



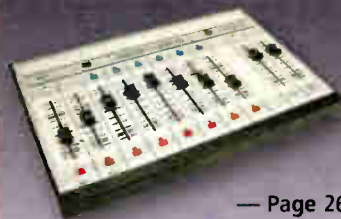
RADIOWORLD

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INSIDE

STUDIO SESSIONS

• ARC-8 gets you on the air fast, clean and inexpensively.



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• S. Rea Crawford has been a fixture at WAWZ for 70 of its 80 years.



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• Craig Parshall of NRB says new media platforms have a historic free speech problem. — Page 38

'The Killer App for Radio Is The Professional Programmer'

Barry Thomas Is Radio World's Excellence in Engineering Award Winner

BY PAUL McLANE

Barry Thomas remembers the smell; a romantic mixture of history, technology and tobacco.

NEWSMAKER

"There was this weird mix of 1940s dust from the Harris boards and Gates transcription turntables, kicked-up dust and this slight tinge of nicotine.

"It felt huge."

He was a teenager, doing newsbreaks on a little disco-formatted, automated AM that ran in a back closet of a TV/FM/AM combo. He'd been allowed on the air because he had "an awful cold that gave me a little rumbling voice."

But 32 years later, and still not yet age 50, he has built his career working not behind microphones but inside equipment racks, under studio counter-



Photo by Jim Peck

tops and at conference podiums. He also is among radio's most vocal advocates — on Capitol Hill, at convention panels and in standards discussions — for radio and for the engineering profession.

Barry Thomas, CPBE CBNT, vice president of engineering for Lincoln Financial Media, is the recipient of the Radio World "Excellence in Engineering" Award. Recipients represent the highest ideals of the U.S. radio broadcast engineering profession and reflect those ideals through contributions to the industry.

(continued on page 4)

High Stakes For LPFMs, Translators

Here's a Sampling of Industry Thought on the FCC's Balancing Act

BY LESLIE STIMSON

WASHINGTON — The power levels being discussed may be low, but passions on the issue run high.

The FCC is seeking to license more low-power FM stations while at the same time reducing a backlog of roughly 6,500 pending translator applications — and developing a way that these secondary services can coexist.

The commission now is reviewing approximately 200 comments filed in its Third Further Notice of Proposed Rule Making, RM-11338. This article provides a sampling.

Several organizations wrote that they support the spirit, if not every detail, of the commission's proposed approach to the situation. It laid out a tiered market-based approach that would locate new LPFMs and FM translators in the top 150 markets using specific LPFM "channel floors" recommended in those markets.

Many filers suggested modifications to the plan that would tip the scales in favor of either more LPFMs or FM translators.

One angle drawing a lot of attention is the commission's plan to dismiss

(continued on page 10)

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iPhone World Radio History



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World Radio History



FCC Prefers E-Reporting For National EAS Test

WASHINGTON — The FCC thinks it will be easier for broadcasters to file electronic reports rather than paper ones for the Nov. 9 national EAS test.

To that end, the agency developed an electronic reporting system it encouraged stations to use; the system was to become available to stations in mid-October.

On test day, the agency would like stations to inform the commission quickly whether they received the national EAS test message and whether they were able to pass it on. It wants broadcasters to follow up with a more detailed report later.

Reports are due to the commission within 45 days after the test. As of



FCC's Greg Cooke, right, and FEMA's Antwane Johnson during an EAS session at the spring NAB.

and Technology Policy Kelly Williams said stations should decide in advance who will fill out the report, noting that in some cases, the legal department may want to review it.

If one EAS encoder/decoder feeds multiple stations, only one report is needed; however the agency wants information pertaining to all of those stations.

Undetermined is what would happen to information that stations submit to the FCC. Cooke said the question was being discussed and that the FCC realizes releasing some information would be useful to the industry.

He said the e-reporting system would have a secure portal. "We need to know that data people send to us is not going to be available to competitors, among other things."

Adrienne Abbott, chair of the Nevada Emergency Communications Committee, said it would be helpful to have aggregated station data in order to identify EAS system problems and fix them.

NAB, the FCC and FEMA worked together to craft PSAs to inform the public about the national test. Radio PSAs in English and in Spanish are available for download on their sites, as well as that of the SBE.

On Nov. 9, the federal government

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mid-October, the agency hadn't said what would happen to a station that doesn't file a report in that timeframe, if anything.

Greg Cooke, associate chief of the Policy Division of the FCC's Public Safety & Homeland Security Bureau, said the e-reporting system and a special "one-day" EAS handbook for the national test would be available at www.fcc.gov/nationwideeastest. The commission hopes stations will use the handbook in conjunction with FEMA's EAS Best Practices Guide (page 6).

He encouraged stations to fill out basic information ahead of time, such as facility ID numbers, monitoring obligations and specific EAS equipment details. Then, on Nov. 9, the agency would like stations to report online simply whether they received the EAS test and if they could re-transmit it, with follow-up information to be reported within 45 days.

NAB Senior Director of Engineering

Cooke stressed that the FCC is not planning to take a punitive stance against stations that can't receive or pass along the message. "Our real emphasis is on participation in the test."

Our real emphasis is on participation in the test.

— Greg Cooke, FCC

Though reporting to the FCC is mandatory, use of the online form is optional. If stations do use it, they do not then need to file a paper report, Cooke said.

Asked if a broadcaster with multiple stations would need to file reports for each one, Cooke said: "We really want information broken down by encoder/decoder, and the links between all of those. Anywhere there's a box, we want to know what happened."

will activate the EAS through its 60 Primary Entry Point stations which, in turn, will relay the message to LPI stations, where the message will continue on down the daisy chain to reach the public.

FEMA is encouraging stations to determine now what sources they are supposed to monitor to receive the EAS message. It encourages stations that may not have a PEP source to see if their EAS encoder/decoder can monitor their local NPR member station and receive the EAS message through NPR's Public Radio Satellite System.

— Leslie Stimson

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ALESIS

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THOMAS

(continued from page 1)

His résumé is rich with technical accomplishment in all manner of environments. That includes supervising tech operations for radio groups, and directing engineering work in support of national radio news bureaus and coverage of political conventions and Olympic games. He has built studios, moved stations, created engineering departments and designed satellite networks.

But perhaps even more impressive has been his role in national technical organizations. When issues of importance involving radio engineering are being debated, you can be sure to find him nearby.

He served two terms as president of the Society of Broadcast Engineers and chairs its Government Relations Committee. He has been active in support of legislation to allow FCC commissioners to add engineers or computer scientists to their staffs.

The SBE this year elected him Fellow, a designation that recognizes members who have rendered conspicuous service or made valuable contributions to the advancement of broadcast engineering.

He also is active in the National Radio Systems Committee, the influential standards body co-sponsored by the National Association of Broadcasters and the Consumer Electronics Association. He chairs the NRSC RBDS Subcommittee. Barry also serves on NAB's FASTROAD and Engineering Conference Committees.

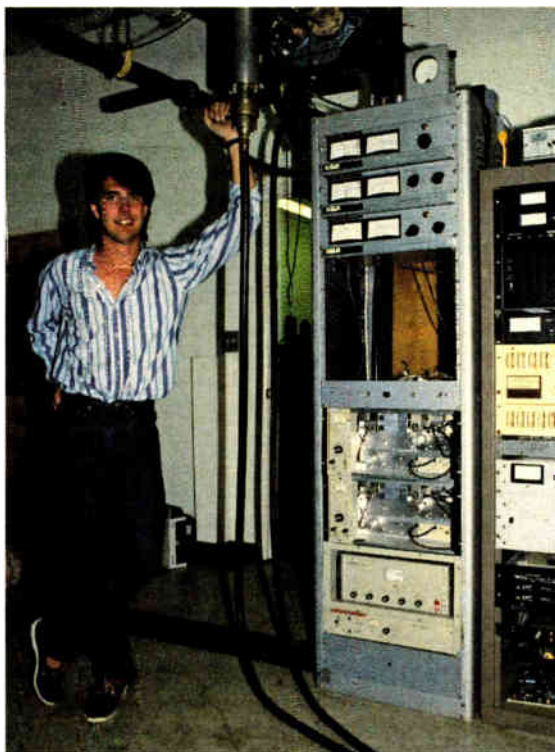
HAIL, COLUMBIA

In those early days at WNOK in his hometown of Columbia, S.C., he eventually did just about every task at the station, including engineering, production, morning show support, oldies PD and sales. Later he helped build a new 100 kW station in the Hilton Head area.

He rattles off a list of people who assisted him, particularly early in his career.

Peter Hamlett helped Barry obtain radio interviews and cordially tried to talk him out of a career in the business. "He taught me from a customer service perspective. He taught me the fun of radio and the excitement of doing the work."

Engineer Bob Byrum entrusted an AM station to the young engineer. "I made all kinds of messes and had to clean them up. He was the person who taught me my



At the WNOK(FM) transmitter site in the 1980s. 'I was the assistant engineer when this site was built, but I moved and rebuilt the former main transmitter, an RCA BTF-10e1, to be the aux. This was the STL/monitor/processor/exciter rack between the main and aux transmitters. I was proudly standing by our new 8100Xt2.'

craft, the math, the nuts and bolts."

Local engineers Fayne Anderson and Milton Holliday shared time and knowledge, as did Bobby Lambert, a former FCC inspector, and contract engineer Alan Hovermale.

Barry met Tony Gervasi, hired him as an assistant and was best man at his wedding. Cross-town engineer Ed Noyes, currently a Citadel/Cumulus engineer in the market, was a staunch processing competitor. "We'd meet at Lizard's Thicket, where everything's deep fat fried, for lunch and we'd say, 'I made a change last night, go figure out what it is.'" Radio exec Bill McElveen, then at Audubon Broadcasting, was supportive.

His career took Thomas to Cleveland as chief engineer of WPHR(FM), which later became alternative WENZ. "Paul Donahue at Gannett told me, 'You've got an opportunity to work in Cleveland, you need to go.'

Boy was he right. Paul was trying to tell me there were these talented people and you'll learn what you won't learn anywhere else."

Thomas soon became DOE for OmniAmerica Group of Cleveland and stations WMJI(FM), WMMS(FM) and WHK(AM).

"It was a competitive market, a fierce market; yet the stakes weren't so high you couldn't make a mistake. You *can't* make a mistake in San Francisco or New York." He recalls the confluence of talent and events in the mid-1990s as a magical one. Cleveland saw the opening of the Rock and Roll Hall of Fame and Museum and Jacobs Field; the Indians went to the World Series. Thomas worked with or got to know industry figures like Dean Thacker, Carl Hirsch, John Gorman and Chriss Scherer.

"I ended up working in the footsteps of Steve Church and Frank Foti. Everything they'd left at the transmitter site of WMMS/WHK — you could see these old Cutting Edge or Telos frames there. ... 'Ooh, this is where Carl Smith taught his classes.' Then you get a chance to meet Carl Smith."

BROAD BODY OF WORK

Eventually the West Coast called.

Thomas became a station technical director for AMFM/Chancellor Media in the late 1990s, a time of infrastructure change in the industry after the easing of ownership caps. Around this time, Chancellor and Evergreen Media merged to become AMFM Broadcasting, which later would be purchased by Clear Channel.

Barry headed a staff of engineering directors from Evergreen and Chancellor in constructing facilities in San Francisco and Los Angeles. He recalls a period of 12 months in which the team performed two station moves, a station buildout and a major swap of transmitting facilities (changing KYLD from 107.7 to 94.9 MHz). Another big project, building KCMG(FM), "Mega 100," let Thomas move to Los Angeles, one of his career goals.

The early '00s saw him directing engineering at dot-com firm Comedy World Radio Network, including design of its studio and office facility for radio, video and Internet publishing. Then, as VP of engineering for Westwood One Radio Networks in New York, he directed network operations, maintenance and affiliate



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The EAS Best Practices Guide was created in partnership with EAS Participants to support incremental improvements by providing basic guidelines for EAS operation and maintenance.

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FALL SHOW PRODUCT SPECIAL

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iStockphoto/Simon Oxley

OPINION

- New Media Has a Free Speech Problem 37

tech support for the country's largest radio network, and managed tech support for the likes of Bill O'Reilly, Tom Leykis, Jay Severin, Jim Bohannon and Lars Larson.

Among further accomplishments, Barry has worked as a contract engineer in Ohio and California. He helped found StratosAudio, an interactive radio technology company, and worked there as chief technology officer. He assisted in the launch of SBE Chapter 101 in South Carolina, sold gear for dealer Broadcasters General Store and has had a hand in three patents.

Since 2006 he's been VP of engineering at Lincoln Financial Media, formerly part of Jefferson-Pilot Corp. It currently has 14 stations. He is based in Atlanta and oversees engineering and IT, reporting to CEO Don Benson.

THEIR OWN ENEMY?

"Against all odds, I'm still really excited about what's ahead for radio broadcasting," Barry told me. "Broadcasters, and particularly programming professionals, still are very good at what they do."

While a platform like Pandora may grow, "Group sourcing of musical taste is only good to a point. People still appreciate professionals making music decisions for them, being presented with a product. ... The killer app for radio is the professional programmer."

Yet broadcast engineers have a key role. He likens it to being on the shop floor in a car factory. "We don't necessarily design the car. We ideally have input; but really skilled and talented design people come up with the design, really skilled sales people sell it. It's our job to *make* that thing.

"You give me an exciting design, and I just *love* making that car."

Barry Thomas feels engineers in general do themselves a disservice.

"We are so customer service-oriented, we allow ourselves to be taken advantage of a great deal. We [also] tend to devalue our own skill set. We devalue the importance of our role in the enterprise."

The old "engineer stereotype" shouldn't apply anymore, he said; yet even engineers still fall into that mindset. "I've really made an effort throughout my career to be part of the management and programming teams."

And the radio product does excite him. You can sense a lifelong love for the medium in his voice.

"It's still magic on the airwaves. I listen to talk radio: Rush, Neal Boortz, Rachel Maddow. You hear good programming, something that draws you in ... people still gravitate to that. In music, too. It's presentation. The music is not the product; the presentation and the lifestyle are the product."

He's further excited by what radio groups are doing with streaming, citing

Clear Channel's New iHeartRadio as an example — "They are injecting streaming radio with professional programmers; I think that's going to be very interesting to see" — but he thinks this trend also will leave holes in individual markets. "When I want to hear about Los Angeles, I go to stations that have that lifestyle, that tell me about that region. When you have national brands, like Clear Channel, you leave holes for local brands."

REMISSION

If you know Barry Thomas personally, you are asking yourself, "But what about his health?"

In 2008, concerned about a persistent crick in his neck, he sought medical advice. He was diagnosed with multiple myeloma, a cancer of the plasma cells in bone marrow.

"It had degenerated one of my vertebrae. Incredibly fast it went from, 'Hmm, what's that little mass,' to 'They can't see the outline of the vertebra on the X-ray.'"

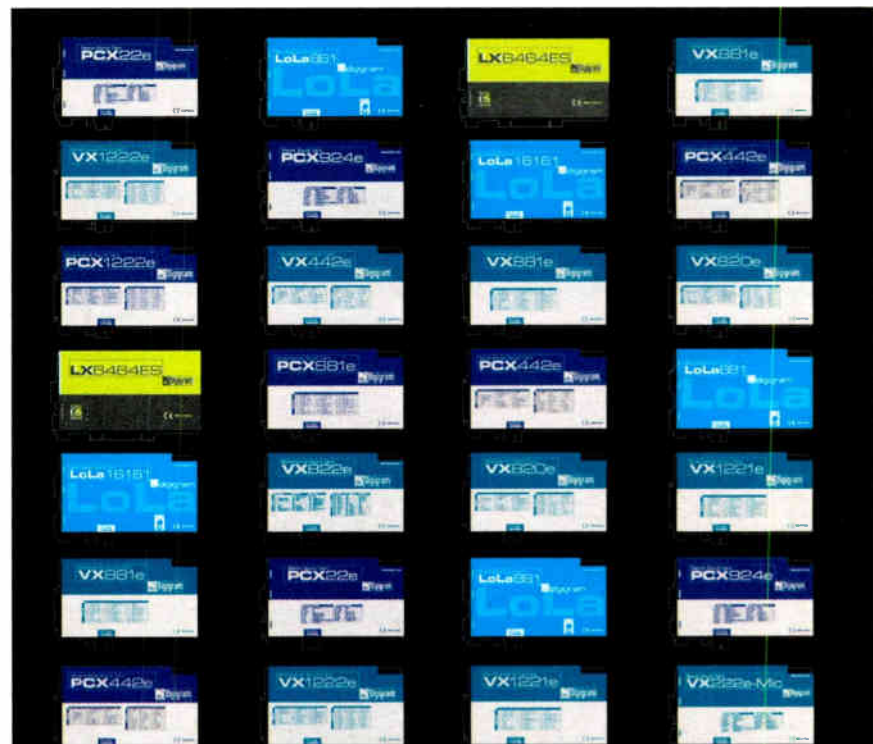
He went through emergency spine surgery, involving a fusion and titanium rods. ("I walk around looking like the

Muppet Sam the Eagle.") In the course of that he also started going through chemotherapy. "The treatment was a combination of oral and intravenous meds; and at the same time they're harvesting stem cells. At the same time my wife is pregnant with her second set of twins." In a short span he went through four courses of chemo as well as the stem cell harvesting; and his sons were born.

Today he receives infusions every eight weeks, with blood tests and checks every four. Usually he feels pretty good, he told me, though recovery weeks are harder physically due to the treatments. He has to fight fatigue and find more time to rest. Also, "I don't wish the diet program on anyone!"

Now the cancer is in remission. "The counts are zero. Whatever started has stopped." Thomas sounds upbeat, saying life expectancy for people with his condition has gone up dramatically, and adding that he's appreciative he can go about his life's duties.

"If you look how others have responded ... the fact I can function and work a full-time job and be a father, it's a miracle itself."



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FEMA Finalizes EAS Best Practices Guide

Guide to Prepare Broadcasters, Alert Originators for National EAS Test

FEMA's Integrated Public Alert and Warning System program put the finishing touches on an EAS "best practices" guide, intended not only to help broadcasters and alert originators prepare for the nationwide Nov. 9 test, but to improve dissemination of any future EAS events.

IPAWS Program Manager Manny Centeno told Radio World the guide is a "living document that will be frequently updated as we learn more from the nationwide EAS test and other coordinated statewide EAS tests."

The guide includes specific instructions for alert originators and broadcasters. It has been significantly updated since RW published a draft in our Aug. 10 issue.

Installation and Configuration: Monitoring EAS Sources

Most National Primary, also known as Primary Entry Point, sources for the EAS are AM stations. AM reception introduces challenges that include, noise, distortion, and interference. FM signals may also present challenges in some situations. To ensure nominal reception of an EAS source on the AM and FM bands, it is important that EAS participants follow best practices for signal reception.

Challenges to AM Reception

- Weak signals are the source of most AM reception issues. This is true for receivers that are farther away from the source, or when a suitable antenna is not used
- Selection and use of low quality receivers for signal reception contribute to reception problems
- Overloading – this is caused mainly when a high-powered transmitter is in the same location as the receiving device
- A long list of man-made and natural sources cause radio interference and reception problems. These sources include the following:
 - Atmospheric Interference — lightning, fading, reflection, refraction, etc.
 - Electric Noise Sources — light dimmers/switches, fluorescent ballasts, overhead power lines (worn or defective power line insulators), computers and other digital processing equipment, monitors and displays, electric motors, such as compressors, blowers, and fans
 - RF sources, such as cellular telephones, STL links, RPU equipment, and others may cause interference to AM reception

Challenges to FM Reception

- Weak signals contribute significantly to FM reception problems. This is also true for receivers that are far away from the source, or when a proper antenna is not used
- Use of low quality receivers as message source for EAS devices
- Channel Interference – this is caused, for example, when a distant and weaker signal is "over-powered" by a closer, more powerful signal on an adjacent channel
- Distorted Audio — some sources of EAS messages may over process, or over modulate the audio and introduce distortion. This distortion may prevent EAS devices from decoding the AFSK tones

An Emergency Alert System Best Practices Guide

EMERGENCY ALERT SYSTEM
IPAWS
 Integrated Public Alert and Warning System

Installation and Configuration: Reception Best Practices

It is important that EAS participants can receive a clear signal from their sources. This may be simple to achieve in locations where those sources are nearby. It can be significantly more challenging to receive these important EAS messages in remote locations, rural areas, and locations that are susceptible to interference from man-made or atmospheric sources. The best practices listed are basic in nature to most broadcast engineers, however, many are often forgotten and have led to widespread challenges in observed state and territorial EAS tests.

Antenna Selection and Installation

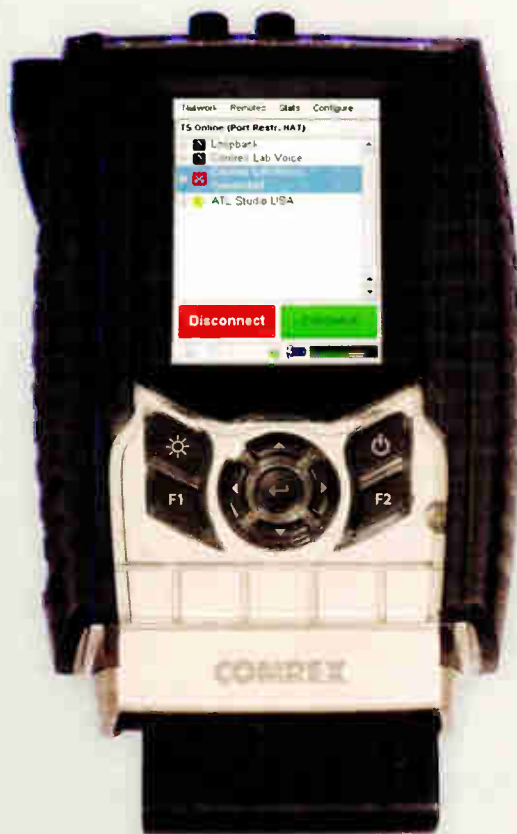
- ✓ Evaluate your signal acquisition needs and select an antenna suitable for the local conditions — mountainous areas, buildings and obstructions, high concentration of RF sources or noise, etc.
- ✓ Avoid placing antenna indoors and near sources of interference
- ✓ Whenever possible, make use of an exterior antenna for better performance. Select an antenna for the proper band and with nominal gain for your requirement
- ✓ Select an exterior directional antenna for locations with high station density
- ✓ For AM, a tuned whip or tuned loop antenna may prove useful
- ✓ Observe proper grounding and properly secure the antenna to minimize movement in high winds
- ✓ Use high-quality, low-loss coax to reduce signal loss and interference

AM/FM/VHF Receivers and Tuners

- ✓ Select a high quality radio tuner with the following features:
 - Antenna Terminals - Essential for reception. Choose a receiver/tuner with AM and FM antenna terminals. Select a receiver/tuner with balanced antenna terminals and use 75Ω coaxial cable to minimize interference
 - Sensitivity - Choose a receiver/tuner with a low decibel femtowatt (dBf). This is a measure of how well the receiver/tuner picks up signals. The lower this measurement is, the better the sensitivity
 - Audio Out Interface – A receiver/tuner with good audio output levels is desirable. Make sure to check the audio levels driving the monitor input of the EAS device for nominal levels and no distortion
 - Station Preset Memory – A receiver/tuner with non-volatile memory presets is very helpful to prevent retuning source stations if power outages occur
- ✓ Select a tuner/receiver with non-volatile memory to preserve station/channel presets
- ✓ Observe good audio engineering practices by ensuring proper grounding, audio phasing, impedance, and levels.
- ✓ Use high-quality shielded audio cable between receiver/tuner and EAS device

(continued on page 8)

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World Radio History

EAS BEST PRACTICES

(continued from page 6)

Installation and Configuration — EAS Devices Best Practices

Understanding how to install and configure an EAS device is essential. EAS devices are installed in different locations, including radio stations, DTV stations, cable head ends, wireline service providers, and satellite facilities. There are significant differences between these types of locations and facilities; however, EAS device configuration is similar. Review and follow manufacturer instructions.

EAS Device Basic Installation and Configuration

- ✓ Select a location for the EAS device that is suitable for the type of operation desired. For manual operation, place the device near the operator position so that it is visible and audible
- ✓ Bench test the unit to make sure it was not damaged in shipping – check audio inputs and outputs, as necessary
- ✓ Install the unit in the desired location
- ✓ Connect EAS source monitor inputs as indicated in the state/local area EAS Plan – tune/select the frequencies or sources per the state EAS Plan
- ✓ Connect the output of the EAS device to your audio air chain – if the device requires an audio switch, connect per device instructions – properly ground connections and verify audio quality and amplitude
- ✓ Follow the manufacturer's instructions to configure the following items:
 - Configure your state and local area FIPS Code
 - Set the correct date, time and UTC offset/time zone, and daylight savings setting, as desired

- Set station Originator Code to "Broadcast or Cable"
- Set call sign or identification code
- Set attention tone duration
- Set for Automatic or Manual forwarding – if facility is unattended, set to Automatic
- Configure the appropriate event codes – this is not required for an EAN, but is necessary for live codes and RMTs
- Adjust the audio inputs and outputs of the EAS device for best audio quality and amplitude
- If connecting to a crawl or character generator, test that the data is properly driving the generators – adjust the speed and timing of the crawl so that it is readable and set it to appear on screen for the duration of the EAS event – choose size and color for optimum readability
- If switching external equipment, verify that all necessary contact closures are operating properly and are activating ancillary equipment, as desired
- ✓ Conduct an RWT or RMT to verify that the system is operating properly along with all ancillary devices
- ✓ Monitor your EAS sources and let them know if you are not receiving RWTs or RMTs – inform them if there are problems with audio quality or amplitude
- ✓ Perform regular checks in between RWTs and RMTs to make sure equipment is operating properly
- ✓ Regularly review EAS logs and take action if tests are not received or conducted



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Installation and Configuration: Quick Checklist

This checklist is designed to provide EAS participants with a basic guideline in preparation of the Nationwide EAS test and to receive and relay day-to-day EAS messages. Several state EAS plans provide a similar list as a guide for EAS participants.

- PEP Station or Source _____
- EAS Monitoring Assignment #1 _____
- EAS Monitoring Assignment #2 _____
- EAS Monitoring Assignment #3 _____
- EAS Monitoring Assignment #4 _____
- ___ EAS device is powered and fully functional
 - ___ Monitoring device or tuner is receiving the assigned source per the State EAS Plan
 - ___ Audio from the monitoring device is properly connected to the EAS device and quality is nominal
 - ___ EAS device has been properly configured
 - ___ EAS device is connected to the facility's air chain and is ready to broadcast alerts
 - ___ EAS device is set to Automatic relay
 - ___ EAS device is set to log alerts and tests
 - ___ Logs are filed, as required
 - ___ Facility personnel are trained in EAS procedures and device operations
 - ___ A copy of the state EAS plan is available for reference

To contribute to the Best Practices Guide, visit nationaldialogue-emergencyalertsystem.ideascale.com.

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PC Software for archiving and logging all of your stations audio.

TRANSLATORS

(continued from page 1)

pending FM transmitter applications in top markets where the number of possible LPFMS would fall below projected "channel floors."

The agency also sought comment on whether to expand the number of AMs that can be allowed to transmit using FM translators; that number hovers around 500 at present. And several commenters revived the idea of letting radio use analog TV channels 5 and 6.

We start with excerpts of comments about the feasibility of opening an LPFM application filing window by the summer of 2012.

GIVE ENOUGH TIME FOR LPFM FILINGS

Prometheus Radio Project, Future of Music Coalition & United Church of Christ wrote:

We emphasize that one of the most important things the commission can do to ensure a successful LPFM service is give potential applicants adequate time to apply for construction permits. Accordingly, we ask the commission to open an LPFM application filing window no sooner than six to nine months after the publication of the final LPFM

PERHAPS MULTIPLE WINDOWS ARE NEEDED

From Michelle (Michi) Eyre, founder of REC Networks:

REC agrees with Prometheus that multiple filing windows may be warranted. We need to make sure that the territory that is designated for each window does not cause disparity to another part of a metropolitan area that is in another state.

For example, a filing window where Nebraska and Iowa are in different filing windows and where Nebraska is in the first window may disadvantage Council Bluffs, Iowa, because Omaha was allowed to file first. With more urban availability of LPFM, this issue is now more important than ever.

DON'T DISMISS ALL PENDING TRANSLATOR APPS ...

Several executives contributed to a filing by the National Association of Broadcasters. Executive Vice President of Legal and Regulatory Affairs Jane Mago headed the list:

NAB believes the proposal jumps too quickly to dismiss pending applications for FM translators, which are often integral to the ability of many FM licensees (and AM as well) to serve their local

If the rules are published no later than January 2012, then July 2012 would be the soonest reasonable date for an application window.

– Prometheus Radio Project,
Future of Music Coalition & United Church of Christ

rules, and to seek comment on the use of multiple filing windows as was done in the 2000 filing process. ...

If the rules are published no later than January 2012, then July 2012 would be the soonest reasonable date for an application window; and August, September, or October would be more likely to ensure good outcomes.

audiences and fulfill their public interest commitments.

We emphasize, however, that the proposed approach could be a reasonable first step, if it is improved to more precisely limit the adverse effects on broadcasters with long-pending FM translator applications to situations where grant of those applications would preclude LPFM applications. ...

The Arbitron Metro more accurately reflects the actual radio marketplace than does the newly-created "grid," and is the longstanding, commission-endorsed regulatory benchmark for radio market definition. Use of Arbitron Metros, rather than the grid, would improve the precision of any determination about the balance between LPFM and FM translator opportunities in a market, consistent with the LCRA.

A filing by National Public Radio was signed by several executives, led by Terri Minatra, acting vice president for legal affairs, general counsel and secretary:

The measures the commission proposes to adopt ... would cast aside FM translator services that many applicants have spent considerable resources preparing to provide. Such an outcome would be harmful to future public radio service. It is also unnecessarily harsh. ...

Rather than specifying minimum numbers of LPFM station opportunities on a market-specific basis and summarily dismissing or processing FM translators thereafter, the commission should first address the backlog of pending FM translator applications to identify those which

review the interference ratios to be used in an FM version of OET Bulletin 69. ...

NTA therefore proposes that the commission put in place a true terrain-dependent interference analysis program and process the now-pending FM translator applications using it and see how many of the applications survive. A better judgment can then be made as to how many, if any, FM translator applications it is necessary to dismiss.

GO AHEAD & DISMISS

John Lombardo, Chicago Independent Radio Project, writes:

I strongly support the idea of dismissing all pending translator licenses

The commission should ... address the backlog of pending FM translator applications to identify those which propose an FM translator service the applicant actually intends to provide.

– NPR

propose an FM translator service the applicant actually intends to provide. It should do so by investigating the few entities that filed massive numbers of FM translator applications to determine whether they possessed the financial means and service plans to construct and operate the proposed stations. If the investigation confirms that an entity has been engaged in spectrum trafficking, the commission should dismiss the entity's pending applications, in addition to any other action the circumstances may warrant.

in markets where a set LPFM "floor" could not be met if additional translator licenses were granted. I'd also ask, moving forward, that the commission make sure there is room for urban LPFMs in the country's largest markets by providing opportunities for waivers for second adjacent channels, as called for in the Local Community Radio Act.

MARKET-BASED APPROACH TO TRANSLATOR PROCESSING IS JUSTIFIED

Educational Media Foundation, submitted by attorney David Oxenford of Davis Wright Tremaine, states:

The market-specific approach to the decision as to whether to dismiss applications pending from the 2003 FM Translator Window has been accepted by many of the major parties filing comments in this proceeding: ...

The real issue raised by the vast majority of the comments is not with the question of how to move forward — there seems to be general agreement that some form of the FCC's market-by-market review of LPFM and translator availability is an acceptable methodology. Instead, the real issue seems to be whether the FCC made the right "cut" in deciding how many of the applications from the 2003 FM translator window

(continued on page 12)



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TRANSLATORS

(continued from page 10)

can be processed, and how many must be dismissed to preserve opportunities for LPFM.

Naturally, the comments of LPFM proponents ... argue that there should be more protection for LPFM opportunities, and hence more dismissals of translator applications. However, these comments all seem to proceed from a reading of the Local Community Radio Act that presupposes that the only goal of the statute was the promotion of LPFM stations. In fact ... the LCRA does not read that way. Instead, the LCRA seeks to promote opportunities for both new LPFM and new FM translators. ...

Thus, a wholesale dismissal of the translator applications is not warranted. ...

MARKET APPROACH NEEDS BETTER BALANCE

Media Watch, submitted by Director and Founder Ann J. Simonton:

With a decision for the FCC to process the translators in our area, the FCC will — for the most part — be giving the people who already have frequencies in the area extra channels. KLOVE/Air 1 network could go

With a decision for the FCC to process the translators in our area, the FCC will — for the most part — be giving the people who already have frequencies in the area extra channels.

— Media Watch

from having seven channels to having a maximum of 11 radio channels. And in the end there would be no room for not even one LPFM station located in downtown Santa Cruz. We urge the FCC to optimize its current proposed rulemaking to better balance LPFM and translator licensing.

'CHANNEL FLOORS' OVERESTIMATE LPFM AVAILABILITY

Prometheus, REC Networks and Common Frequency stated in a joint filing:

REC along with our allies Common Frequency and Prometheus Radio Project ... have invested a lot of time and effort into doing a thorough analysis of the commission's market-based channel floor proposal. ... [We] felt that the 30 x 30 minute study area for most large, medium and small markets were over-proportionate and did not accurately represent the urban areas they intended to protect.

LPFM advocates encourage the commission to use its market-by-market analysis, but to revise its meth-

odology for estimating future available LPFM stations by using a 21x21 minute grid. In addition, we urge an increase of 25 percent to the LPFM channel floors.

DON'T USE SMALLER GRID

On the question of market definitions, Educational Media Foundation stated:

The [LPFM proponents'] maps substantially understate the size of the Arbitron Metro Markets that are used for virtually all FCC definitional issues for radio

The LCRA seeks to promote opportunities for both new LPFM and new FM translators. ... Thus, a wholesale dismissal of the translator applications is not warranted.

— Educational Media Foundation

markets. In fact, in connection with the proposed dismissal of FM translator applications from the 2003 Window, the LPFM proponents do not seem to suggest that the applications for translators that will serve areas in an Arbitron Metro, but will be located outside the urbanized area, be preserved. Instead, they seem to be urging that the larger area be used for purposes of determining who to dismiss, while using the smaller area for purposes of determining how many LPFM stations can serve the area. They cannot have it both ways.

EASE CROSS-SERVICE TRANSLATOR LIMITS

Mark Humphrey writes as an individual:

As a broadcast engineering consultant, I've helped several independent AM stations to take advantage of this rule in areas where existing FM translators could be found, purchased and modified to meet the cross-service restrictions. And as a shareholder in WCJW, Warsaw, NY, I'll say firsthand that our three translators have greatly helped this locally-programmed AM Class D facility to remain viable in a rural market despite the poor economy — in fact, we've added some full- and part-time jobs since our programming has expanded to a formerly-impossible 24-hour/day schedule. ...

However, I've been in contact recently with a number of frustrated AM broadcasters that want FM translators but cannot find any available for sale. Barring any change in the present rule, I've advised these licensees to wait until the next round of "Auction 83" translator construction permits is granted, then acquire a new authorization and attempt to negotiate a swap of it for a pre-May 2009 license (which can be relocated to a suitable site) — but frankly, this overly complicated "workaround" will just create an additional processing burden for Media Bureau staff.

BUT WAIT A MINUTE ...

On the topic of FM translators for AMs, Prometheus, Future of Music Coalition and United Church of Christ stated:

While we appreciate the efforts to further assist the AM radio service, we oppose the lifting of cross-service restrictions on translators licensed from Auction 83 unless other anti-trafficking safeguards are instituted beforehand, at least until the commission develops a better factual record of the localism benefits of any such change. We also ask the commission to prohibit the rebroadcast of HD signals on FM translators, particularly when such translators are operating at increased power and height under the "fill-in" rule.

ALLOW RADIO USE OF CH. 5, 6

Laura Mizrahi and Clarence Beverage of Communications Technologies Inc. wrote:

CTI's principals are members of the Broadcast Maximization Committee, which submitted a proposal in the diversity docket proceeding. The proposal suggests that a portion of the vacant spectrum in VHF Channels 5 and 6 can be used to relocate the LPFM service by dedicating spectrum space for this service.

It is believed that BMC's proposal would allow many new LPFM stations to be located in markets where there is currently little or no LPFM availability. In fact, there may be no way to achieve the proposed LPFM "channel floors" without employing this added spectrum. Further, LPFM operation in VHF TV Channel 5 and 6 spectrum would be free from interference from full power stations and avoid conflicts with the FM translator service.

Comment on this or any article. Write to radioworld@nbmedia.com with "Letter to the Editor" in the subject field.

NEWSROUNDUP

ERI CONTESTS STATE FINDINGS: In Indiana, the state Occupational Safety and Health Administration proposed a \$91,500 fine against ERI for alleged safety violations in connection with two fatalities. ERI disputes the findings and is contesting OSHA's conclusions. Two men fell some 340 feet and died in April while helping to build a 500-foot tower for the WASK Radio Group. ERI Vice President of Marketing Bill Harland said the company "regrets this terrible accident and mourns the tragic loss of our employees."

BE BUYS LOCALMEDIA: Broadcast Electronics acquired the assets of application developer LocalMedia, the company responsible for development of the CrowdControl, DJ Wall and SMS Campaign Manager radio social media tools that BE released over the past year. Several LocalMedia personnel will transition to BE.

HARRIS: As of Dec. 1, William Brown will be the new president and chief executive officer of Harris Corporation. He succeeds Howard Lance, who is retiring. Brown comes from United Technologies Corp., where he's had several senior roles since 1997, most recently senior vice president, corporate strategy and development.

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BY LEIF CLAESSON

WORKBENCH

(continued from page 14)

to cover the occasional mistake. Part numbers for the pins:

- Male pins HA-3MXX (50 per bag)
- Female pins HA-3FXX (50 per bag)

Jim Schropp has been working with his dad Larry for 10 years now. Larry started Schropp Electronics Services in 1982. The company does contract work for stations in both North and South Carolina, as well as consulting and project work up and down the East Coast.

Reach Jim Schropp at jim@amfmengineer.com.

As busy as our lives can be, it's the little things we forget — for instance, that we left our remote control in "maintenance override."

Fig. 4 suggests a great way to remember. Paul Shulins and his engineers at Greater Media Boston mounted this little box right by the transmitter building door. It's tied to the maintenance mode LED on the remote control. This override indicator is bright enough to catch anyone's attention, even if you leave the building lights on and it's the middle of a sunny day.

Spare yourself the irritation of locking out your remote control system by adding a warning light like this. Thanks, Paul, for sharing the idea.

Wayne Eckert is president of Channel I Images; he wanted to pass along a few tips to deter copper thieves.

Since exposed copper looks like solid gold to thieves, hide it. A good way to do so is to coat the copper with roofing mastic. Roofers know this stuff as "bull-nose." It's a nasty tar-like substance that never really seems to dry up. It gets on anything and everything with which it comes in contact (tools, hands, clothes).

Some bull-nose mastic on the ground kits in Fig. 5 might have prevented a theft. The material reduces the scrap price of copper to the point the metal becomes almost worthless unless the mastic is burnt off. This not only reduces the price but also increases the thieves' labor, a double whammy.

Purchase the material at Home Depot



Fig. 3: The female Neutrik crimp XLR connector.



Fig. 4: Place this warning box by your door as a reminder to reset the remote control.

or Lowe's or any roofing supply store. An example of the product is Gardner 1-Gallon Wet-R-Dri All-Weather Roof Cement.

In situations where applying mastic is not practical, mark up your copper utilizing a stamping set.

These are relatively inexpensive letter stamps that can be used with a lineman's or handheld sledgehammer to mark up copper permanently with something like "Stolen from WXYZ Radio." These stamps also can be heated with a heat gun to mark up the jacket of Heliac, though be careful not to push the heated stamp all the way through the jacket. The stamps work well for marking up plastic equipment cases to keep them from growing legs.

Several stamp sets are available from www.use-enco.com. Enter "Steel Stamp Set" in the search box.

Then there is prosecution. If the crooks are in custody, do all that you can to assure they are convicted. Station management may want to call in markers with city hall to assist, and let local media outlets including newspapers and television know.

Another thought: State courts may not treat your copper theft as the crime

of the century; but if the incident involves an air conditioning system, management would be well advised to bring it to the atten-



Fig. 5: Not much left of these cable ground kits, hacked off by copper thieves.

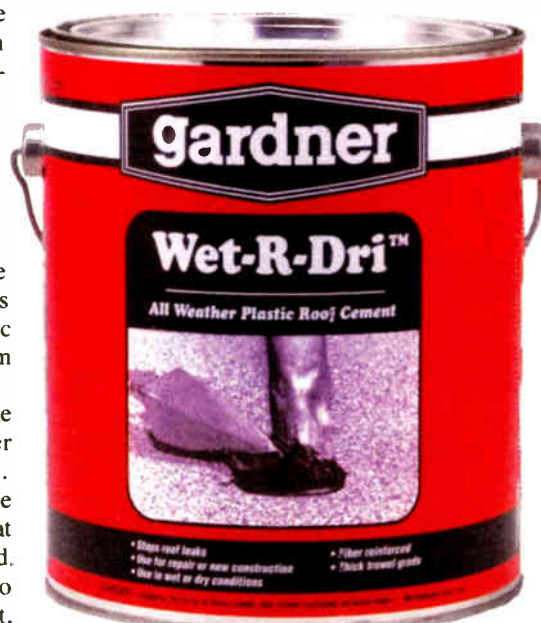


Fig. 6: Bull-nose mastic on the ground kits in Fig. 5 might have prevented a theft. An example of the product is Gardner 1-Gallon Wet-R-Dri All-Weather Roof Cement.

tion of the U.S. Attorneys Office. While there are no federal laws against copper theft, intentionally releasing Freon is a serious crime that can bring with it long prison terms and steep fines.

Wayne writes that it's a no-brainer for the USAO to prosecute, since few copper thieves have the proper EPA 608/609 license or refrigerant recycling equipment. (Does it seem far-fetched that copper thieves could be snagged on a Freon angle? Read about one such case at <http://tinyurl.com/rwthef>.)

Reach Wayne Eckert at w.eckert@channellimages.com.

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 43 years in the broadcasting industry, and is still learning! He is SBE Certified, and is a past recipient of the SBE's Educator of the Year Award.



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World Radio History



Photo by Jim Peck

The following pages provide a sampling of new products at the fall Radio Show. Shown: Jay Tyler, left, and Chris Fleming of Ramar Communications in Lubbock, Texas, get in touch with a Wheatstone E1 Control Surface.

RCS HIGHLIGHTS ZETTA AUTOMATION

RCS is showcasing its new digital radio automation system, Zetta.



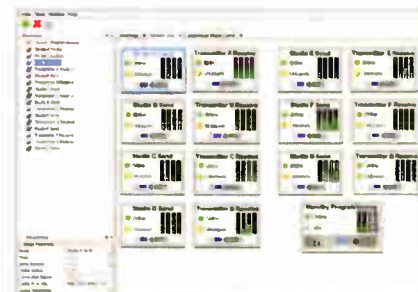
Audio levels can be auto-normalized on audio import. Trim-in, trim-out, segue and intro can be set automatically during import. Users can drag content into blank logs in Zetta, use its clocks as log templates, load flat ASCII files or use live integration with GSelector. The Segue Tool lets users override the trim-in, cross-fade and volume points for log events. Users can audition assets anywhere in the system including library and logs.

RCS also teamed with Digital Alert Systems to interface the DASDEC-II EAS/CAP system with NexGen Digital automation.

Info: www.rcsworks.com

TIELINE RELEASES IP CODEC MANAGEMENT SYSTEM

Tieline's Codec Management System delivers a streamlined codec management PC interface for engineers to remotely monitor, configure and control a network of Tieline IP audio codecs.



Users can create and manage primary and backup connections, view IP statistics to maintain critical connections and adjust individual codec settings like algorithms, jitter buffers and forward error correction.

The alarm and fault detection features, plus multi-layered IP codec redundancy strategies, give users control and peace of mind in managing point-to-point and multipoint IP connections.

A free trial download is available at www.tieline.com/products/G5/Codec-Management-System.

Info: www.tieline.com

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WO Automation for Radio 3.0 automation system is compatible with the Listener Driven Radio audience choice program service. Listener Driven Radio depends upon input by listeners to determine song playlists. WO 3.0 will adjust its playlists to accommodate changes mandated by audience input in real time.

Other new features include multimeter file transfer capabilities, enhanced



user rights and controls along with a "Canadian content" calculator.

WO Traffic is up to version 6.5. It offers, according to a release: "New tools to tag programming for spot placement compatibility or copy violations, create custom, multi-level order approval workflows and book, bill and report on detailed non-linear Internet campaigns."

Info: www.wideorbit.com

NEW HIGHER-POWER FM CIRCULATORS FROM ERI

Electronics Research Inc. is updating its circulator subsystems to accept higher FM HD Radio power levels.

These new FM circulators are available in single-ended configurations for



3.5 kW, 5 kW and 10 kW. They are configured in kits that include directional couplers, a reject load and wall/ceiling mounts or floor stands.

Special configurations using multiple circulators can accommodate higher

power levels to maintain spurious emissions performance for the analog transmitter in systems that employ -10 dBc HD Radio power levels.

Info: www.erlinc.com

IQOYA ADDS AN APP

Digigram's Iqoya family of IP audio products has a software app member.

Iqoya *Mobile is an iPhone app for turning an iPhone into an MPEG 2 Layer II or AAC codec along with a



handheld recorder/editor. The app is fully duplexed. It is compatible with third-party N/ACIP-compatible codecs.

Cancun, shown, is a soon-to-be-available handheld USB audio interface designed for the ENG market. It'll be offered in two-channel and four-channel models.

Digigram also announced digital audio partnerships with ACL NetworX and Telos Systems. The partnerships will facilitate the use of Digigram products upon those companies' respective Ravenna and Livewire IP networks.

Info: www.digigram.com



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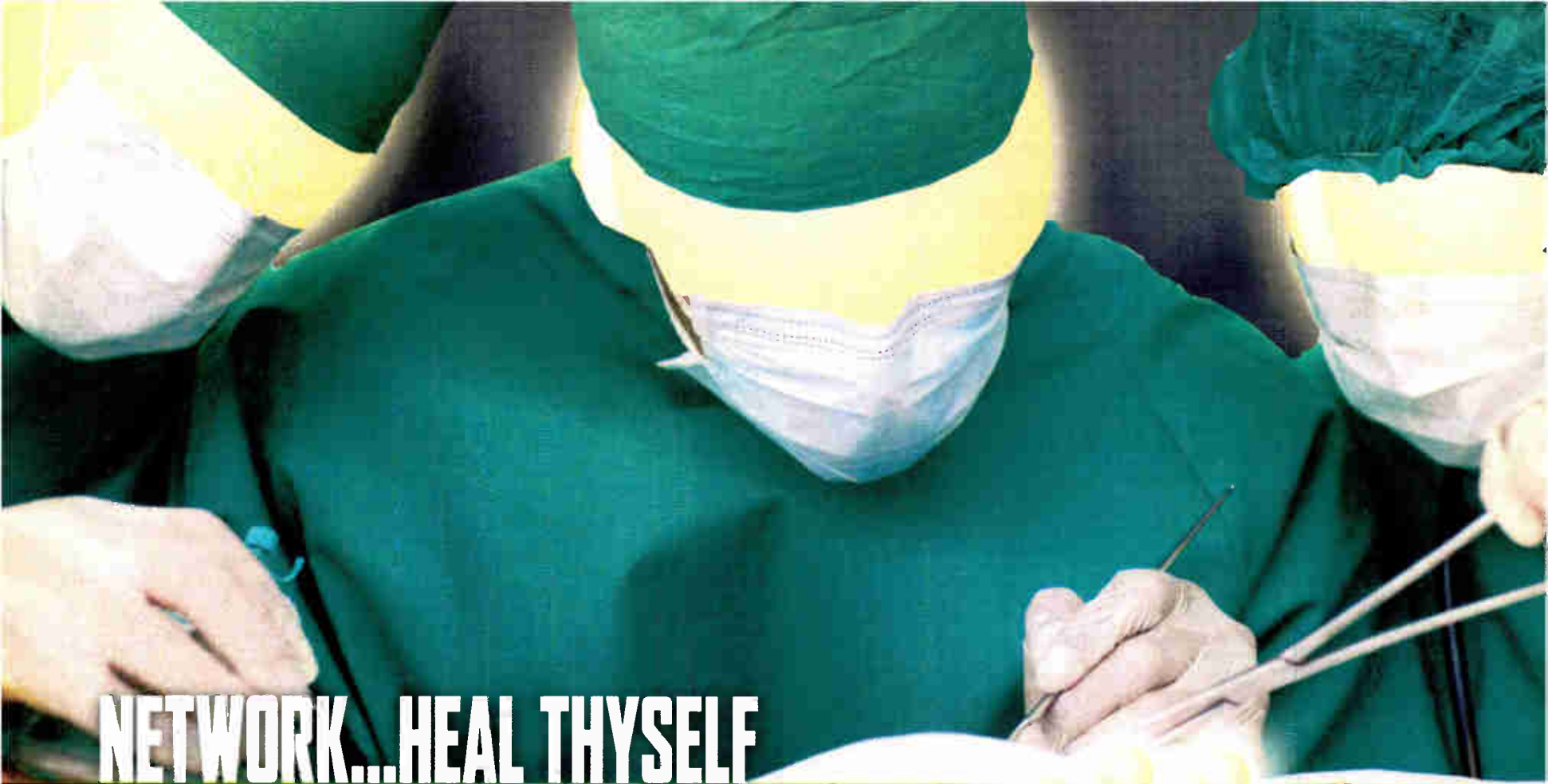
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JK AUDIO DIALS UP CONCIERGE

JK Audio's Concierge 2x6 Switch Core is the heart of a new multiline talk show phone system. Working with one or more of JK Audio's innkeeper hybrids (innkeeper 1rx or innkeeper 2)



it can handle six phone lines incoming and route two at any time to the Guest Module controllers. Two Concierges can be linked to create a 12-line system. The system is modular and scalable.

Working with the Concierge are the new Guest Module control surfaces. They connect to the Concierge with Cat-5 cabling. Innkeepers already in service are compatible with the Concierge 2x6 with a free firmware update.

Info: www.jkaudio.com

BE LOOKS TO THE WEB

Much of the latest from Broadcast Electronics revolves around using the Web.

The newest addition is the SMS Campaign Manager. Its job is to create



mobile text ad campaigns; it has tools for building mobile text subscriber databases, fine-tuning campaign schedules and messages, issuing messages and reporting and tracking campaign operations and results.

Also, the Radio World "Cool Stuff" Award-winning CrowdControl allows listeners to interact with DJs and interfaces with social media such as Facebook and Twitter. The upshot is that partici-



pants can choose the station's playlist.

DJ Wall is a central interface or aggregator for social media users. A station can use it to collect messages, comments or even develop polls for listeners to participate in.

This fall, BE acquired the assets of application developer LocalMedia, which had developed many of these tools.

BE also has tweaked its AudioVault automation program. One change is that the segue editor has been made more accessible by placing it within the main user interface screen. There are more available on-screen tools and easier accessibility to them, including a single-track editor.

Info: www.bdcast.com

DIGITAL ALERT SYSTEMS MEETS EAS/CAP REQUIREMENTS

The latest from Digital Alert Systems is the MultiPlayer, a four-EAS message payout-channel device. Previously, DAS' EAS devices have been limited



to one-channel-at-a-time performance, even in environments where one unit serves several channels.

The MultiPlayer works with DAS' DASDEC units. It carries four audio players onboard. Each of those players is independently controllable via GPI or an IP network. Each also can be programmed to play audio files or switch outputs. Added to the DASDEC's payout stream, a total of five independent EAS/CAP channels can be deployed at one time.

Recent updates also include the DASLC and DASLCR. The new models include the main features of the DASDEC-II but have a lower price and leave out features that might be unnecessary in a simplified operation. Both are housed in 2RU boxes and are EAS- and CAP-compliant; they meet all FCC Part 11 rules and conform to FEMA CAP V1.2 and IPAWS 1.0 standards. The DASLCR adds a pair of internal AM/FM/WX receivers.

Info: www.digitalalertsystems.com

OMT MAKES AVAILABLE VERSION 4.2 OF IMEDIATOUCH

The iMediaTouch radio automation suite is available in version 4.2. The new version of the Windows-based suite supports both 32- and 64-bit versions of Windows 7.



It also adds opportunities for placing "quick links" to social media websites within the OnAir and Voice Tracking modules.

OnAir now has an auto-duck feature for liner EOM adjust, a new audio library blade in Log tools, new Info and Backsell tabs added to voice-tracking module and a "wildcard feature" added to iMediaImport to allow for hundreds of downloadable audio elements from external FTP sites using simple id3 tagging.

OMT says it has added features to iMediaArchive and iMediaTouch platforms designed for large NPR music stations looking for mass library storage and enhanced search capabilities within their databases.

Info: www.imediatouch.com

WHEATSTONE HAS A SIDE GIG

The SideBoard is a compact tabletop mixer that acts as a front end for the utility mixers in each Blade of a Wheatnet-IP audio network system.

SideBoard's footprint is about the size of a computer keyboard, making it suitable for newsrooms, guest seats and other "smaller" applications.



Available in four- or eight-fader models, SideBoard has access to all signals in a Wheatnet-IP audio network. Each fader features on/off switch, program and audition bus assign, programmable button, a SET switch and an eight-character source display. Any network source can be assigned to any fader.

The master section has six programmable buttons that can serve as source presets or activate a number of functions.

From the Audioarts Engineering division is the X-12 Digital console, a 12-fader board. It uses modular input and outputs for customizing to each facility. Sources can be analog and/or AES digital. Monitoring features include a headphone jack and cue speaker, both with level controls.

Each input channel has selectable A/B sources, on, off, cue switches and access to three stereo program busses. A USB port allows for connecting to digital devices and storage media.

Info: www.wheatstone.com

NAUTEL PACKS HD RADIO EXCITER INTO VS LINE

Transmitter maker Nautel has built an all-in-one low-power HD Radio transmitter package for the VS transmitter family.



The VS HD matches an HD Radio exciter with an Exgine data collector card for what Nautel calls "an affordable HD Radio implementation to low-power FM stations" when used with Nautel's VS series transmitters. VS transmitters are available in 300 W, 1 kW and 2.5 kW outputs. The VS HD is compatible with Nautel's HD PowerBoost technology.

Info: www.nautel.com

BSI ON THE IPAD

Broadcast Software International has a trio of new iPad apps based on its Op-X, WaveCart and Stinger platforms.



The Op-X app looks a lot and operates a lot like the Op-X radio automation system that's on the big studio-based system. The idea behind the app is to put the Op-X system onto the road and interface with the home studio or into home voice tracking studios.

The WaveCart app is based on the latest WaveCart 5.0 Pro live assist program. The app allows remote control of a WaveCart system, from the station or the road via the Internet.

The same can be said for the Stinger Mini app. Based on the Stinger clip player live assist program, the Stinger Mini app allows up to 72 trigger buttons to be crammed onto the screen. The GUI can be customized as well.

Info: www.bsiusa.com

The future is calling. (It's for you.)



These days, nearly everything is networked. And now, so are your broadcast phones. Meet Telos VX, the multi-line, multi-studio, networked talkshow system.

VX uses standard Ethernet to connect all the phones, hybrids and consoles around your facility, transporting caller audio, mix minus, POH and control logic on one skinny cable. Connect to POTS, ISDN-PRI, or even BRI telco lines via standard gateways, and *voila*,

they're available for use anywhere in your facility. And if you decide you want to use VoIP services, VX can do that too.

VX is so scalable, it can manage multiple simultaneous talkshows in the largest facilities. Yet it's cost-effective even for a few studios. Audio is clean and consistent, because dedicated, third-generation Telos hybrids manage each individual call. Even conferences are crystal-clear. You can deploy VX

"virtual phones" in production rooms, news workstations, or anywhere there's a PC with a USB mic and headset. Got a hot talkshow that suddenly demands more lines in a certain studio? Just a few keystrokes at a computer and you're set.

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PRODUCT SPECIAL**HARRIS UPGRADES
STL LINK**

The Harris Intraplex HD Link STL operates as a 950 MHz RF link as well as an IP-based STL for additional reliability.



Recent fine-tuning includes automated responses to declining signal strength such as switching to mono or dropping auxiliary programs until full strength is regained.

In addition, the company has a new FM transmitter this year, the Flexiva, a solid-state FM transmitter suitable for analog, HD Radio and DRM duties. The Flexiva utilizes Harris' PowerSmart technology for energy and space efficiency. It is a 2011 Radio World "Cool Stuff" Award winner.

Info: www.broadcast.harris.com

ENCO DEBUTS APP

Automation developer ENCO Systems' latest tool is ENconveyor, an automated download and conversion tool.

ENconveyor offers download scheduling controls along with conversion abilities. It is functional with HTTP and FTP protocols. ENconveyor is designed to be agnostic when it comes to automation systems.

ENCO's Presenter live assist radio automation system has been upgraded. Presenter/2 features LiveList technology.



Photo by Jim Peck

According to ENCO, "LiveList technology allows sharing of monitoring and control of a Presenter screen from any workstation on the network, making control and studio switching painless and easy ... Because Presenter is built on the ENCO DAD Audio and Control Engine, it also benefits from enhanced metadata tools for HD Radio and webcasting."

A new addition is also a manual mode, "for those times when absolute manual control is needed while still requiring an instant return to a live assist or automated mode of operation," according to ENCO.

Shown, Don Backus of ENCO speaks with Jimmy Perez of GLR Networks.

Info: www.enco.com

**INOVONICS TALKS
EAS, PROCESSING**

Inovonics said its 730 RDS encoder can interface with Digital Alert Systems' DASDEC CAP/EAS equipment.



Also news from Inovonics is its new flagship processor, the David IV, shown. It features a five-band "mul-

tipressor" (five bands of compressor and graphic EQ each), high-pass filter, gain-riding AGC, stereo enhancer, stereo encoder, bass management controls and Inovonics' PIPP final limiter. The AGC offers a capture range of ± 18 dB and an adjustable correction rate, according to a release.

Inputs and outputs include a digital input (AES3 32 kHz-192 kHz), digital output (AES3 32 kHz-96 kHz) and analog I/O (XLR). The program outputs are programmable. There are also composite/MPX outputs, an RDS subcarrier input and RDS sync output.

David IV can be controlled via the Web and a computer. Inovonics says that presets for popular radio formats are included and new ones can be downloaded easily.

Info: www.inovon.com

**HENRY LAUNCHES
TALENT POD**

Henry Engineering's Talent Pod is aimed at remotes, especially sports



broadcasts. It is an interface designed for announcers and talent to control their mic (on/off), provide a cough button, headphone volume and mix settings.

The Talent Pod allows the user to create a local and IFB return mix in his

headphones. The 1/3-unit Talent Pods can be linked together via Cat-5 cables.

Info: www.henryeng.com

**TELOS, OMNIA, AXIA
EXPAND OFFERINGS**

The Zephyr Z/IP One is a 1RU codec that functions with public IP networks and mobile phone data services, even from connections behind NATs and firewalls. When the network is functioning well, Z/IP provides the lowest possible delay and the highest possible fidelity; should network conditions become challenging, the Z/IP One lowers the bit rate and increases buffer length to ensure that the best audio quality gets to the studio with the least delay. Z/IP One is wireless-capable and can connect to IP networks via Wi-Fi, EVDO and UMTS. Telos Z/IP Server service (free to owners) helps overcome troublesome firewalls and NATs to connect with other Z/IP codecs.



Axia Audio's iQ is a stereo, four-bus console in sizes from eight to 24 faders. Accessory frames include multiple phone controls and programmable buttons for control of peripherals. The QOR.32 integrated console engine supplies four mic inputs, 16 analog ins and eight analog outs, two AES/EBU ins and outs, and eight GPIO ports. Axia says it is the only AoIP console manufacturer that builds the network switch into the console.

The Omnia.9 processor from sister company Omnia is for processing FM and HD1 signals, with options for HD2 and HD3. Features include "undo" technology, a source declipping algorithm and program-adaptive multiband expander. A Psychoacoustic Composite Embedder allows up to 140 percent audio peaks in stereo, within 100 percent total modulation. The box supports encoding to MP3, MP2, AAC, HE-AAC (including RTSP/3G for streaming to

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mobile phones), Ogg Vorbis, WMA and WMA Pro. The onboard RDS encoder is dynamically updatable.

Info: www.omniaaudio.com;
www.telos-systems.com;
www.axiaaudio.com

LOGITEK'S ROC REBORN

Logitek has reintroduced the ROC console name into its product line, with a redesigned series offering the AoIP functionality and operational features suited to a variety of radio and TV uses.



Designed to operate with the JetStream Mini AoIP audio networking platform, the new ROC series is available in configurations of 6, 12, 18 or 24 faders, OLED displays throughout and a reverse-printed overlay that provides an attractive finish while protecting the surface of the console.

RGB-addressable lighting allows users to set-up customized light colors in on/off and softkey buttons; an optional onboard router control panel offers simple source/destination selection for five routing locations. Optional softkey panels are available to handle user-defined functions; 12 GPI/Os are provided on the wall- or rack-mountable power supply.

Info: www.logitekaudio.com

COMREX CELEBRATES 50

Comrex, celebrating its 50th year, has released three new products this year.

The Access codec line has a new member, the Access 2USB Portable BRIC



Photo by Jim Peck

IP Codec. It has USB connectivity (two ports) and select 4G compatibility.

The LiveShot IP Video Codec is aimed at doing with video what Comrex's

codecs do with audio. It mounts on a camera's battery mount and can send data wirelessly (3G or 4G, Wi-Fi) or wired. It can also utilize an FTP server to store recorded material that is then forwarded to a destination.

The third product is an upgrade to the STAC phone system, the STAC VIP. The VIP adds VoIP (and SIP) telephony advances to make the STAC telephone talkshow system compatible with VoIP PBXs, smartphones and even Skype.

Shown, Andre Williams talks with Kelly Clark of Comrex at the Radio Show.

Info: www.comrex.com

WORLDCAST SHOWS SILVER RECEIVER, SLA MONITOR

WorldCast has a new FM rebroadcast receiver available from its Silver line. Called the FM Receiver Silver, the IRU unit has a dual MPX output and monitors RF levels and MPX deviation.

Also for monitoring from WorldCast's Audemat brand is the SLA Monitor software app, shown. Compatible with all of Audemat's monitoring and control products, the SLA Monitor measures

Service Level Agreement signals.

Additional monitoring news concerns an upgrade to the Relio platform. Version 3 features a more powerful processing core and silence detection and response. Also, the Compact Flash modules have been moved to the inside of the unit, allowing for additional inputs and outputs on the back panel.

APT's latest is the AoIP NextGen card for the WorldNet Oslo modular codec platform. The four-channel IP card utilizes APT's recently introduced SureStream IP codec technology.

Info: www.worldcast.com

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ARC-8: Cool, Affordable Stuff

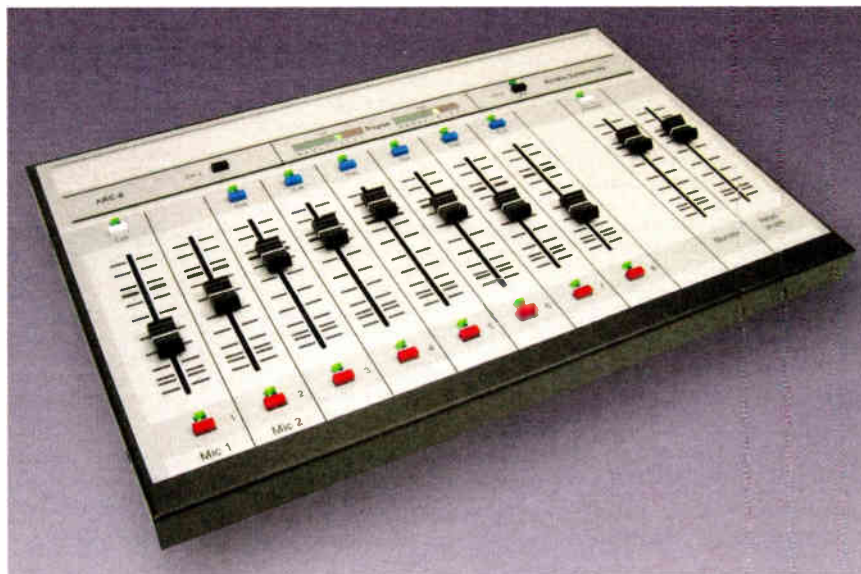
Arrakis Console Gets You on the Air Fast, Clean and Inexpensively

PRODUCT EVALUATION

BY ALAN PETERSON

The Arrakis ARC-8 radio broadcast console fills a valid need for a simple and inexpensive broadcast-style analog mixer, primarily for low-power operators, educational institutions, combo operations with uncomplicated studio requirements and station owners obligated to replace long-in-the-tooth main studio mixers from a much earlier era.

A product such as this offers an alternative to the option that many operators seem to exercise: Strip out a failing console and replace with an MI-style mixer (such as a Mackie product) modified to



PRODUCT CAPSULE

ARRAKIS ARC-8
Radio Console

- Thumbs Up**
- + USB digital audio interface
 - + Compact and a breeze to operate
 - + Affordable for any radio operation
 - + Very respectable audio specs

- Thumbs Down**
- Requires factory repair in many instances
 - Faders and switches do not feel robust

Retail: \$799

For information, contact Arrakis Systems in Colorado at (970) 461-0730 or visit www.arrakis-systems.com

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function as an on-air board.

In spite of its simplicity, Arrakis put a few goodies under the hood that differentiate it from an MI hack job, which is how it earned a Radio World "Cool Stuff" Award in 2010.

In its present form, the ARC-8 can still be considered a simple, basic and capable broadcast mixer; but it now includes features that make it a favorable choice when a big, or even a medium, console is out of the question.

Among the features: a mix of conventional RCA unbalanced inputs and RJ-45 balanced audio connections, a dedicated phone mix-minus bus and a USB I/O socket allowing digital audio to move between the audio playback computer and the console.

With all A/D and D/A conversions done within the ARC-8, the concern of program audio passing through an inadequate computer soundcard is eliminated.

NOT AS EXPECTED

When unboxed, the ARC-8 is surprisingly small, with a very low profile (18 x 11.5 x 2 inches). This is especially noticeable if you are among those replacing an older studio console such as an '80s-vintage LPB or BE mixer.

It is also lightweight, as the power supply — typically a weight hog in many mixers — is an external unit.

The mixer surface carries 10 source inputs on eight faders; two dedicated mic faders, five line faders (with one A/B switchable channel), one channel switchable between the USB port and an unbalanced -10 dBu input.

Slide faders have a full undamped 4.5 inches of travel, and each channel is acti-

vated by a push on/push/off button switch.

The switch action is mechanical rather than electronic, and feels a little on the light-duty side. It is probably a good idea to treat the buttons with an easy touch, and not the sledgehammer-like punch representative of the Great American Disk Jockey.

All circuitry is mounted to a single motherboard attached to the top of the chassis. Most ICs are 5532 op-amps, which is fine; they sound good, and they are easy and inexpensive to find should you need to replace one. They keep the design and layout simple.

The board is braced to the top panel with sheet metal screws in multiple locations, so you will not experience flexing or a flimsy feel when handling controls. And as on many of its mixers, Arrakis included a pair of diagnostic LEDs on the board to show if it's receiving both +12 V and -12 V. This is the first place to look when troubleshooting.

WIRE AND GO

Hooking up studio components to the ARC-8 is a simple and speedy process. Except for the XLR mics, all inputs to the rear panel are a mix of RCA and RJ-45 sockets.

While preferable to go the balanced route, the reality is there will be numerous unbalanced sources throughout the studio, including consumer-type CD decks, portable audio players and laptop computers brought in by talent, and possibly a turntable preamp or two.

For connecting unbalanced sources, pick up some good hi-fi cables — not the budget 50 percent spiral shield stuff. As long as you keep the cable at five to 10 feet tops and use proper RF suppression techniques should the studio

(continued on page 28)

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ARRAKIS

(continued from page 26)

be colocated at the transmitter site, you should be successful.

By the way, the ARC-8 has superb RF immunity. User complaints and engineering chatter over the years may have suggested otherwise, but the particular mixer I tested performed well in a hot zone. The manual devotes some page space to ground loops and hum elimination, but good engineering practice suggests keeping a few ferrite donuts knocking around to suck RFI out of those cables.

Balanced components hook into the ARC-8 via RJ-45 jack inputs; LPB did this 11 years ago in its old Blue 5A mixer and it's still a good idea.

Hook it up using cables ordered through Arrakis; or make your own using common Cat-5 network cables wired to appropriate plugs. If you go the self-fabrication route, the color code is printed in the manual and is the same standard scheme used for analog audio by all other manufacturers.

Headphones are connected to a 3.5mm socket on the rear panel. Why not a stout 1/4-inch jack? If you bought headphones recently, you know most are sold now with a mini-plug and 1/4-inch adapter, so it makes sense.

If left up to me, I would have included two headphone jacks — there are two mics for two people, right? — and put one along the front edge of the ARC-8 for the primary talent.

If this is a consideration for you, there are aftermarket headphone splitter amps (such as the Rolls HA43) that can be connected to the headphone jack so everyone has a feed.

The Program outputs to the airchain are XLR balanced, with a separate set of RCA-10 outputs available to feed whatever outboard gear is needed: a logger, distribution amp or a streaming computer.

The point-winner for the ARC-8 is the USB port on Channel 8. Hook it to your audio computer, it's detected as a sound interface and right away you have bidirectional audio running between the two. Whether you are using the ARC-8 as an air or production console, audio stays in the digital domain, bucking noise and hiss.

Monitoring? You got it. The studio monitor can be switched between Program and Air, requiring an external receiver or mod monitor audio output.



The headphones are Program-only.

You should know that, if you are replacing an old, worn console with an ARC-8, your monitor speakers will require external amplification. Many older boards came with a monitor amp that powered the speakers. The ARC-8 does not. But on the positive side, even a simple set of \$75 active computer speakers with floor woofer can fill the bill quite effectively.

So if you're retiring a dying board, you might as well also retire that monitor speaker that has been up there since 1979. The clarity may surprise you.

The ARC-8 lacks a cue speaker. When you put a source in Cue it will be heard in the headphone and monitor speaker. This will take a little getting

used to; the first time you hear it, you might think your source is being cued on the air.

START THE SHOW

So it's connected. What can it do?

Don't expect to mix a five-person morning ensemble show through the ARC-8. It was designed to be a fast and simple console for computerized automation systems (see sidebar) and for live performance with two studio hosts and telephone.

For this, the ARC-8 is a competent radio studio mixer. The built-in minimus is ideal for feeding an external telephone hybrid unit. I have found it can also feed a Skype computer connection

very well, for talk hosts looking for higher-quality guest audio than a telephone.

Mics connect to two XLR sockets on the rear. The preamps are designed around the capable Analog Devices SSM2019 IC and each input has a trim pot to adjust optimum mic levels. Phantom power for condenser mics is an option, requiring a separate power supply to be obtained from Arrakis.

You have enough inputs to plug in two CD decks, a news network, the phone, an aux input (e.g. an iPod) and an audio management/automation computer via USB, and still have some capacity left over.

Note if you are used to a board with separate Program and Audition (or Program II) busses, or require one for your purposes, the ARC-8 probably is not for you. This is a single-bus stereo console meant for straightforward mixing and cueing for air. There is no stock way to "split programming" across a Prog and Aud bus.

If this is your need, you might be better off with a mixer from the Arrakis 1200 line, although you lose out on the USB port.

OBSERVATIONS

One reservation I have about the ARC-8 is that of serviceability. Relevant ICs are socketed for fast replacement, but switches and faders are soldered to the motherboard and are for the most part inaccessible. Indeed, even the manual says factory service is required for repairs on faders.

My experience has been that faders are likelier to need attention before the ICs will. Food crumbs, sneezes, coffee spills all have a way of finding their way through slots on the chassis front and playing all kinds of havoc with faders.

Granted this makes for speedy

assembly and a low price for the user. Still, a company such as Behringer (manufacturer of inexpensive MI- and DJ-type mixers) allows field-swapping of worn crossfade sliders on its VMX and DX line of mixers. I have to wonder if Arrakis — and its extensive association with pro broadcast mixers — considered such a change before rolling out the ARC-8?

As stated, the buttons feel light to the touch. The plastic conductive faders also have a light, "sandy" feel to them when operated. This mixer likely will hold its own in the studio, but I would instruct all performers to respect the gear and not beat on it.

The manual has a parts layout chart

showing the location of relevant ICs and related components, but lacks a schematic, explaining that any component-level work should be a factory job. A good techie can navigate his/her way around the circuitry to be sure, but having one as part of the paperwork would be handy.

SHOULD YOU GET ONE?

I mentioned the kinds of users who would be most interested in the ARC-8, including low-power operations as well as lean-running stations ready to replace failing older boards. I want to elaborate.

In both situations, I have seen MI-type mixers pressed into service as "main studio consoles," primarily due to cost. At first it seems like a reasonable idea, but then add in the cost of a mute/tally light circuit, the risks of "wandering hands" messing with EQ and aux (and perhaps the effects) controls, and itty-bitty faders not conducive to good performance. Round it out with those top-mounted jacks picking up dust, dirt and other nasties and that bargain mixer becomes anything but.

The ARC-8 is not an MI board retooled to be a broadcast mixer; it started out life as a radio console and in its small-bodied way, it succeeds. If your needs require channel on-off logic, digital inputs on every fader, a second bus and total automated recall of settings, look further up the product line.

The ARC-8 gets you on the air fast, clean and inexpensively, and has just enough digital technology to make your music on hard drive sound good.

Alan Peterson is an SBE-certified audio engineer and broadcast technologist, a General class amateur operator, production director for the Radio America Network in Washington and a longtime RW contributor. Reach him at apeterson@radioamerica.org

DIGILINK AUTOMATION SOFTWARE

The ARC-8 comes with a free copy of DigiLink Xtreme automation software for Windows XP/2000, optimized for use with the console. In fact, it will only function if it sees the ARC-8 at the other end of the USB cable.

It is roughly similar to the original DigiLink Free software rolled out in 2001, which evolved into the Xtreme line. It is more stable than the original software and comes with a decent recorder and trim editor (but no CD ripper).

For stations that have not considered a computerized playout system or is "roughing it" with basic Windows audio players, the bonus of an included automation system is irresistible.

While the DigiLink program transfers audio to and from the ARC-8 console, note that it does not control it — that it will not turn channels on and off based on time of day (such as activating the SAT fader for on-the-hour news). Human intervention is required for such program switches.

Even though DigiLink will not work without the ARC-8 connected to it, the console can be used with any Windows audio software. The computer will read the USB connection as an HID-compatible audio interface.

If more sophisticated automation is required, it is worth checking out Arrakis New~Wave. It is not free but offers a lot of features not found in Xtreme, including remote voice tracking, music scheduling and FTP pickup of network audio.

Download a demo at <http://arrakis-systems.com/newwavedemodownload.html>

— Alan Peterson

Twice the mixing console. Half the price.

So, it's time to upgrade your studio. In fact, it's overdue. You knew those analog boards would only last 10 years when you bought them... 15 years ago. They need such constant attention that you're actually afraid to take a holiday.

Still, your manager says it will cost too much to replace them. But you're ready with your secret weapon: Radius, the new IP mixing console from Axia. You show him the pictures. You tell him what Radius can do, with its 4 program buses, automatic clean-feed, instant-recall console snapshots, one-touch Record Mode, convenient talkback and rugged machined-aluminium construction. You show him how the built-in Ethernet ports will eliminate the kilometers of expensive cable in your ceilings, and you can tell that he's already counting the money he'll save.

Then you drive home your point: at just \$5,990 US, Radius costs less than you would expect to pay for some flimsy, stripped-down, feature-free board with less intelligence than your wireless mouse. After he picks his jaw up off the floor, you get to tell the on-air staff about their cool new Axia mixers. And then go home, a genuine money-saving, DJ-pleasing Engineering hero, smiling as you imagine the envious looks you'll receive the next time your colleagues visit the station...

▶▶ One-touch Options control. Push and rotate to select source, adjust pan, trim gain and more.
 ▶▶ Sexy, multi-segment LED meters with switchable VU / PPM ballistics and peak hold.
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 ▶▶ Full-featured monitor section even lets you control Guest studio monitors.
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▶▶ Plenty of professional balanced mic, analog, AES and Livewire I/O in a fan-free 2RU chassis.
 ▶▶ Rugged, built-in super duty power supply. No line-lumps or wall-warts on Axia gear.

▶▶ It doesn't just look cool - it stays cool thanks to beefy heat sinks and fan free design.
 ▶▶ Built in Ethernet switch lets you network devices and studios easily.

www.AxiaAudio.com/Radius



CRAWFORD*(continued from page 30)*

"New Jersey is the most diverse and densely populated area of the country, a fascinating market," he said. "We are well aware that a Christian radio station must be sensitive to the wide spectrum of racial, religious and ethnic groups in the most cosmopolitan market of the United States."

While WAWZ has a religious format, it does not espouse any particular denomination.

"We believe in the Judeo-Christian ethic. We have a very broad presentation that is inter-denominational. There are so many things about this Judeo-

Christian ethic that help and edify people of all backgrounds.

"There are many values and principles changing in the world today," he continued. "The fabric of our country is changing. People who have lived here a long time are reticent to assert values and standards that are important to traditional America.

"I don't want to seem 'holier than thou,' but I'm talking about being accountable for your own actions and not expecting the government to bail you out. Put in a solid week for your employer. Be a good neighbor and stick with the things that have made us a great nation."

As general manager for 38 years, he admits he hasn't made all the right calls.



Alma White founded WAWZ and the community of Zarephath. Her legacy was marred by religiously intolerant and racist writings and teachings.



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Then you drive home your point: at just \$5,990 US, Radius costs less than you would expect to pay for some flimsy, stripped-down, feature-free board with less intelligence than your wireless mouse. After he picks his jaw up off the floor, you get to tell the on-air staff about their cool new Axia mixers. And then go home, a genuine money-saving, DJ-pleasing Engineering hero, smiling as you imagine the envious looks you'll receive the next time your colleagues visit the station...

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▶▶ Silky-smooth, side-loading 100mm, conductive-plastic faders beg for your touch.
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Rea Crawford Hits a Milestone

Seventy Years Is Quite a Career for an 'At-Large Radio Man'

BY KEN DEUTSCH

For an individual to work 10 years at one radio station anymore feels unusual; 20 years is uncommon. Thirty years

NEWSMAKER

with the same station can seem nothing short of miraculous.

So how to describe S. Rea Crawford's tenure?

"Our station went on the air in 1931," said Crawford, general manager of WAWZ(FM). "I signed on here in September 1941, so I've been here 70 of those 80 years. It's been a great ride with a lot of hard work, struggle, a few tears and plenty of excitement along the way."

Crawford's life is so intertwined with his station that it is hard to talk about one without the other.

The religious-formatted WAWZ, named for its founder Alma White and community of Zarephath, N.J., started out as an AM at 1380 on the dial, sharing the frequency with WBNX in the Bronx. Eventually its owner, Pillar of Fire Church, gave up that AM spot and started broadcasting on FM in 1954.

WAWZ is a not-for-profit ministry. Though it holds a commercial license and airs spots, the bulk of its income is derived from listener donations. The parent organization has six U.S. branches in three states, and owns three radio licenses.

"We started the first Christian network," said Crawford. "Our original station was KPOF(AM) in Denver, named after our church. That went on



The staff of WAWZ is shown in a Christmas photo. General Manager S. Rea Crawford is at left.

in 1928 and is still a vibrant ministry in 2011. Then we came on the air here in Zarephath in 1931, and later we acquired WAKW(FM), Cincinnati in 1961."

For the most part these stations are programmed locally, although some syndicated shows are heard on all three. WAWZ, known as "Star 99.1," airs primarily contemporary Christian music.

Crawford noted that in the 1950s FM stations were still considered the lesser lights of the radio constellation.

"We bought our FM from a newspaper here that was going to dump it," he said. "How much did it take to get? Two thousand dollars. You could junk out the cable and equipment for that much. Offers in recent years have been into seven figures."

The station's budget is about \$5 million a year, and it has 35 employees. Estimated listenership is about 300,000, though Crawford said that sometimes

reaches 600,000.

"As to Arbitron, we show up respectably in New York but very strong in our Arbitron-rated home market of Middlesex-Somerset-Union. We show up first pretty consistently in MSU in our target demographic."

A LITTLE HISTORY

When Crawford was still in his first year of high school he joined WAWZ. The attack on Pearl Harbor was three months in the future.

"I remember going out with our engineer and our portable equipment to the Roger Smith Hotel to broadcast war bond rallies," he said. "We did it for nothing! ... We always had pretty tight security because of the war, and everything was tense."

A few years later came another tense moment. On Nov. 17, 1950 a severe hurricane slammed through Zarephath.

"It laid our 300-foot self-supporter right down on the terra firma," said Crawford. "It was almost unbelievable to see it proud and perfect one minute, and seconds later a tangled mass of steel."

When the tower came down, only the heavy timber base remained standing.

"I was 22 and I remember I used to climb that tower," he said. "It seemed like Mt. Everest — indestructible."

Radio World asked him to list his duties over the years. "I started out with a broom, and quickly moved to steeplejack, helping to erect towers; proof of performance, all through the night; field intensity measurements, three-direction-

al array on 1380 kilocycles; assisting in various FM maintenance and functions; occasional on-air DJ; faced FCC unannounced inspections, etc. etc."

He said the station's board of trustees is "not very prolific in assigning titles to people." Until 1973 he was an "at-large radio man."

"Then when our former GM passed away, I was suddenly catapulted to GM, with the full responsibilities of general manager."

Now 84, he oversees all aspects of the station, still working full time. Station Manager Scott Taylor carries "the gut load" of day-to-day operation. Crawford also is involved with the ministry of the parent organization as a trustee and a presiding elder of the Pillar of Fire at Zarephath.

BISHOP WHITE

Alma White, founder of the church and station, does not enjoy a bright reputation in modern histories. Though she was a feminist and is considered to be the first female bishop in the United States, she also is remembered for her association with the Ku Klux Klan and virulent anti-Catholic, racist and other intolerant public comments.

That's not the person Crawford recalls.

"I did indeed know Alma White," Crawford said, "and was the object of a couple lectures — I deserved it! She died in 1946 when I was 17 years old."



Crawford at a test bench at the transmitter site. He was in his mid to late teens when the photo was taken.

He described White as "a stellar individual and a giant of a Christian. ... Back in the 1920s and '30s, this country was much polarized concerning race, religion, ethnicity and so forth. She did speak with certain individuals of many different organizations; but when she realized some of the serious issues regarding some organizations, she repudiated them and had nothing to do with them."

Crawford's way of looking at the world today sets the tone for the station.

(continued on page 32)

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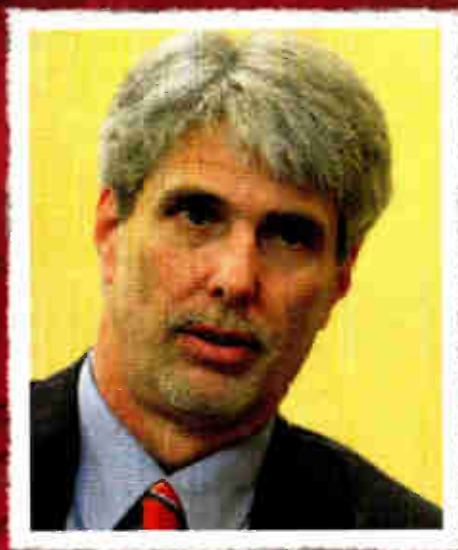
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CRAWFORD*(continued from page 30)*

"New Jersey is the most diverse and densely populated area of the country, a fascinating market," he said. "We are well aware that a Christian radio station must be sensitive to the wide spectrum of racial, religious and ethnic groups in the most cosmopolitan market of the United States."

While WAWZ has a religious format, it does not espouse any particular denomination.

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such businesses in the state.

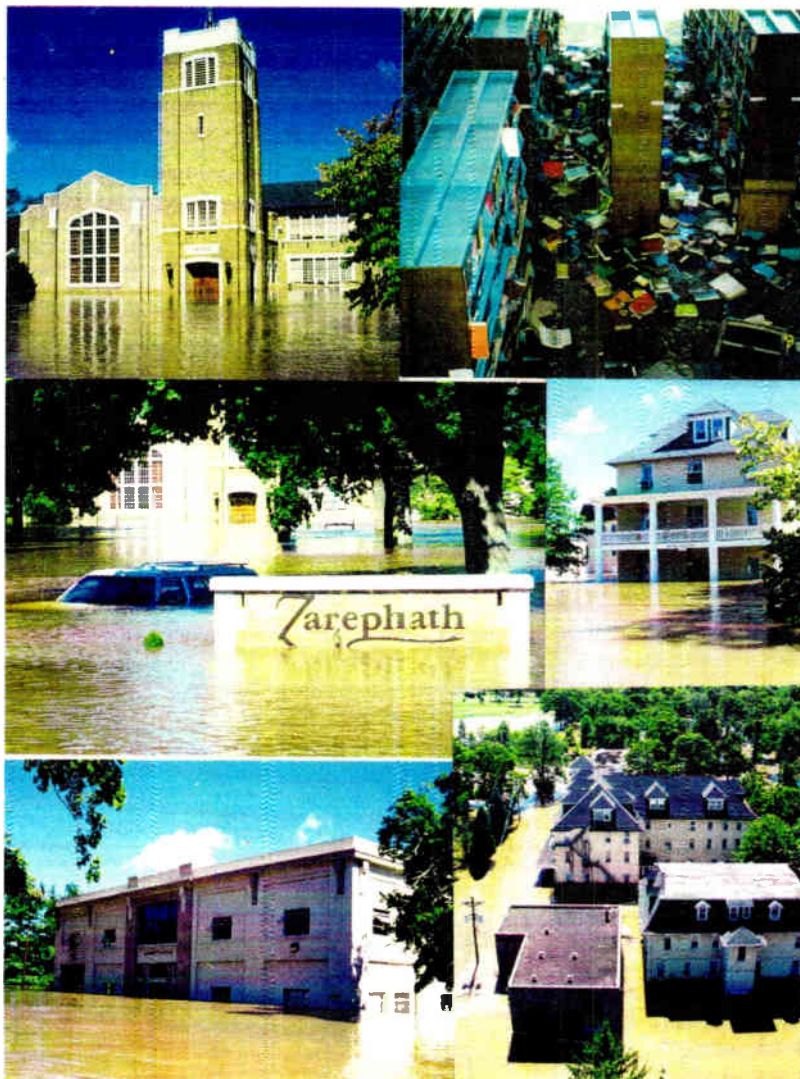
"We started on the station about eight years ago," said Kalafer, who also spends advertising dollars on New York City's WOR(AM).

"The listeners to 99.1 are so dedicated. Johnny Stone, the morning man and our voice on the air, has a loyal following and the station really delivers for us. When you purchase media, it's supposed to be by the numbers. But in our case, the management and staff of the station are a big part of our decision. It's clear that there is leadership there and a consistency of staff that really makes me feel comfortable."

Station Manager Scott Taylor said, "Rea is an inspiration to the staff, not just because of his longevity, but also because of his personality. He's very much engaged in this industry and as excited about radio today as he was the first day he showed up for work. When we get visitors here on a tour, he loves to show off his old-time radio collection. He gets a thrill out of sharing his passion."

WAWZ was named Station of the Year in 2007 and 2008 by the National Religious Broadcasters. In 2008 the NAB presented WAWZ with the Crystal Radio Award for Community Service. The Christian Music Broadcasters Association awarded WAWZ Station of the Year in 2010.

Hear WAWZ streamed at www.star991fm.com. At that URL one also can



hear HD2 channel "The Voice," which features spoken-word programming. HD3 channel The Energy" offers a more intense variety of Christian rock.

Crawford encourages young folks to appreciate what they have.

"Everyone is worth something, not just in the sight of God, but in the sight of family and community. Strength and legitimacy come from what you are doing." He also confesses to being frustrated with some aspects of the American culture.

"A lot of kids are technically smart," he said. "They understand the iPods and the computers, but ask them about Winston Churchill or FDR! We learn from history, and those values will be lost if we don't wake up."

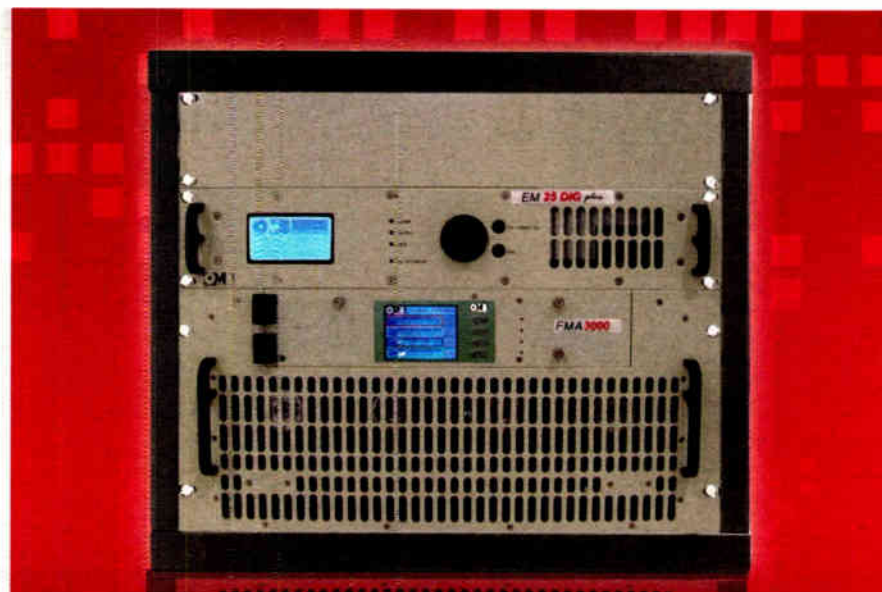
Ken Deutsch says his radio career paralleled that of Rea Crawford, minus the longevity and the talent.

Zarephath was hit hard by Hurricane Floyd in 1999, as shown at left. The campus also suffered damage in this year's Hurricane Irene, which Crawford described as 'a nasty girl.' WAWZ activated an emergency studio at its tower site and was still broadcasting from there in mid-October. It plans to build a new and bigger studio rather than rehab the old one. 'These hundred-year floods are coming every 12 or 15 years,' he added.

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PROMO POWER



Mark Lapidus

Add These Events to Your Holiday Promotion Planner

“As God is my witness, I thought turkeys could fly,” WKRP General Manager Arthur Carlson moaned in one of the show’s most famous scenes.

Anyone who has worked in our business knows too well how wrong a holiday promotion can go when it isn’t conceived and executed carefully.

Stick Up for a Cause — Everybody loves drumsticks, so why not use ‘em to help you raise big bucks for charity?

Collect a half dozen drumsticks from well-known musical groups. Frame each collectable, perhaps with a lyric sheet of the band’s most famous song and an autograph from — who else? — the drummer.

Take great pictures of each framed collectable and let the auction begin. While you could do a live auction on-air only for a few hours, you’ll make more money for the charity of your choice by putting them on eBay and linking the photos from your website to the auction.

Whether you decide to run the auction for one day or several, be sure to update your listening audience about the current bids. If it’s possible to get the drummer(s) to do a live call-in, it will add extra authenticity.

Have your morning show make an on-air check presentation to the charity the day before Thanksgiving. You can position a title sponsor by calling it “The [Name of Client]” Drumstick Auction.

Ask for Food — I feel compelled to encourage you to consider food collection this Thanksgiving. There are many food banks that need assistance to meet the demands brought by unemployment and under-employment.

While it can be difficult to get listeners to donate cash, it’s relatively easy to get people to bring food, if you ask for it properly.

I still love hearing a DJ or several DJs camped out in a truck they’re attempting to fill with food until they can’t lay down anymore. It may take you a week to fill a big moving truck, so be prepared.

The good news is that the longer the promotion goes on, the more publicity you’ll generate via television coverage and action on Facebook and Twitter. Use short sounds bites from people who depend on the food bank and from representatives. Your title sponsor can serve as a drop-off location.

Post pictures of progress on your website or stream the entire activity live with a “turkey-cam.”

Simple Helping — A much smaller but worthy Thanksgiving promotion involves

having your DJs dish out food at a homeless shelter on Thanksgiving. It will be an experience they will never forget; and their participation will remind your audience that your station cares about your community.



iStockphoto/Simon Oxley

Religion and Culture — As we flip the calendar to December, I’m reminded that people increasingly

have become cynical about holiday commercialism.

If you’d like to walk down a path few commercial stations choose, you could actually create a December services and events calendar on your website and promote it on-air.

This isn’t just for stations with a religious bent, nor is about one specific faith. There is room to celebrate faith and culture observances like Christmas, Hanukkah and Kwanzaa by letting your listeners know where they can attend services and special events. Highlight a few of these on the air, mentioning your title sponsor and driving traffic to the website section.

Could you live stream any of these services or events? Why not? People won’t

watch them if they’re not interested.

Twelve Keys of Christmas — Now on to crash commercialism.

Do you know anybody who wouldn’t want a car as a holiday present? Find a car dealer to give you a car (or a long lease on one) to give away on-air. The “Twelve Keys of Christmas” works great when you register people all day for 12 consecutive days, picking one key winner each day. As you’re doing this, ads are running for your title sponsor encouraging listeners to visit the dealership because 12 additional keys will be given away on-site, one per day.

Key winners will try their key during the event you stage a few days before Christmas.

Digital Day — When’s the last time you did a promotion for HD Radio? The holidays are a perfect time to promote your HD stations by giving away digital receivers while tying into a local retailer for a special sale.

If you can’t get radios to do giveaways, can you give away a show-hosting opportunity to a listener? Maybe this winner could host a Christmas-, Hanukkah- or Kwanzaa-themed show on one of your multicast channels.

Shopper’s Delight — Perhaps there is a major (mid- to high-end) store in your community who would host a special evening shopping event in which consumers make a substantial donation to a charity for the privilege of shopping at 50 percent off for a few hours.

Naturally there have to be some limitations to this promotion; but I have seen it raise thousands for charities, while making money for stations because of the sponsor involvement.

Choose your charity wisely, as it will be handling many of the logistics and inviting their membership to participate.

First Baby — Is it New Year’s yet? Call me sentimental, but I still love the “first baby of the year” contest. “Calling all pregnant couples due to deliver around Dec. 31! Will your bundle of joy be the one to win all the goodies we’ve gathered from these sponsors? Send us your sonogram!”

Listeners can follow along by placing “bets” on your website. Whoever picks the correct couple also wins the same prize(s) supplied by the contest sponsors.

If none of these ideas suits you, I suggest viewing a few pieces on YouTube of WKRP. While you might not find anything useful, you will at least get a laugh. This will put you in a better mood for brainstorming your own celebratory promotions.

Mark Lapidus is president of Lapidus Media. Contact: marklapidus@verizon.net.

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New Media Has a Free Speech Problem

NRB's Parshall Cites a 'Breathtaking' Threat to Freedom of Discourse

COMMENTARY

BY CRAIG L. PARSHALL

The author is senior vice president and general counsel of the National Religious Broadcasters.

Two years ago, I took a closer look at the way in which Web-based "new media platforms" were changing — faster than the speed of sound it seemed — the entire landscape of broadcasting, as well as communications.

There is nothing new about the new media revolution, of course. But it was the free speech implications of this communications tsunami that both intrigued and rattled me.

As the general counsel for NRB, an association that represents radio and television stations and networks, webcasters and publishers (among others) who carry distinctly Christian content, I spend every day dealing with the statutory and regulatory policies and constitutional issues that affect traditional broadcast platforms. Like others who also come from the legal corner of the communications world, I also try to keep abreast of the changing tides of electronic media in order to see how those new currents might affect freedom of speech — and more particularly from NRB's perspective, religious free speech.

BIG NAMES

So when I reviewed the meteoric rise and the monolithic market dominance of a handful of new media tech companies, I thought I would give them a closer look. I am glad I did.

For the next 18 months I directed an effort through



A project of the National Religious Broadcasters

our Office of General Counsel, aided by several key NRB legal partners, to evaluate the actual corporate practices as well as the written *terms of use* policies of eight large new media corporations.

The names are familiar ones: Apple (specifically the iTunes App Store), Facebook, Google, MySpace and Twitter, together with Internet service providers AT&T, Comcast and Verizon.

What we found was shocking. The results of our analysis have been released in our white paper, "True Liberty in a New Media Age," available at our website, NRB.org.

What also resulted was the creation of our permanent, ongoing freedom of speech campaign, the John Milton Project for Religious Free Speech. In addition to being a famous epic English poet of Christian-themed works in the 17th century ("Paradise Lost"), Milton was an astute observer of public policy. When a small cadre of printers looked ready to collaborate with the government's idea of granting them a license to print in exchange for their agreement to censor unpopular ideas, Milton cried foul.

His argument for freedom of speech and for an open marketplace of ideas where good ideas would be allowed to rise and bad ones would inevitably fall, became a classic. Our founders relied on Milton's theory more than any other source during the free speech debates over the First Amendment.

After our review of the current new media situation, we concluded that Twitter was the *only* one of those eight large corporations that deserved a passing grade. Its policies not only demonstrate a respect for free speech, but even further, it has, up to now at least, never practiced viewpoint censorship.

The other seven companies, by contrast, forbid anything on their platforms that they deem to constitute "hate speech" — a dangerously undefined phrase that, more often than not, is used by ideologues to suppress politically incorrect ideas.

But the problems don't end there. Using vague, ambiguous terminology, these companies ban whole categories of speech — any content that is "offensive," or "inflammatory," or which promotes a "politically religious agenda," or that dares to say anything critical about other religions, or which takes on controversial issues like abortion or same-sex marriage.

Some of them promise to censor any form of speech on their platforms that their users might find objectionable — regardless of whether those reasons have any merit.

These new media giants have declared that they

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PARSHALL*(continued from page 37)*

possess both the right and the will to use standard-less, arbitrary power to shut down ideas they simply do not like. Considering how a handful of these giant technology companies rule entire fields of Web-based communications, the threat to freedom of discourse is breathtaking.

CONSEQUENCES

If this were simply a problem with the *written policies* of new media platforms, the civil liberty risk would be less. But policies — like ideas — have consequences.

Google and Apple's iTunes App Store have already committed overt censorship of religious viewpoints. In December 2010 and again in March 2011, Apple removed two apps — after

After our review of the current new media situation, we concluded that Twitter was the *only* one of those eight large corporations that deserved a passing grade.

they were developed, vetted, approved and were placed in the iTunes App Store — simply because gay rights groups complained about their orthodox Christian ideas.

First, Apple stripped the Manhattan Declaration app off its iTunes App Store because of its view that marriage should be defined as one-man and one-woman. Next, Apple blocked the Exodus International App because that Christian ministry had the audacity to minister to persons in a gay lifestyle who wanted to get out — a concept that has apparently been declared an intellectual crime against humanity by the thought police. Gay online organizers succeeded in shaming Apple into remove those apps simply because they didn't like the mainstream evangelical perspective on gay issues. Of the 425,000 apps currently on Apple's iTunes store, the *only otherwise lawful* content that as been censored has been *religious* expression.

Google has also exhibited a predisposition against religious content.

Not only did they practice censorship of religious viewpoints while they maintained their China platform, but they also attempted to block a Christian, pro-life ad on their search engine. It was only after a lawsuit in England ensued that they reluctantly retreated. Earlier this year they established new guidelines for their fabulous Web tool, "Google for Non-Profits." It had been available to all non-profits at a little or

no cost. In March, however, Google announced that churches and other faith groups would be excluded from their program — only *secular* non-profits need apply.

Facebook, which has partnered with gay rights groups and which has promised to stamp out *homophobia* on its social networking site, is poised to join this "ideas too dicey to debate" club.

A BETTER IDEA

These past practices and current policies of the giant new media platforms are tremendously significant for every broadcaster.

When we recently convened a panel discussion at the National Press Club in Washington to discuss these trends and the content of our report, former FCC Commissioner Harold Furchtgott Roth, now founder/director of the Center for Economics of the Internet of the Hudson

Institute, one of our panelists, called our findings "deeply troubling."

The others who joined me in our roundtable — Colby May, senior counsel and director (Washington office) of the American Center for Law and Justice; Suzanne Caruso, associate dean for external affairs, Liberty University School of Law; and Brian Walsh, executive director of the American Religious Freedom Program of the Ethics and Public Policy Institute — were equally appalled.

NRB is not looking for some new federal rule or a market-entangling lawsuit. The exact legal status of the Internet, in terms of the free speech obligations of new media companies that use it, profit from it and dominate it, is still a frontier area of law.

What we are really after is a voluntary recognition from these Web-based giants of their civil liberty responsibilities.

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What is the standard that ought to prevail? Why not use the current free speech values that have been articulated by the Supreme Court: Other than that short list of narrow, well-defined categories of speech that can be deemed illegal for content reasons (child pornography, incitement to violence, criminal obscenity, "fighting words" etc.), everything else (something we call "otherwise lawful expression") should be permitted.

LAWFUL IDEAS

NRB will try to initiate a dialogue with these companies. We will, of course, be thanking Twitter for doing it the right way. We will also be asking the hard questions of the other Web companies and ISPs. They may be tech giants, but they have to be held accountable to the American citizens they seek to serve and from whom they have generously profited.

Free speech is too important a value to be stomped underfoot by the fast-step march of companies that prize tech innovation and market dominance over liberty. We wouldn't tolerate our local telephone company refusing to give us phone service because of our political views — neither should we permit these new media platforms to block our otherwise lawful religious ideas because they are unpopular with certain vocal, activist groups.

John Witherspoon, a signer of the America's Declaration of Independence and a Scottish preacher, was the sixth president of what would later be called Princeton University. He mentored a host of men who would later become our nation's earliest presidents, members of Congress and Supreme Court justices.

He once remarked that religious freedom is so intertwined with civil liberty that to do harm to the one invariably injures the other. Regardless of anyone's personal worldview, or religious beliefs — or lack of them — freedom of speech over new media platforms is too important to leave solely to the whims of tech innovators. If that happens, the next ideas that are censored from these Web-based venues could be your own.

Comment on this or any article. Write to radioworld@nbmedia.com.

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Email: radioworld@nbmedia.com
Website: www.radioworld.com
Telephone: (703) 852-4600
Business Fax: (703) 852-4582
Editorial Fax: (703) 852-4585

For address changes and subscription renewal, please visit radioworld.com and click on the "Subscription" button. To submit letters or story proposals, to request writer's guidelines, or for other editorial matters, email the editor at radioworld@nbmedia.com.

EDITORIAL STAFF

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AUDIENCE DEVELOPMENT Tracey Dwyer
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SUBSCRIPTIONS

Radio World, P.O. Box 282, Lowell, MA 01853
TELEPHONE: 888-266-5828 (USA only 8:30 a.m.–5 p.m. EST)
978-667-0352 (Outside the US) FAX: 978-671-0460
WEBSITE: www.myRWNews.com
EMAIL: newbay@computerfulfillment.com

CORPORATE

NewBay Media LLC
PRESIDENT AND CEO Steve Palm
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VIDEO/BROADCAST GROUP

EXECUTIVE VICE PRESIDENT Carmel King
VICE PRESIDENT / SALES DIRECTOR Eric Trabb

ADVERTISING SALES REPRESENTATIVES

US EAST & LATIN AMERICA: John Casey, jcasey@nbmedia.com
T: 212-378-0400, ext. 512 | F: 330-247-1288
US WEST & CANADA: David Carson, dcarson@nbmedia.com
T: 212-378-0400, ext. 511 | F: 866-572-6156
SOUTHERN EUROPE, AFRICA, MIDDLE EAST:
Raffaella Calabrese, rcalabrese@broadcast.it
T: +39-02-9288-4940 | F: +39-02-7004-36999
UK & IRELAND, CENTRAL & NORTHERN EUROPE:
Graham Kirk, g.kirk@audiomedia.com
T: +44-1480-461555 | F: +44-1480-461550
JAPAN: Eiji Yoshikawa, callens@world.odn.ne.jp
T: +81-3-3327-5759 | F: +81-3-3322-7933
ASIA-PACIFIC: Wengong Wang, wwg@imaschina.com
T: +86-755-83862930/40/50 | F: +86-755-83862920
CLASSIFIEDS: David Carson, dcarson@nbmedia.com
T: 212-378-0400, ext. 511 | F: 866-572-6156

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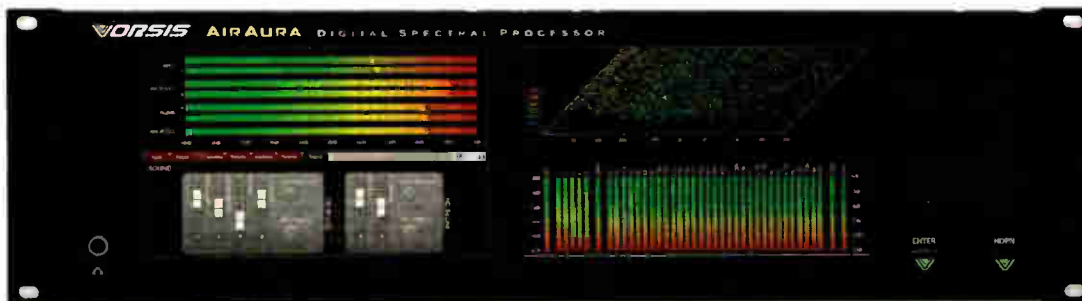
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