Phillies in 60," a condensed, one-hour highlight reel that runs at 1 p.m. and 4 p.m.

Other features include a daily half-hour "Phillies Today" program and several weekly shows, including "What's the Word," which looks at how the Phillies are being covered in print and in social media, and "The K File," a weekly replay of every Phillies strikeout from the previous week.

While CBS produces all of the content on the channel, its arrangement gives the team veto power over content.

"We've asked that this be more infor-

his reach in the marketplace," Sottolano says. "And we had an interest in providing unique content that fit within Phillies 24/7."

WHAT'S NEXT

Unlike the Pittsburgh channels, which depend heavily on Clear Channel's iHeartRadio platform to reach as broad an audience as possible, the Phillies channel is available only over the air via HD Radio.

Sottolano says that's partially a result of MLB's tight restrictions on streaming game content, and partially a deliberate move to promote CBS Radio's variety of HD multicast offerings in the market, which also include a '70s-oldies format and a classic rock channel, plus simulcasts of all-news KYW(AM) and talk WPHT(AM).

"We've talked about podcasting the talk shows, which we don't currently do," he says. "And we don't currently do it because we wanted to create unique content for HD Radio."

At the team's end, Brooks says he'd still like to see better market penetration for HD Radio, but he says the Phillies hear from fans who are listening on HD.

"We've gotten a couple of calls during the off-season," he says. "When there was a mistake and a game played two days in a row, we got calls. There were people listening."

Sottolano says CBS has devoted considerable promotion to educating fans about where to find Phillies 24/7.

"We have on-air promos, a landing page (on the *CBSPhilly.com* portal), a

(continued on page 28)

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Radio for the iPhone? Apps—so—lutely!

Over the summer, try some of these amazing mobile tools

A thief comes over to a man walking down the street and says, with murder in his eyes. "Don't move, this is a stick-up! Your smartphone or your life!"

The man pauses for a long time. Finally, the thief says, louder, "Come on, buddy, your smartphone or your life!" To which the guy replies, "I'm thinking it over!"

That's a modification to the great, old Jack Benny routine; in the original, the thief is demanding money, not a spiffy gadget.

Whenever I'm without my iPhone I feel not only out of touch but positively disconnected. It's not because I'm afraid I'll miss a call. It's mainly because I'll miss my apps.

With summer upon us and at least a

few days of vacation looming, I thought you might enjoy recommendations for apps that can be quite useful to those in the broadcast biz. I've also included a few for fun. Note that not all are available for all phones.



RADIO

I'll assume you've already got the streaming apps from the major U.S. radio companies, plus Pandora and Slacker. But I run into lots of radio folks who have never tried Stitcher for on-demand news and talk radio.

Stitcher is probably the most useful app for mining fresh talent, getting ideas for new shows and being

able to listen easily to programs in episode form. Their cool new feature is that you can set your phone to do the downloading when you have access to

Wi-Fi, saving you bandwidth charges and eliminating buffering.

These other radio-like apps are worth a test drive:

- **Concert Vault**, by Wolfgang's Vault, consists of music from Bill Graham's archives.
- **OTR Streamer** has old-timey radio shows that take you back to the days before TV.
- **Scanner Radio Plus** acts like a scanner for police, fire, EMS and airport.
- **Police Scanner Plus** is a scanner, plus music and the ability to record.
- **Songza** brings you music to fit a mood.
- **Twitter's "music"** hashtag (#music) is an interesting way to find new music trends out there in the tweeting ether.

PRODUCTIVITY

Dropbox lets you easily transfer large files via all devices, and can automatically back up photos taken on your phone.

CamScanner makes amazingly clear PDF files using your phone's camera and is terrific for doing PDF conversions on contracts, memos and receipts, then sending them effortlessly to an email address.

CHANNELS

(continued from page 26)

website we can direct people to with information on what these shows are and where you can listen to them," he says. "I get a decent amount of listener feedback and email from folks that want to know what the programming schedule is and where to find an HD radio."

In Pittsburgh, McAleer says the Penguins aggressively track their audience through their "PensPoints" program, which offers rewards for everything from beer purchases to watching games on TV.

"Some of the numbers where redemption is highest is through terrestrial radio," he says. Then there is also iHeartRadio, where the Penguins channel is featured prominently.

Whether heard primarily over HD Radio or streaming, these sports-specific subchannels provide additional

PROMO POWER



Mark Lapidus

Evernote lets you make notes on either your phone or computer and they sync.

NEARLY TECHNICAL

SpeedTest X HD tests the speed of any Wi-Fi connection you can reach. I used this baby often, to see if I've got enough "up-speed" to stream.

Maglight isn't perfect, but when you don't have a magnifier handy, it'll help you read that invisible serial number.

UDID+ displays your unique device identifier (on iPhone and iPad) and allows you to email the numbers. When you're testing apps, this is true time saver.

Analytics tracks all of our Google Analytics on as many websites as you have in your profile.

And get **Flashlight** (or any of the bright LED apps out there) — come on, you know you're going to need it!

NAVIGATION

Waze has saved me many times from being stuck in traffic when the bigger name map apps have failed. Why? It's user-driven, and in major cities that means that lots of people are using it

(continued on page 31)

promotional and marketing opportunities.

"We've been able to build some revenue that didn't exist before," Sottolano says.

"There's a revenue split," Brooks says of the Phillies' deal with CBS. "There's some money to split at the end of the year."

In Pittsburgh, Clear Channel has the Penguins locked up through 2018 and the Steelers through the 2016 deal. Across the state, CBS Radio and the Phillies are in the second year of a three-year deal, and Brooks says the all-Phillies channel will be on the table when renewal time comes around.

"I'm sure when we sit down to have those negotiations, we'll sit down to keep that going," he says.

Scott Fybus, a longtime RW contributor and the editor of NorthEast Radio Watch (www.fybus.com), is still waiting patiently for an all-Red Sox channel.

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1900: Phones become fixtures in more well-to-do and steam-punk homes.



1920: Every home is working toward having a telephone!



1936: The advent of the dial desk phone. No more asking the operator to connect you.



1963: Push buttons usher in the thoroughly modern world. Touch tones enter pop culture.



1983: The mobile phone is a reality. Plots in all TV shows get a boost!



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How to Break Breaking News

When events unfold fast, top news directors follow these rules

BY PAUL RIISMANDEL

Breaking news is, by its definition, unexpected. While a hurricane's path can be predicted days ahead of time, the size and scope of the impact it will have is an unknown. An urgent news conference might have to be scheduled only hours in advance.

Other emergencies, like April's Boston Marathon bombing, come without any warning.

Your newsroom has to respond to big, breaking stories. It's a challenge for even the most experienced news directors to provide accurate, up-to-the-minute coverage to listeners — sometimes for hours, days or weeks on end.

When the WBZ(AM) newsroom learned of the marathon bombing, News Director Peter Casey said, "the immediate goal was to get people down to the site, to where the people [were] fleeing, and to the hospital, because that's where the stories [were] going to be."

The problem was that the reporters who had been assigned to cover the elite race had already left to go file their stories, 50 minutes before the blast, and it was difficult to get journalists back to the scene, because people and traffic were being ushered away by police.

According to Casey, for listeners just tuning in, "You want them to know almost instantaneously what you're covering [and] what has happened. Is there a danger to people in the area? ... You're thinking, 'This is clearly a public safety issue.'"

Says Tim Scheld, director of news and programming for New York City's WCBS(AM), "Our job is to be the eyes and the ears of the people listening to us." He recalls when U.S. Airways Flight 1549 landed on the Hudson River in January 2009. The newsroom started getting phone calls about a plane on the river. However, "we had not seen it anywhere else. We had not heard it anywhere else, and the scanner chatter wasn't really conclusive. But it became clear to us that something was going on."

"Our philosophy is to send everyone we can in from all directions," says Scheld. Better to have too many people



there than too few, just in case everyone is needed; you can always back off later.

With Flight 1549, there was a reporter a couple blocks away who was called in. It turned out that traffic cameras had a clear view of the plane. "We literally had a live picture from a camera, showing us a plane bobbing up and down in the Hudson River," Scheld recalls.

The reporter was on air describing the situation — "the equivalent to having our helicopter over it."

Covering the story quickly is important, but so is getting it right.

Reporters "don't have much access to officials. You're witnessing what's going on," says Casey. "What you're seeing is accurate and immediate."

At the same time, he says, "You have to use your own experience and judgment not to be too hasty to jump on things ... There's an adrenaline rush



Tim Scheld

during these types of situations — to do as much as we can to put out as much information as you can. But there has to be a check and a balance."

In order to keep control over what's going on air, Casey says, he has reporters work from scripts rather than ad-lib, whenever possible.

ACCURATE BETTER THAN FIRST

Two days after the Boston bombing, the Associated Press, Fox News and CNN were among organizations that wound up having to issue retractions for having incorrectly reported key information. At WCBS, Scheld says, "We were going on the air and being very honest. We were saying the AP said that here is a person in custody ... but not only can CBS News not confirm that, CBS News has sources that say it's just not true."

He adds, "Nobody wants to hear it first if it's wrong."

For this reason, News Director Mike McMearty at Washington's WTOP(FM) says their newsroom philosophy is to "First get it right, then get it first," which he credits to the station's Vice President of News and Programming Jim Farley.

"It almost sounds like a contradiction," McMearty says. "You don't get to the second part unless you get it right."

Social media users came under criticism during the Boston manhunt, too — for posting and tweeting raw, uncorroborated information from police scanners. Casey points out scanners have been in newsrooms for decades. "It provides you with that good base of information of where there's activity that might be worth investigating." However, he strongly cautions that the scanner only tells you what police are going to investigate, not what has actually happened. "It's not a source by itself."

With the Beltway sniper attacks in the Washington area in 2002, county police asked the press not to report where they had set up roadblocks. "We had to think about another way to do this," says McMearty. "We could report that there are delays on I-95 where the police are looking for suspects, without tipping off exactly where the blockades are." Public safety comes first.

KEEP UP MORALE

An important breaking story can last hours, days or, as in the case of

the Beltway sniper, even weeks. When a news team is in it for the long haul, it becomes a priority to keep the staff going strong.

This might seem obvious, but Casey advises to "keep (reporters) fed," then to "think about who's been on the air how long. What shift is coming next?"

When the manhunt for the second suspect closed in on Watertown, Mass., four days after the marathon bombing, WBZ had reporters inside the police perimeter. "They were either going to be sleeping in their cars, or not sleeping all night long," Casey says. "We could not get relief staff inside that perimeter."

Around 1 a.m., the station finally was able to bring in relief, but the situation reinforced the need for basic preparedness. "Every reporter should always pack a bag of clothes. You're going to need something to eat, and something to drink," says Casey. "They should have an emergency bag in the car. [because] you never know where you're going to be."

"When the sniper attack happened, it was a hellish three weeks," McMearty recalls. "We did stories we never thought we'd do, such as about how to avoid the sniper."

After Sept. 11, 2001, the station made a psychologist available to the staff. WTOP also brought in a voice coach to help on-air staff learn how to care for and control their voices, and to recognize how they sound.

McMearty recommends paying attention to how reporters sound on air, especially the tone: "Bring it down a notch."

After all, during emergencies, "people are hanging on the words we're saying. How we say it is important."

"It's very seat-of-the-pants in our business. There is no manual that you sit and open up and say how you do this," says Scheld. At WCBS, "We do know every day that we can do things better than we did today."

He emphasizes that reporting breaking news is a team effort, which is why it's extra important to trust your staff.

A news director, according to McMearty, has to be all things — "a go-between, hand-holder, cheerleader and constructive critic all on the fly."

According to Casey, during any crisis, a station's role is to be a "utility," so that the listener "can turn on that flow of information and not have it stop."

Paul Riisman is a 20-year veteran of community and college radio. He is co-founder and technology editor of RadioSurvivor.com.



Mike McMearty



APPS!

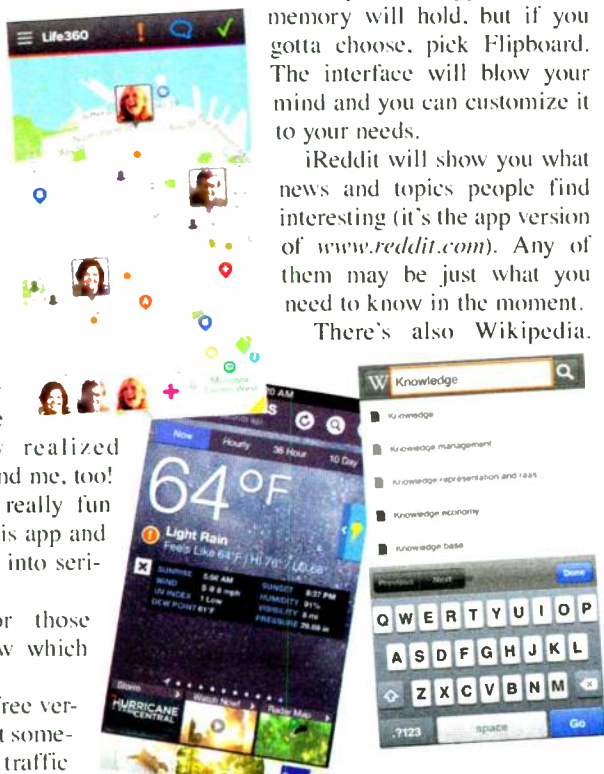
(continued from page 28)

to share information. It has a very cool interface. In my market, they've partnered with a TV station, but perhaps in your city they'd partner with a radio station.

Life360 pretty much "Let's Stalk Your Kids"; at least, that's how my kids saw it when I demanded they put this tracking device on their smartphones. But once they started using it, they realized they could find my wife and me, too! You could execute some really fun morning show bits with this app and probably also get yourself into serious trouble.

There's Compass, for those times you just gotta know which way is north.

With Traffic View, the free version shows only photos, but sometimes these shots from live traffic cameras can help you out quickly enough to check info for on-air use or just for driving somewhere yourself. The paid version streams live video.



NEWS & CONTENT

Get as many news apps as your memory will hold, but if you gotta choose, pick Flipboard. The interface will blow your mind and you can customize it to your needs.

iReddit will show you what news and topics people find interesting (it's the app version of www.reddit.com). Any of them may be just what you need to know in the moment.

There's also Wikipedia.

fast on your phone. Of course, factual accuracy is not guaranteed.

And let's not forget Weather, a pure necessity for anyone on the air. I like the Weather Channel's version, but almost all weather apps deliver the goods.

SOCIAL

Get LinkedIn. In this business, you gotta stay connected because, well, you never know.



If you actually do play piano, try Virtuoso. You'll be frustrated by the size of the keyboard, but it makes for a good icebreaker with the opposite sex.

Group SMS lets you send text messages to large groups of people, like your sales staff to remind them of their 7 a.m. meeting every Monday morning.

As for the WhitePages app, it's not perfect, but what phone book ever has been?

JUST FOR FUN

TonePad is a blast. If you have no musical talent whatsoever, at least you can drive your friends crazy by playing with tones. Highly addictive.

If you actually do play piano, try Virtuoso Piano. You'll be frustrated by the size of the keyboard, but it makes for a good icebreaker with the opposite sex.

As you can tell, I'm a bona fide app junkie and very appreciative when friends share great apps they love with me. There are so many released daily that it's virtually impossible to keep up.

Mark Lapidus is president of Lapidus Media. Send him more suggestions of great apps: write to marklapidus@verizon.net.









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WNYC Maximizes 'Here's the Thing'

Station makes the most of its Alec Baldwin-hosted interview show

MULTIPLATFORM

BY CHRISTOPHER SPRINGMANN

"Stayed up way too late last night listening to the Billy Joel interview — laughing out loud in bed and singing along. It was funny, dynamic and one of the best interviews I've ever heard. Bravo!"

— Maureen from Milwaukee, "Here's the Thing" Listener

What happens when your station's biggest fan becomes its biggest star? WNYC(FM) certainly found out when they put actor Alec Baldwin behind a Neumann U87 with "Here's the Thing," an original made-for-podcast topical guest interview show.

A recent program with guest Thom Yorke of Radiohead generated more than 100,000 clicks in three days at the WNYC website.

But here's the thing about "Here's the Thing." After a season of podcasts is in the can, they are repackaged and syndicated to around 160 affiliates. After that, to come full circle, those shows are then finally broadcast on WNYC.

Aren't they doing things a little ... backwards?

According to WNYC spokeswoman Jennifer Houlihan Roussel, "We sell the podcast and the broadcast platforms



Emily Botein, producer and editor, left, and Chris Bannon, vice president for content development and production at WNYC, work on an episode of 'Here's the Thing.'

separately. Sometimes an underwriter chooses to buy both, but not always. When the broadcasts are distributed to the local markets, the national credits embedded in the shows remain, but

local markets have their own ad breaks (avails) as well. We have an ad management system for the podcast units that allows us to rotate in multiple underwriters in any given time."

The HTT staff is currently editing the 2013 syndicated series, producing 10 one-hour shows drawn from the 26 original podcasts.

This product reaches three unique audiences for "HTT." There's WNYC's initial single-interview podcast, available at the station's website. Some are more than an hour long. The next leg is the one-hour syndicated version, containing excerpts from one to three interviews each. Last, there's the WNYC on-air broadcast of that syndicated anthology.

PRX, the Public Radio Exchange, will distribute the latest series in the fall of 2013.

PRX makes the "deal" with affiliates clear and simple: "Each episode is 59 minutes long, and includes two one-minute floating ID breaks. There is no newscast hole. All programs in the fall season must be scheduled — cherry-picking is not permitted."

WNYC is repurposing and maximizing its content on multiple platforms.

OPENINGS

Alec Baldwin opens "Here's the Thing," personally voicing the intro and the sponsor's message, a la Paul Harvey and Charles Osgood, as the show's theme rolls a sweet musical bed of Miles Davis' melodic "So What." It's all very low-key and smooth, with Baldwin at his best. Or as WNYC's Chris Bannon, vice president for content development and production, gushes, "Any advertiser, any underwriter in the world, would love to have Alec Baldwin read their copy, no matter what it is."

According to Bannon, Baldwin's involvement was evolutionary.

"Baldwin's a Manhattanite," Bannon said. "He used to call in to the 'Brian Lehrer Show,' talk to listeners, and people really liked that. Then Kurt Andersen, who hosts 'Studio 360,' WNYC and PRI's nationally syndicated arts and culture show, asked Alec if he would be a guest host; the first-ever."

Baldwin went on to host the New York Philharmonic broadcast plus fundraising spots on WNYC. Then independent producer Kathie Russo, now a producer at HTT, suggested to Baldwin, in so many words: "Alec, how about cutting a pilot, maybe interviewing a friend?" That friend was actor Michael Douglas.

"Here's the Thing" was born.

Alec Baldwin's appeal? Impeccable acting credentials, industry cred and unfettered access to fellow celebrities and stars. Add in a passionate, highly-literate, provocative interview style coupled with insatiable curiosity.

(continued on page 34)

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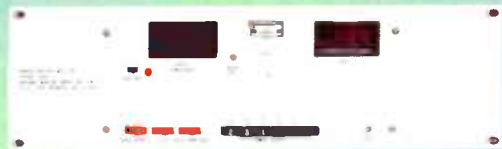
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HERE'S THE THING

(continued from page 32)

Baldwin insists on engaging his subjects in person, eye-to-eye, which produces great theater, spontaneity and superb audio, but real challenges, too; thus, there are no remote studio bookings via ISDN for out-of-town guests, or even Baldwin calling in on location.

MECHANICS

So how does HTT get the talent together into a studio? The correct answer is: any way, anywhere they can. At WNYC's facility, or New York's Radio Foundation studio, or in the case of New York Times Executive Editor Jill Abramson, at a studio "just around the corner from her office," one properly equipped with Pro Tools and a Neumann U87. Priority one is accommodating guests and their busy schedules. Therefore much of the production is done at the guest's location.

Flexibility is also a key, as with Baldwin's interview with talk show legend Dick Cavett, which took place at Cavett's home in Montauk on Long Island. HTT's producers decided on a documentary approach, bringing in a crew with Sennheiser shotguns on booms while recording to a Sound Devices 722 digital recorder.

The result was a refreshing, very-editorial departure from their studio efforts. After post-production, Baldwin's intro is a work of art, adding VO commentary over a ducked scene-setting background conversation, complete with traces of room noise. Or, as Baldwin explained: "For our listeners, that sound you are hearing is the rattle of iced tea being delivered into the parlor here ..." while Cavett jokingly comments on the "very attractive employee" with the tea, i.e. his wife

Martha. There is absolutely no "mic consciousness" for these two pros. The listener feels like they are sitting on the couch as an invited guest, taking all this in. A captivated listener might actually look around for their glass of iced tea.

Baldwin's passionate in-your-face interviewing style, at least initially, was annoying to some. One fan posted the following after hearing his show with actor/singer Patti LuPone: "A nice, interruption-free interview. A little kiss-assy ('You're BREATHTAKING')." But then, this is part of the charm.

An actor by trade and not a seasoned radio program host, Baldwin brought an aggressive style that initially led him to step on guests. Emily Botein, producer, program editor and Pro Tools "nuder," explained, "Alec is very aware of his interruptions. His enthusiasm sometimes bleeds over into interrupting his guests. He doesn't like it, I can tell you that. He's very conscious of it."

For Baldwin, who reads his own notices, this consciousness led to a subsequent change in style. "If you listen to the first podcast vs. the most recent ones, you'd see a real evolution in the way that he interacts with guests in terms of those interruptions," Botein said. "He's disciplined himself like the actor that he is. When you're learning a role, you learn what to do that's going to make you more effective."

WNYC's Bannon has a slightly different take on Baldwin's style, but no less insightful. "One of the things that's great about having someone with Alec's career in the role of host is that he comes from a lifetime of being aware of the audience. He's got a lot of intention. Behind every question is, 'What will this make people think or feel?' You can't teach that to someone."

A look at the variegated guest list might also lend a



Alec Baldwin, in a WNYC promo pic.

clue to the appeal of the show. Like any guest-oriented radio show, certain themes dominate. Baldwin is a New York-based actor so there's no surprise that a number of Broadway and Hollywood actors have been on the show — from Elaine Stritch and LuPone to Debbie Reynolds.

But Baldwin has thrown the producers for a loop at times. Like the time he suddenly said he was "interested in prisons." Lo and behold, a more newsy and topical show with Martin Horn, former New York City commissioner of correction and probation. There's a show with pro football player Andrew Luck and there's that Thom Yorke piece.

"The beauty of doing this kind of work is that there's a very, very long tail," says Bannon. "The listener may have just discovered the shows through the Thom Yorke podcast, then goes back and listens to every program, all the way back to Michael Douglas.

"With the right host, it's work that is very durable."

Christopher Springmann is the producer of the syndicated health talk show "Life, Love & Health."

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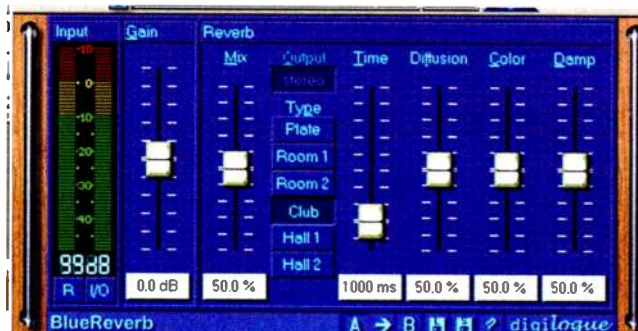
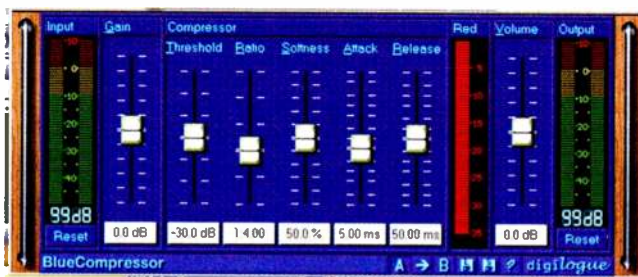
BY CURT YENGST

Bornheim, Germany's Marcus Stahlberg, operating under the Digilogue banner, has been working on a new audio editing platform called Acoustic Cutter, but his earlier foray into the world of digital audio came in the form of a suite of 10 DirectX/VST processing plug-ins called The Blue Line, all contained in a single compact installer file. The plug-ins include BlueChorus, BlueCompressor, BlueDelay, BlueFilter, BlueFlanger, BlueGate, BlueMultitap, BlueParamEQ, BluePhaser and BlueReverb.

The basic interface for each plug-in is the same. All controls appear as virtual "faders," with other options appearing as buttons. Each plug-in features the ability to save and recall presets, as well as perform A/B comparisons. I preferred the fader-style controls to the virtual "knobs" I've seen on many other plug-ins.

There are at least two conventions regarding how to turn a "knob" with a mouse, either up for clockwise and down for counterclockwise, or right for clockwise and left for counterclockwise. I've even seen ones where the knob has to be dragged using a circular motion. Faders leave little guesswork.

The layout of these plug-ins is reminiscent of the old rackmount processors they replace, so they're intuitive. The BlueChorus chorus, BlueDelay delay, BlueFlanger flanger and BluePhaser phaser operate very much like the old effect stomp boxes I used when I played in a garage band about 100 years ago. The BlueParamEQ parametric EQ is similar to what one might find on a large recording console. The two midrange



BlueCompressor, top, and BlueReverb are among the Blue Line plug-ins.

sections are truly parametric, offering cut/boost, frequency and bandwidth controls; but the high and low sections omit the bandwidth control. The BlueFilter filter essentially is a single-band EQ, operating as any of several filters, such as low-pass, high-pass and band-pass. It also includes a low-frequency oscillator for more interesting effects.

The BlueGate offers more surgical control of the signal than a traditional noise gate, including individual adjustments for attack, sustain, release and decay. The BlueCompressor compressor is straightforward and easy to use and includes input, output and gain reduction metering.

The BlueMultitap delay allows for up to eight separate delay signals, all of which can be individually adjusted for level and pan. The BlueReverb is a simple, bare-bones design, with six basic "spaces" to choose from and fine tune with available time, diffusion and damping controls.

Overall sound quality on these plug-ins is good. The "stomp-box" effects and the BlueChorus, BluePhaser, BlueFlanger and BlueDelay effects were clean and smooth-sounding. My only complaint here was with the delay. Adjusting some parameters while audio was playing generated some popping artifacts. Keeping monitor levels low while making such adjustments might be prudent.

The BlueCompressor did its job well, but the gain reduction meter seemed to lag a bit on transient material. The BlueReverb didn't exhibit any of the artifacts I've heard on other free reverbs, even on transient sources. The BlueFilter plug-in was a bit confusing at first and took considerable experimentation to get the hang of, but certainly works as intended.

A nice effort on the part of Herr Stahlberg, and a much appreciated gift to the digital audio community.

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BBG: Consider the Changing Landscape

Asks Congress to help with priorities like a CEO, infrastructure and reduction of overlap

COMMENTARY

BY MICHAEL MEEHAN

Around the globe today, only one out of six people lives in a country with free media. According to Freedom House, this is the worst media freedom rate in more than a decade.

That's precisely why the work of U.S. international broadcasting journalists is more critical than ever.

At the Broadcasting Board of Governors, our clear and simple mission is to inform, engage and connect people around the world in support of freedom and democracy. As the demand is greater, our financial resources are fewer. All across the federal government, agencies such as the BBG are asked to do more with less. As technology platforms advance and become more decentralized, our challenges grow exponentially.

But, when planning for the future, the BBG is unlike other agencies in that it also needs to consider seismic changes in broadcasting, journalism and

technology, along with the larger strategic global context for our broadcasters: Voice of America, Radio Free Europe/Radio Liberty, Radio Free Asia, the Middle East Broadcasting Networks and Radio and TV Marti.



Michael Meehan

BASED IN REALITIES

From a media standpoint, we don't work in a vacuum. Publicly financed broadcasters from other Western countries, such as the BBC and Radio Netherlands, have faced deep cutbacks in funding, ending big chunks of shortwave while building out mobile and Internet platforms.

As anyone familiar with the U.S. news business will know, it's a tough economic situation for broadcast journalists everywhere.

The president's budget request for fiscal year 2014 (which you can see at radioworld.com/links), submitted to Congress in April, takes these realities into account. Since international broadcasting remains an integral part of U.S. national security — part of "soft power" — we work with other parts of

our government in setting the strategic priorities, and are solely responsible for maintaining the journalistic independence of our broadcasters.

Practicing independent news and information is the catalyst for open democracy. We must continue to reach target countries around the world where media are not free.

For example, in response to the rapidly rising extremism in North Africa, we increased distribution and added

two new broadcast languages in Mali at the Voice of America. We have also had great success in expanding distribution across Africa through new affiliate agreements and FM transmitters on U.S. embassy compounds that can reach listeners in populous capital cities. Working with the State Department, we have plans in more than a dozen African cities.

But tight budgets force us to prioritize the use of our resources. We have had to take a very hard look at spending — seeking efficiencies wherever

(continued on page 38)



A young Pakistani girl is interviewed by a Mashaal Radio reporter about her destroyed school in the Khyber tribal district of Pakistan.

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BBG

(continued from page 37)

possible and limiting the impact on our mission-critical work.

We must face tradeoffs that are informed by our strategy, which includes changing the way we do things in order to respond to world events and to our audiences' preferences.

Most importantly, we are seeing that our strategies are driving success; for example, using a "Washington bureau" concept to cultivate new audiences in Latin America (more than 23 million), which has driven our global audiences up to a record 203 million people weekly.

Other varied delivery platforms are helping us reach more people in important markets, including digital tools like SoundCloud, the recently debuted Global News Dashboard, and expanded mobile-friendly sites.

For FY 2014, the BBG requested \$731 million from Congress, including new investments to counter violent extremism, engage new audiences in Burma and make critical infrastructure improvements. This is \$18 million more than the current budget, which includes sequestration cuts.

CEO

The BBG is the only federal agency managed by a part-time committee. The president's budget request also includes a legislative proposal to establish a chief executive officer, a key strategic objective that the BBG board adopted in 2012.

If enacted, the proposal will improve the management and efficiency of BBG operations, helping to mitigate the challenges of a part-time board. The CEO will provide day-to-day executive leadership for U.S. international broadcasting, and will have management authority over the federal and non-federal elements.

Proposed shifts include scaling back selected language services to reduce overlap, increasing cooperation and ensuring that broadcasters will provide complementary content, streamlining and restructuring central news operations, realizing savings in information

technology, and making significant administrative and support reductions.

The FY 2014 budget request also includes program, transmission and staffing reductions across all the BBG broadcasters and the International Broadcasting Bureau, in part through efforts to continue to restructure operations and end duplication.

The VOA Greek and RFE/RL Balkan services would be closed under this proposed budget, and AeroMartí broadcasts of TV Martí would be eliminated.

Some of these changes, if enacted by Congress, will be very difficult on the professional men and women involved. The BBG will do everything possible to minimize the impact on our employees through agency buyouts, early-out authority and reducing positions via attrition.

To be competitive in today's complex media markets, we must innovate as never before. To have the resources and management structures to enable such



BBG is streamlining syndication strategies to deliver content via Google Currents, YouTube, SoundCloud and iTunes.

innovation, the agency must continue to integrate its operations. Our people leading in innovation and integration are at the heart of the BBG's strategic plan and the budget process, year after year.

Michael Meehan chairs the Strategy and Budget Committee of the Broadcasting Board of Governors.

READER'S FORUM

THAT TRICKY FIRST HARMONIC

When I read Mark Persons' article in Radio World about quarter-wave stubs ("Prevent Transistor Failures With Science," May 22), I was a bit amused at the "first harmonic" comment, because I have fielded questions about this subject many times during my years of teaching.

The definition of a harmonic is: An integer (whole number, odd or even) multiple of a fundamental frequency. So then, by definition, the first harmonic is the fundamental frequency multiplied by one, which is the fundamental frequency!

That is why we seldom use the term "first harmonic."

Further, the second harmonic equals fundamental frequency times two. The third harmonic equals fundamental frequency times three. And so on.

Mark, your article was well-written and informative for upcoming engineers. Through the years I, too, have been able to solve many problems using stubs, from RG-58 to 9-inch rigid. For decades, many transmitter and antenna manufacturers have also incorporated the stub as an integral part of their products.

*Ernest "Buster" Sutton, CPBE
Proprietor
Broadcast Technical Services
Sweetwater, Tenn.*

In the May 22 issue of Radio World, we asked you to tell us how many of the "Cool Stuff" logos you could count. There were 22 2013 logos and one 2012 logo. These sharp-eyed readers each won a Radio World t-shirt: Don Browne, Michael Margrave, Mike Martin and Mark Voris. Congratulations!!

Prevent Transistor Failures With Science

TECHTIPS

BY MARK PERSONS

I build these for clients and you can too.

THE SETUP

Here's the test setup, with a return loss bridge and dummy load connected for testing a shorted quarter-wave stub with N-Type adapter, ready to connect.

Here's the test setup, with a return loss bridge and dummy load connected for testing a shorted quarter-wave stub with N-Type adapter, ready to connect.

Next Issue of RADIO WORLD July 3, 2013
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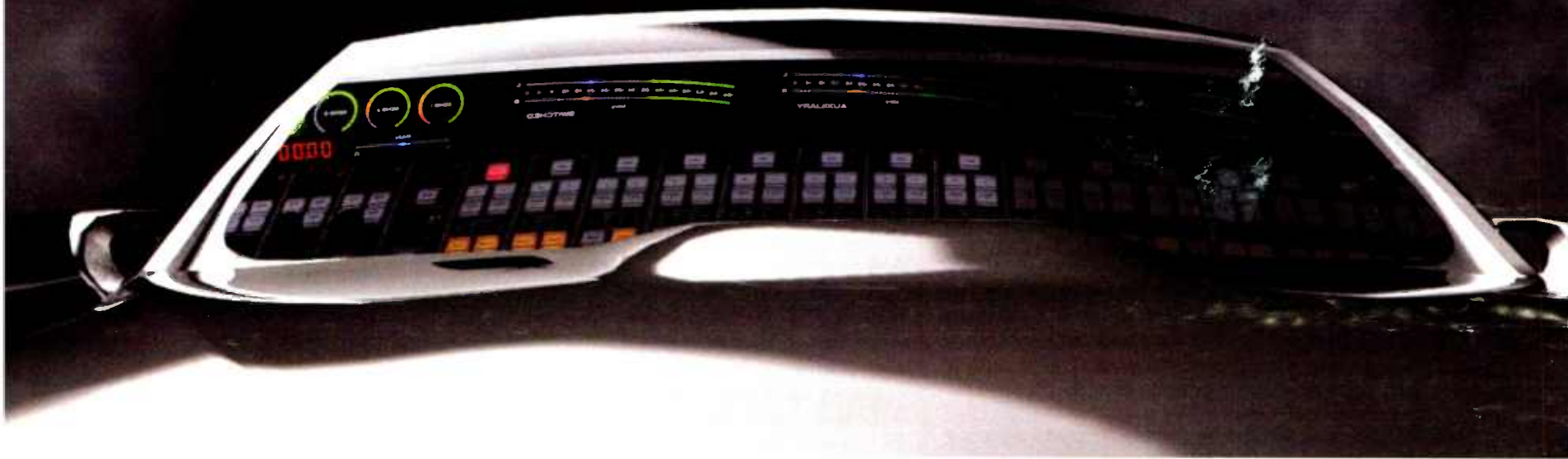
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