



RADIO WORLD

SEPTEMBER 25, 2013 | The News Source for Radio Managers and Engineers | \$2.50 | RADIOWORLD.COM

INSIDE

BIG SHOT

- Saving your station from hunting season, and other autumn tips in *Workbench*. — Page 12

BACK IN A NEW YORK GROOVE

- AES returns to the Big Apple. — Page 16



ON THE CLOCK

- Automation, scheduling, traffic and more in Buyer's Guide. — Page 22



NextRadio Ramps Up Its Push

Jeff Smulyan's motto for NextRadio is 'cool and free'

NEWSMAKER

INDIANAPOLIS — This is an exciting time for Jeff Smulyan, the chairman, president and CEO of Emmis Communications.

The push is on to promote radio in new Sprint smartphone models that come with the free NextRadio App. Some 13,000 people had launched the NextRadio app on their Sprint HTC One and HTC Evo smartphones as of early September, according to Emmis.

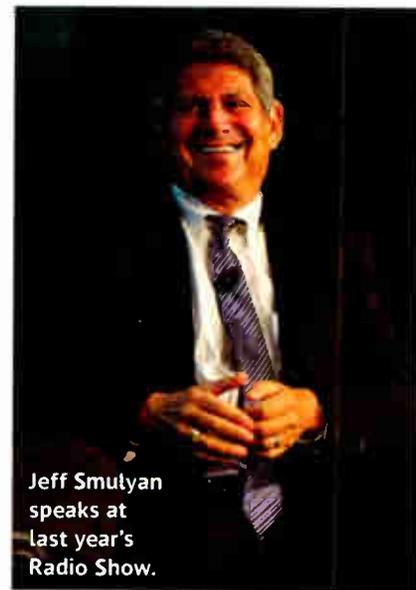
The number was increasing daily, the company said, and is expected to rise sharply as consumers buy more phones and as wireless company Sprint, phone manufacturer HTC and broadcaster Emmis-owned NextRadio conduct a beta eight-city marketing rollout.

Emmis Senior Vice President/Chief Technology Officer Paul Brenner expected the test to go live shortly before the Radio Show convention this month. Phones have been provided to 40 DJs at stations owned by various groups in those eight markets so they'll talk about NextRadio on-air, online and on social media. A total of about 14 radio group owners are involved. Sprint and

HTC support the effort with their own marketing plans targeting radio.

The NextRadio App does not use a streaming signal to deliver station audio. Instead it provides local over-the-air reception in phones with enabled FM chips — and adds interactive features, if stations opt to support them, such as buy song, rate song, social media coupons and geo-location services. "If that app is active, you have access to all stations in the listening area," said Brenner, who added that approximately 2,000 stations had been tuned to through the app as of

(continued on page 6)



Jeff Smulyan speaks at last year's Radio Show.

© NAB

As the October LPFM filing window at the FCC approaches, Prometheus Radio Project argues that this opportunity could improve radio's reach and content immensely. **PAGE 37**



Prometheus's Pete Tridish, far left, working during a barn-raising in Petén, Guatemala, in 2004.

20002 P0002
 TUCSON AZ 85710-7905
 2033 S AUGUSTA PL
 KOHN
 ASSISTANT CHIEF ENGINEER
 TOM MILLER
 562-1SD1 000006142
 #BXNN10J *****AUTO**SCH 3-DIGIT 859
 #0009383 1# RDWA 0009383 E1309

Big where it counts, baby.

New DESQ AoIP console. Just \$4,990.
From Axia, of course.





Vorsis® ultra-high resolution processing

Wheatstone® baseband**192** digital transmitter link

WheatNet-IP Intelligent Network native



push your sound to the extremes of clean, sweet and loud and punch it directly into your exciter. available only in AirAuraX3, FM-531HD & VP-8IP processors. Feel the rush: <http://bit.ly/X3-RW>

 **Wheatstone**
BROADCAST AUDIO PERFECTIONISTS™

phone 1.252.638-7000 | wheatstone.com | sales@wheatstone.com



AM Radio: Where Do We Go From Here?

iBiquity Says HD Radio provides a cost-effective path for AM to evolve

COMMENTARY

BY JOE D'ANGELO

The author is senior vice president, Broadcast Programs and Services, for iBiquity Digital Corp.

It's been more than 90 years since KDKA(AM) in Pittsburgh became the first commercially-licensed radio station in America, and the technology of AM broadcast has not changed significantly since then. Compare the cars, trains, telephones and motion pictures of the 1920s to today.

Back then, a simple crystal radio, made with a hunk of galena crystal and 50 feet of copper wire wrapped around a milk bottle, and a pair of headphones, were all you needed to receive your local AM station. Other than the occasional



AM stands out as the only service in the car that currently can't display even analog artist and title data. AM becomes the 'blank screen' in the dash – the only 'unconnected' part of the connected car.



Just put a shirt on and I'll let you buy as many BSW consoles as you want!

September is Console Month at BSW!

Great Deals On Top Brands All Month Long!

thunderstorm, there was no electrical interference to speak of.

Fast-forward to today. Manmade electronic noise on the AM band has increased to the point that many regional and local channel AM signals are severely compromised, and even the Class "A" 50 kW clear channels are suffering from noticeably diminished coverage. FCC Commissioner Ajit Pai recently stated, "Every day it gets harder to pick up a clear AM signal."

LIMITED RECEPTION

AM revitalization is all about addressing this noise issue, and HD Radio digital technology has proven to provide a cost-effective path to allow AM radio to evolve, giving it a fighting chance at survival.

We don't want to prematurely sound the death knell for the senior band since, after all, five of the 10 top-billing radio stations in America are still AM; but outside the largest markets, AM listen-

ing has been largely relegated to talk or oldies formats and shrinking, aging audiences, and consequently diminished billing. Digital radio transmission provides a potential long-term solution for AM radio's survival.

Its ability to improve reception in noisy conditions can help make the band viable again, and also allows for quality stereo music broadcasts that AM radio's early pioneers could only dream of. All-digital AM, thanks to its time-diverse encoded content, increases signal durability and robustness in many of today's challenging AM interference environments.

Can AM remain viable as electrical interference continues to increase, limiting reception possibilities and, by definition, potential audience? According to the FCC, until 1978, AM claimed more than half of all hours spent with radio. Right now, AM listening accounts for only 17 percent of radio listening, and continues to diminish every year.

The median age of listeners to the AM band is now 57 years old, a full generation older than the median age of FM listeners. We've already seen broadcasters giving AM stations away to charity, selling them for the real estate value of the land they sit on or just handing back their licenses to the FCC. At today's current rate of audience erosion, many AM operators can plot the day their station goes out of business, the day rising operating costs exceed shrinking revenues and another AM is forced to go dark.

An all-digital AM broadcast environment, where the broadcast is solely digital, would be vastly superior to analog or even hybrid digital AM, where digital and analog exist side by side. The more robust all-digital signal creates a better reception environment, as well as less potential for co-channel interference, which is also a source of noise.

We designed the hybrid approach as

(continued on page 5)

broadcast gear from people you trust



Lowest Prices and Largest Inventory on EVERYTHING For Broadcast



Save Nearly \$2,000 On Exclusive Console Bundle

BSW Exclusive! Get the Arrakis ARC-15BP-blue console bundled with FREE automation software and a FREE music library!

- 15 input source channels
- Bluetooth-capable for incredible versatility
- FREE NEW-WAVE automation software
- FREE music library of your choice

ARC-15BP-BLUE-FREE List \$5,540.00

Only \$3,579!



Great Little Console Now Even Better

The 8-channel Audioarts Air 1 now has a bi-directional USB portal for easy computer or automation interfacing!

AIR1 List \$1,995.00

Only \$1,749!



Build Your Base With BRIC

The award-winning BRIC-Link Audio Over IP codec delivers ultra-reliable, full duplex transmission over IP links.

- Works on a wide variety of data networks
- Superb audio quality
- Advanced stability and reliability

BRIC-LINK List \$1,500.00

Contact BSW For Lowest Prices



BSWUSA.COM
800-426-8434

Warner/CC Revenue Deal Is Good News

Frameworks are being built for a longer-term, fruitful relationship

Four years ago or so, I suggested that leaders of U.S. commercial radio should face reality and work out a mutually satisfactory relationship with music labels in which the labels and artists felt fairly compensated for their work.

Then and subsequently, I heard back from performance royalty “hawks” who felt that radio should never compromise with artists and labels, who said the historic arrangements worked just fine, that artists got all the compensation they needed through on-air exposure, and that record companies were simply trying to rescue their own “failed business model” by pushing for revenue sharing through voluntary or legislated means.

The hawks maintained this posture in the face of relentless change in the entertainment landscape, the evolution of new platforms and the constant threat that Congress would step in and force a new solution on radio.

So I've been pleased as radio groups, led through the door by Clear Channel, started to explore new relationships with labels, setting up direct arrangements to the satisfaction of both sides. Slowly, the temperature of the dialogue has cooled.

To me, this change was not a concession by radio but rather a clear-eyed business decision. Radio, labels and artists need one another. Operating in a constant state of conflict benefits none of them.

BIG DEAL

Now comes the news that Warner Music Group — one of the biggest



Bob Pittman of Clear Channel, at right on screen, appears on a CNBC program discussing the deal.

labels, though not the biggest — has agreed to a strategic alliance with Clear Channel under which WMG will share in Clear Channel revenue from all platforms. (Warner Music Group is parent to a family of record labels with names like Atlantic, Big Beat, Elektra, Nonesuch, Reprise, Rhino, Rykodisc and Sire.)

The two companies described this as “the first wide-ranging strategic alliance between a major music company and Clear Channel.” It certainly is that. I see it as even more. It likely will act as a model and a prompt. It provides further permission — even pressure — on other

radio companies and labels to come to the table. And no doubt other huge labels Universal Music Group and Sony Music Entertainment will be obliged to look closely at deals with Clear Channel.

At last, the smoke on this battlefield is settling.

As CC and Warner Music put it, this deal aligns their mutual interests “in driving digital growth, increasing radio listenership, breaking new music and creating new marketing opportunities for established artists.” The pact includes provisions to help encourage and promote new music, as well as “targeted user interfaces in digital” that are

FROM THE EDITOR

Paul McLane



supposed to make it easier for consumers to buy music when they hear it.

Clear Channel of course has a lot to offer to a marketing partner: hundreds of stations, millions of radio users and digital consumers, thousands of events, outdoor billboards. Not all broadcasters can offer so much; but just as CC's deal with Big Machine Label Group opened the door a crack, this agreement surely will encourage more radio/label harmony. (Ironically, this news came in the same week that various big record companies, including Warner, sued SiriusXM Radio in a royalty dispute.)

Radio, labels and artists need one another. Operating in a constant state of conflict benefits none of them.

So these days, instead of having to endure carping Tweets from radio advocates and angry musicians accusing one another of ripping each other off and bashing each other's “declining business models,” we get to hear CeeLo Green and Bob Pittman singing one another's praises, using words like “thrilled to be their partner” and “win for all parties.”

Of course, only last September, Leslie Moonves of CBS was quoted as saying that paying artists for radio airplay is “absurd.” And the Clear Channel/Warner announcement doesn't deal directly with the debate over performance royalty legislation. Further, what's good for Clear Channel isn't necessarily good for thousands of smaller broadcast owners, who must navigate their own paths in an evolving competitive landscape.

But just as clearly, this sort of agreement eventually will make such discussions irrelevant. Frameworks are being built under which our industry at large will enjoy a longer-term, fruitful relationship with content creators.

As Pittman put it, “Old formulas don't work as well as they must in the digital age ... Today, music companies and media and entertainment companies need to be more supportive of each other's needs.” Hear, hear.

What do you think? Write me at radioworld@nbmedia.com and I'll share your thoughts with fellow readers.

Play It Smart

Powergold¹²

music scheduling

REAL WORLD SOLUTIONS with POWERGOLD COLLECTIVE SUITE™

Comprehensive asset management with a powerful multi-user environment and true cross-station protection

INTEGRATED WORKFLOW MANAGEMENT

Format Control™ and Workflow Manager™ provide complete access to the tools necessary to achieve programming goals, enabling a smooth workflow from start to finish

COMPLETE CONTROL with INTELLIGENT RULES™

Priority-based rule system thinks like a user, combining rule priority with both a scaling component and an unbreakable core

POWERGOLD.COM

THIS ISSUE

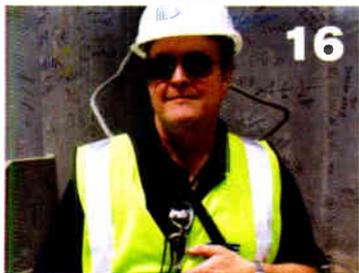
SEPTEMBER 25, 2013

NEWS

NextRadio Ramps Up Its Push	1
AM Radio: Where Do We Go From Here?	3
Warner/CC Revenue Deal Is Good News	4
News Roundup	8, 10

**FEATURES**

Your Tower May Be in the Crosshairs	12
People News	14
AES Swings Back East: New Tech, New Talks	16
Who's Buying What	19
WKMH(FM)'s New Antenna Is a Team Effort	19

**BUYER'S GUIDE**

BSI Simian Proves Reliable for All	22
WIOE Likes Its Digilink-HD Experience	26
Capitol Gains Efficiency With Efficio	30
The Real HoJo Likes RadioTraffic.com	33
OtsAV Awakens SomaFM	34

**OPINION**

Why LPFM Is Good For Radio	37
Reader's Forum	38

AM'S FUTURE*(continued from page 3)*

a transition technology, one that wisely didn't orphan today's receivers while waiting for digital receiver penetration to reach critical mass in the marketplace. All-digital AM holds the promise of a return to the pristine band that existed before electronic noise became an issue, a return to the full coverage of your service area your license entitles you to, with the added benefit of stereo and increased noise resistance. With AM's share of listening declining, the future viability of the AM band overall may well lie in owners taking advantage of the opportunity that the HD Radio AM all-digital system provides.

An all-digital transition won't happen overnight. It took TV 13 years and a government mandate to fully make the changeover. But TV station owners collectively spent some \$10 billion of their own funds switching from analog to digital, partly based upon the value the additional digital spectrum (multicast channels) would have for them. And with HDTV digital transmissions limited to 20 percent of analog power, the savings in electricity represented a significant savings going forward. With new digital TVs being sold everywhere, they finally acknowledged that all-digital media was the future, and they invested in that future.

CURRENT RECEIVERS

Right now there are over 12 million HD Radio-equipped cars throughout America, with a new car with factory-installed HD Radio technology being sold every six seconds, 24/7/365. Every

one of these radios already support HD Radio AM all-digital reception. More than 4.5 million cars will be sold this year alone with an HD Radio digital receiver on board — AM as well as FM.

With more and more people waking up to their cell phones and abandoning clock radios, and table radios and portables becoming a thing of the past, the automobile will be the place where analog AM radio makes its last stand,

all-digital mobile reception extended up to about 45 miles daytime / 13 miles nighttime, which corresponded to an average measured field intensity of 0.2 mV/m and 0.7 mV/m respectively. In layman's terms, all-digital coverage was superior to analog coverage.

No, it won't be easy, and it will come with some cost. This is a decision only the broadcasters involved can make. We've created a digital way forward,

We believe the industry needs to complete its ongoing evaluation of AM all-digital performance, assess the options and move forward quickly to revitalize the AM band.

or allows alternative technologies to render it irrelevant. To put that in a larger context, bear in mind that radio is now the only consumer medium that is not delivered to its users exclusively via digital technology.

The all-digital solution was always "baked into" HD Radio Technology, so existing transmitters and HD Radio receivers are capable of receiving an all-digital signal. A comprehensive, independently-run test program was initiated to evaluate the operational performance of all-digital AM broadcasts. Testing in Charlotte, N.C., with CBS yielded test results showing digital coverage beyond the 0.5 mV/m (field strength) coverage contour with no reduction in stereo audio quality. Solid

worked out the kinks and shown how it addresses the noise problem threatening AM's future. We believe the industry needs to complete its ongoing evaluation of AM all-digital performance, assess the options and move forward quickly to revitalize the AM band and ensure that this vital national asset can continue to serve the listening public for many years to come.

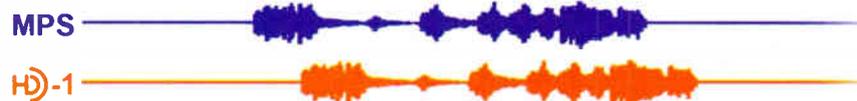
IBiquity remains committed to serve the broadcast industry and do all we can to help ensure a strong vibrant digital future for broadcast radio.

Reach the author at dangelo@ibiquity.com. Comment on this or any article; write to radioworld@nbmedia.com with "Letter to the Editor" in the subject field.

Stop Listener Complaints



M4.2S Timelock™ Reports HD Radio® MPS/HD-1 Time Alignment Problems

**You've Got Mail!****Order Now! Prices Increase October 1st.****DaySequerra**
www.daysequerra.com

JEFF SMULYAN

(continued from page 1)

early September.

“We can see what they’re listening to, for how long and on which stations. User data shows about 15 percent of Sprint customers who buy the new HTC phone are launching the NextRadio app.”

With its Web-based interface, stations can use Emmis’ TagStation to provide data services for radio broadcasting, and deliver interactive elements to the NextRadio app. With the basic, free level of integration, stations can upload branding images to display default artwork in the NextRadio app, as well as call letters, format, station name and slogan.

More than 2,000 stations had signed up for the free level as of early September; and radio groups like Beasley, CBS Radio, Entercom, Greater Media and Hubbard had registered for the additional services like album art and artist information, listener feedback, song tagging capabilities, enhanced advertising options and social integration through TagStation. If stations don’t participate, their audio will still be heard via the app, with no enhancements.

While Brenner has handled the station infrastructure and development part of the Emmis agreement with Sprint to enable FM chips, Smulyan managed its legislative and business facets. Smulyan championed radio capability in cellphones for five years before the Sprint deal was announced in January. He calls the project “the ultimate labor of love.”

Jeff Smulyan spoke to Radio World News Editor/Washington Bureau Chief Leslie Stimson about the effort.

RW: What have the stations committed to?

Smulyan: There’s been unprecedented support; just about everybody in the industry has chipped in to contribute to the \$15 million [in ad inventory] to Sprint.

That was step one, raising the money for Sprint on an annual basis. That level of support, frankly, blew me away. I think, of the top 75 groups we have 70 of them. A couple are still considering, and thousands of small stations, all saying, “I want to do my fair share.” I think that’s probably the most unusual... given, at least in the 40 years I’ve been in this in business. So, that’s number one.

The second part, and this is really the most interesting part, is now we want to... roll this out. It’s going to take awhile, because, while we have 2,500 stations with either their logos on the phones or [using] TagStation, we would love every station in America to use either TagStation or build their own interactive system, but make radio truly interactive on smartphones. So that people can see album art. They can get liner notes on albums. They can buy music. They can share information with their friends. They can call into talk shows. They can enter text to win contests. They can rate records. They can download coupons and use location-based services and calendaring.

There’s so many things that our audiences can do to interact with us on a local basis that we think will make their experience with radio much better. But it’s up to all of us to build an ecosystem that does that.

Now, of the 12-to-13,000 radio stations, we want to get a lot of them really involved. We hope every radio station in America, public or private, will find new ways to engage with their audiences because we think it’s a game-changer for our industry.

RW: Public or private meaning you want noncommercial stations involved as well?

Smulyan: We’ve had wonderful discussions with NPR

A New York Market Radio Association networking event was set for late September, featuring on-air talent as well as tech columnist David Pogue. The text reads in part: ‘Sprint and America’s radio broadcasters lead a groundbreaking tech innovation to make local radio more visual, engaging and interactive.’

and MPR [Minnesota Public Radio]. Everybody’s looking at this as a new way to relate to our listeners in a device where we don’t go through the data networks, which cost all of us money; it makes it free for our audiences through the terrestrial system and in the device that 300 million Americans carry with them every day.

That’s the goal. We want people to know they can get radio when they’re carrying their cellphone, as they all do every day.

RW: How will the stations promote this?

Smulyan: It’s up to each individual station. We hope everybody will do contests with listeners... We want to capture the imagination of every individual station in America to promote it.

RW: So it was a monetary and on-air commitment.

Smulyan: We want people to engage their audiences with this device. Leslie, 20 years ago we sold 40 million Walkmen a year. We don’t sell them anymore. This is the Walkman of the future. This is the one device that every American carries with them every day.

RW: As stations sign up for NextRadio, how does that work for the consumer?

Smulyan: If you walk into a Sprint store [and] you buy an HTC, this is the first phone it’s being introduced on. But it will be introduced to their whole product line — if you do that, the NextRadio app will be there. So when you turn your phone on, you look for it and you hit it and the radio comes on. Wherever you live, it will populate with radio.

Also, if you own an HTC phone from Sprint that you

bought in the last few years, you can also download that app at the Google Play store. The great majority of this process will be in phones that people are buying now.

RW: They’ve also introduced a special red HTC.

Smulyan: Yes, and you’ll see some fun things, but, I think it’s really up to us now. We’ve been in industry that people have kicked around for a long time. This is our chance for this industry to really fight back. There’s a reason we reach 275 million people a week. It’s because people do care about what we do, and we’ve got to drive that point home.

RW: You mentioned this is the introduction to Sprint product line. Have you and Sprint been talking about starting with these models and then moving onto others?

Smulyan: Yes, this is just the first phone. I’ll leave that to Sprint to announce the others.

RW: And you’re talking to other carriers as well?

Smulyan: We will continue dialogue with every carrier. My goal, and I’ve said this for years: We want to be in 300 million phones in the United States. Sprint has been a wonderful first partner. It’s a major, major breakthrough to have a partner like Sprint.

RW: On the station side, we’ve talked about the app, but there’s also the back-end infrastructure, the TagStation system to insert and track ads and associated data all the way from the automation system to broadcast.

Smulyan: TagStation is sort of the first provider of interactivity. When we started this process, other people were doing that interactivity. They’ve sort of dropped out of the business so we’re the only one. But, I want to stress to people they don’t have to go through TagStation. They can build their own. I’m sure other vendors will crop up. But we I hope they’ll do it. I hope they’ll go to TagStation or build their own, so that every broadcaster can have their own interactivity with their listeners. We think it’s critical.

[Ed. note: Non-Emmis stations that want enhanced content to appear on the NextRadio app need a licensing agreement with Emmis plus its TagStation software, or must build their own source content solution that complies with the mobile app capability and obligations for inventory, reporting and processing mandated by Sprint. With TagStation software, the audio is synchronized with visual elements.]

RW: Is the station infrastructure built out for that?

Smulyan: Yes, we have hundreds of stations on TagStation now and many more online. The ramp-up takes a little time.

RW: You’ve had much work going on. Now, additional things need to happen.

Smulyan: Exactly right and I think we listed the companies [see the story introduction], some of them have already set up their enhanced functions. So if you buy a smartphone from Sprint, and there’s a CBS Radio station or a Beasley station, or Hubbard station, or Greater Media station or Emmis station, all the interactivity will pop up on day one.

RW: About the interactivity on the display. Those stations are poised to make money off enhanced ads, right?

Smulyan: Right, and that will be starting. We know it’s going to take a little while to ramp that up. But the capability’s there now. If you’re WTOP in Washington

(continued on page 8)

WHEREVER YOU NEED IT,
ACCESS SIMPLY WORKS.



IP • 3G • Wi-Fi • 4G • BGAN • VSAT • PSTN • DSL
ACCESS
2USB

SMALL WONDER COMREX **ACCESS** IS
THE WORLD'S **NUMBER ONE CODEC**

ACCESS Portable lets you send studio-quality live audio, real time over IP using 3G, 4G, Wi-Fi, BGAN/VSAT, PSTN or DSL to make any remote broadcast really stand out. Connect with your audience from anywhere, live, with the easy to use, handheld ACCESS Portable.

comrex.com

COMREX

19 Pine Road, Devens, MA 01434 USA Tel: 978-784-1776 • Fax: 978-784-1717 • Toll Free: 800-237-1776 • e-mail: info@comrex.com

JEFF SMULYAN

(continued from page 6)

and you sell McDonald's an interactive ad, people can download the coupon when they buy the phone.

RW: That's cool.

Smulyan: That's my motto for this — "cool and free." ... When people see this app, they say, "That's cool. That shows me radio in whole new way." The second part is, it's free. Not only does it consume a third of the power consumption of streaming, we have no data charges. Every time I stream audio, I pay money to buy bandwidth. And my audience pays money to buy bandwidth. They're starting to understand that bandwidth has caps. And when they go over caps, it costs them more money. That's why we think this is so important.

RW: As cars come on the lots with big-screen infotainment systems, how will this look on the display? Will it look like what Pandora and other streamers are doing?

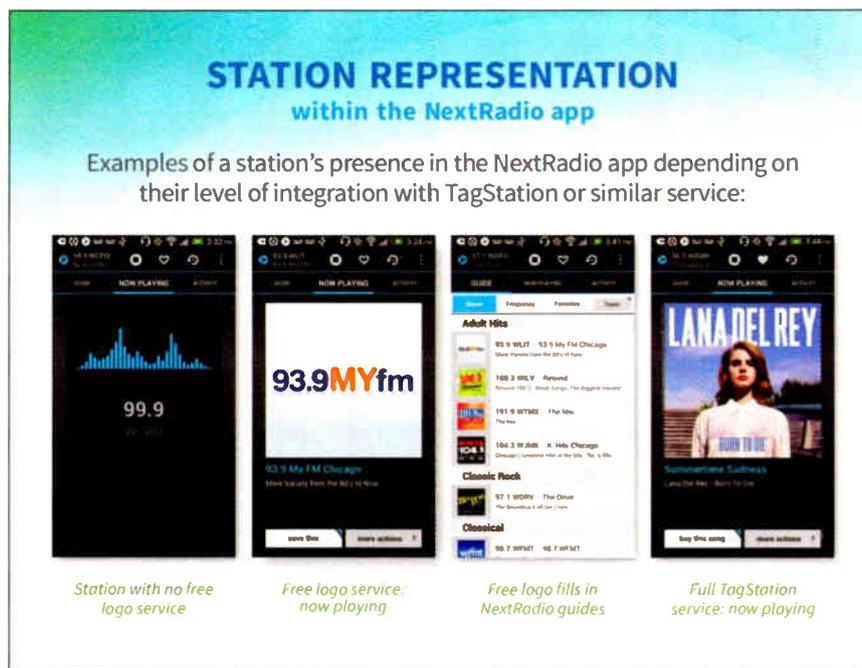
Smulyan: Absolutely. Even cooler. And remember, all of this was done with the suggestion of Kevin Gage [NAB executive vice president and chief technology officer] several years ago, who said we have got to compete in the auto of the future and the smartphone of the future with an interactive display. Now, we were the ones who happened to build it. We put our hand up and said, "We'll build that." That's really key.

RW: So radio's going to look better in the dash or in your handheld smartphone. You're going to bring back the cool factor. And now you're charged with getting as many stations as possible on board?

Smulyan: Right. We want to get every radio broadcaster in America. Remember, the key to the NextRadio system is it is agnostic. It favors no station. Every station in America is displayed. And how they're displayed is up to them.

We're making sure that their logo, their station graphics are totally free. All they have to do is download their logo.

We hope they'll do interactivity as well. When people turn on the radio, we want them to see all the stations, all their logos, all their slogans, all their



formats. That requires no expense by a broadcaster. We hope every broadcaster will want to do interactivity, but even ... if you don't do anything, your frequency and your call letters will show up; but the screen will be blank. We're saying, "Let's not leave a blank screen for our listeners."

RW: Are you talking with Sprint about special promotions for the fourth quarter?

Smulyan: We're working on all sorts of things. The answer is "yes" to any question you ask about talking to Sprint.

RW: Circling back to the money, how much has each station pledged?

Smulyan: We did a formula based on everybody's revenue and what was a fair share. Without getting into each company, of the 70 radio groups participating, they're participating as to their fair share based on their industry revenues. Of the largest 75 radio groups, I believe we have 70 committed to this project.

RW: And the Sprint deal was \$15 million in advertising inventory a year for three years in exchange for Sprint putting the FM app in at least 30 million phones?

Smulyan: Yes, and we believe that after three years — we don't plan to pay anymore. We believe that this will be such an important part of the ecosystem that everybody will be clamoring to have this.

RW: You're thinking the feature will become so popular that Sprint will put FM in more models and other carriers will want to do this, too.

Smulyan: Right.

RW: Is that because Sprint shares in the revenue along with the station when someone downloads a coupon or takes

some other type of action?

Smulyan: Right. They're 30 percent of the enhanced ads. That's because we've got to go back through their architecture. To download a coupon, you've got through their architecture.

RW: Emmis gets some of that too, right?

Smulyan: Emmis is managing — we get a fee for managing all the traffic of all of the enhanced ads — just the enhanced ads.

RW: As opposed to the plain ads.

Smulyan: If you run just your regular ad, that's 100 percent the station's money... Sprint doesn't get anything. Emmis doesn't get anything.

Let's assume you sell an ad campaign to McDonald's for Egg McMuffins, [the] same campaign you've been selling to McDonald's for 50 years. That just stays

on the station, we just hope more people see it and listen to it because they have a cellphone in their hand.

But if you sell an additional coupon to McDonald's that downloads when people hear the ad and see the ad, that goes through Sprint backchannel. And by the way, you ought to be able to charge a lot more for that enhanced ad than you would for a normal audio ad. That is where Sprint gets 30 percent and we will manage it.

RW: The backchannel is when Sprint sends the listener something in response to an action the listener has taken, like downloading a coupon.

Smulyan: Yes. On that phone when it downloads to the listener, and that coupon comes up and you take that coupon to McDonald's and redeem it. The backchannel gives our one-way medium two-way capability.

RW: So you're doing FM analog. What about HD Radio?

Smulyan: We're hopeful that's coming — one step at a time. [iBiquity President/CEO] Bob Struble and I are brothers in arms on this whole process. We think that, ultimately we can do more with data and rich audio and video through HD, but we have to take the first step with analog.

RW: Are you talking to Sprint about that?

Smulyan: Just peripherally.

RW: Is there anything else I should know?

Smulyan: Just remember: Free and cool.

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

NEWSROUNDUP

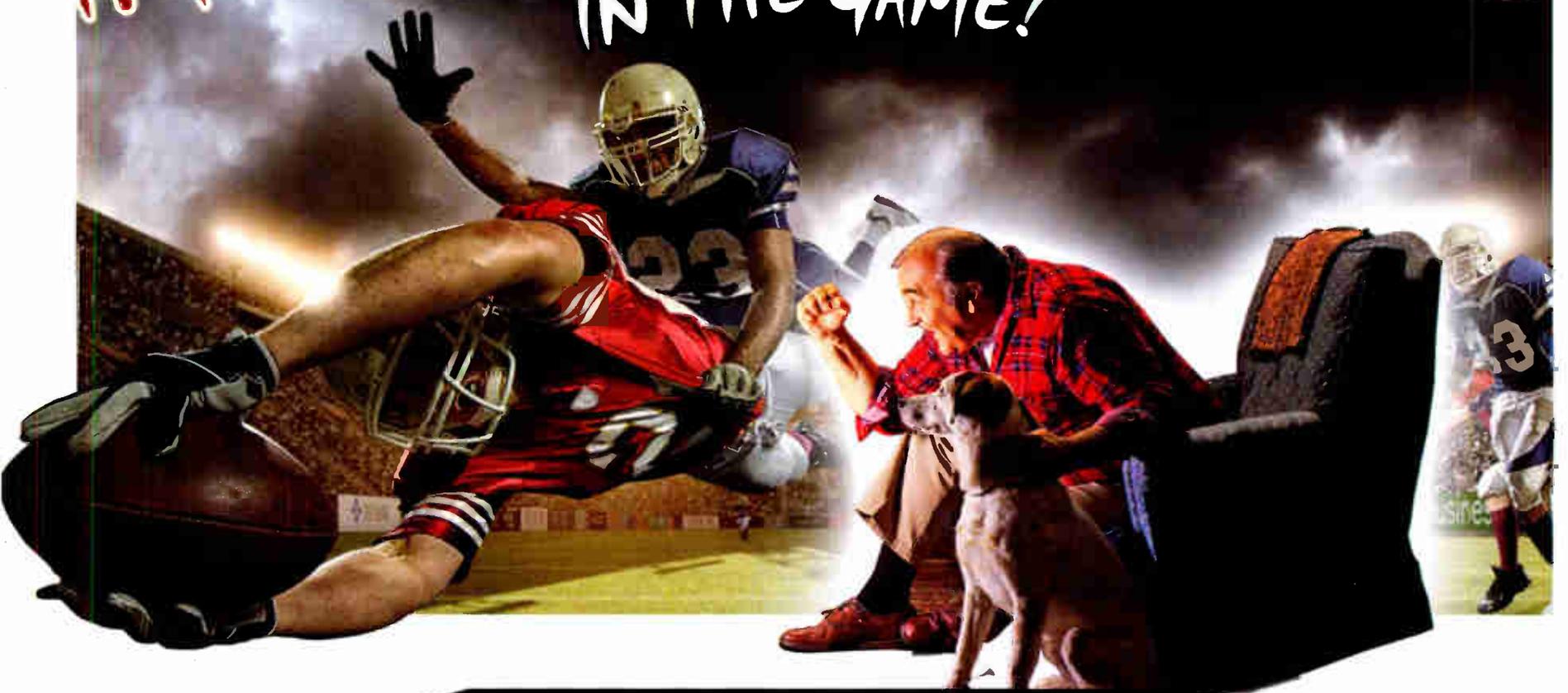
APPLE: The anticipated Apple iTunes Radio was to launch Sept. 18 as part of the new, updated iOS7, as part of a revision to iTunes and on two new iPhone5 models. iOS7 comes on the iPhone 5c and iPhone 5s, and it is a free software update for iPhone 4 and higher, iPad 2 and later, and iPad mini and iPod touch (fifth generation).

NAB HQ: Citing the need to be closer to Capitol Hill and the FCC, NAB wants to move its headquarters to Southwest Washington. Moving to the Capitol Hill/Capitol Riverfront area would make it easier for policymakers and regulators to get to NAB, and will allow organization to better showcase broadcast innovation, according to NAB President/CEO Gordon Smith, who pressed for the move. NAB has been in its current location in Northwest Washington since 1947.

FCC REFORM: By a 415-0 vote, the House passed and sent to the Senate the first of two FCC reform bills. The FCC Consolidated Reporting Act is sponsored by Louisiana Democrat Rep. Steve Scalise, Oregon Republican and Communications and Technology Subcommittee Chairman Greg Walden and California Democrat and Ranking Member Anna Eshoo. The measure consolidates eight reports required by Congress on the industries regulated by the commission into one biennial report.



IMMERSE YOUR AUDIENCE IN THE GAME!



To deliver every heart pounding, bone crunching moment during your football remotes you need an IP audio codec you can rely on. Merlin PLUS is our newest studio codec that can make 6 simultaneous bidirectional mono connections to remote IP codecs or smartphones using Report-IT, saving money on hardware costs and reducing rack space requirements.

Tieline[®] 
The Codec Company

1-317-845-8000

sales@tieline.com

www.tieline.com

NEWSROUNDUP

REVENUE/ROYALTIES: Clear Channel Media & Entertainment and Warner Music Group came to an agreement about music royalties and revenues. WMG is one of the top three music labels. The companies say their partnership will allow WMG to share in revenue from all Clear Channel platforms while gaining promotional opportunities across its multi-platform assets. Entercom President/CEO David Field called it "an important step forward in establishing a new business model that aligns the interests of artists, labels, consumers and broadcast radio." MusicFirst Coalition, a group backed by major labels, said that while it applauded an arrangement that allows more artists to share revenue, "these deals are no substitute for a real, industry-wide AM/FM performance right."

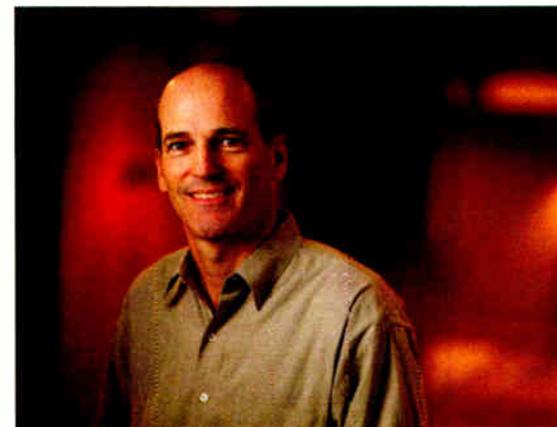
REVENUE/ROYALTIES II: Greater Media signed a revenue/royalty deal with Big Machine Label Group, the broadcaster's first such agreement with a label. In the multi-year arrangement, Big Machine agreed to allow digital simulcasts of the over-the-air signals by Greater Media to scale affordably to support growth of the company's digital platform. Greater Media will share a percentage of its on-air revenues from the airplay of Big Machine's recorded music on terrestrial platforms.

AES67: The Audio Engineering Society published AES67, an effort that has been watched closely

by participants in the audio over IP and broadcast networking worlds. Work has been ongoing under the name "AES-X192." The document aims to provide "comprehensive interoperability recommendations in the areas of synchronization, media clock identification, network transport, encoding and streaming, session description and connection management," according to the abstract.

PANDORA: The Pandora board named Brian McAndrews as its chief executive officer, president and chairman. He replaced Joe Kennedy, who'd said in March he wanted to retire. The board wanted a candidate who could build on Pandora's position in Internet audio and accelerate its growing advertising business. McAndrews in 1999 took over Avenue A, a small digital agency in Seattle, and built it into digital marketing company aQuantive, subsequently acquired by Microsoft. He joined Madrona as an investing partner in 2009, focusing on early-stage technology companies.

TRAFFIC: Livio developed an "FM Traffic Button" for new cars that founder and CEO Jake Sigal predicts could be in vehicles next year. The button provides traffic reports from Clear Channel's Total Traffic Network every few minutes. The system is enabled by software code added to an embedded app on the in-dash infotainment system and accessed by a touch-screen button on the display. No smartphone is required. Livio would write software tailored for a specific automaker to implement and has applied for a patent for its system.



Brian McAndrews

FM TRANSLATORS: The FCC opened a filing window for some "singleton" FM translator applications pending from Auction 83. The window for construction permit applications for 104 applications closes Oct. 9. The move is another attempt by the Media Bureau to process pending translator applications from Auction 83 before the FCC opens a window for low-power FM applications in October.

WESTWOODONE: Dial Global has become WestwoodOne. The program syndicator was expected to revive its former, iconic name. Dial Global's acquisition by Cumulus Media is expected to close by year-end.



**ENCO
DOES
RADIO**

WORLD LEADING
**AUDIO PAYOUT
& AUTOMATION
SOLUTIONS**

enco.com
(248) 827-4440



DAD

THE WORLD'S MOST POWERFUL RADIO AUTOMATION.



Bright idea.

All of our consoles have LED button lamps. They'll stay lit for — well, practically forever. Let's just say, your kids won't have to change bulbs, either.

Big Shot.

Your station super-sizes everything? No problem; iQ can scale from 8 to 24 faders. Handles even the most zany morning crew, talk show - or anything else you think up.

Control at your fingertips.

See these buttons? You can program them (or the button modules available for Element consoles) to perform routing salvos, system-wide scene changes and more. Because great power requires control.

Smarter phones.

Not only are hybrid controls built into iQ for direct-from-the-board control, the iQ6 phone system connects with just one Ethernet cable.

Network everywhere.

No need for cheesy A/V mixers - RAQ lets you put a networked, professional console anywhere, at a price that'll make the even stingiest GM smile.

Double your pleasure.

Did you know that one QOR.16 console engine will power 2 RAQ or DESQ mixing consoles? Makes your money go further on news bullpens, production pods, ingest stations, etc.

Step to the side.

Dirt and liquids: a console's most hated enemy. Element foils 'em with premium, side-loading conductive-plastic faders: dirt drops past, not in.

Who's da boss?

Clients rave about them, talent loves them: over 5,000 on the air makes Axia radio's favorite IP console.

Built to last... and last, and last.

Element modules are machined aluminum with wear-resistant Lexan inserts for long life. We've even designed custom-molded guides to prevent tears around the fader slot. No "ouchies" here.

Unlimited vision.

Some console makers give you "switched meters" to save costs. iQ does away with that annoyance: high-rez OLED displays meter all 4 buses at once.

A low price shouldn't mean "cheap".

Other companies cut corners on their low-cost consoles. Axia packs in as much as possible. Real conductive-plastic faders, machined-aluminum work surfaces, anodized rub-proof markings, aircraft-grade switches. At a price less than some analog "bargain" consoles.

Rack 'em up.

Turn your Radius 8-fader console into a rack-mount powerhouse. Great for OB vans, performance studios, concert remotes and more.

Good timing.

Unlike those other guys' small consoles, DESQ has an event timer and an NTP-capable clock — built-in, not extra-cost. Because time is money (pardon our pun!).

Small but mighty.

DESQ packs big console power into just 18" square. 6 faders, 2 buses, automatic mix-minus, Show Profiles and more. Perfect for standalone or networked studios.

Axia makes the switch.

No "plug-n-pray" unmanaged switches here; Axia builds our own custom zero-config, built-for-broadcast network switch right into our PowerStation and QOR console engines.

Show-off.

Element lets you store up to 99 Show Profiles - "snapshots" that recall channel sources, bus assignments, EQ settings, even fader positions. So every jock can have their own customized console.

Speak your mind.

Element consoles have comprehensive talkback features. You can talk directly to remote studios... even individual talent's headphone feeds. Even our most cost-effective boards let you talkback to callers and codecs.

Handsome devil.

Our meters aren't just good-looking; they're designed specifically to convey the most information possible at just a glance. And Axia consoles support VU and PPM metering styles - something you might not find on consoles that cost a lot more.

Big power, small price.

Radius loads you up with 8 faders, 4 mix buses, automatic mix-minus, onboard EQ and voice dynamics and more — for just \$5990 USD. Shh... don't tell the accountants.

CHOOSING AXIA FOR YOUR NEXT CONSOLE IS EASY. SELECTING ONE MIGHT TAKE AWHILE.

When we introduced AoIP to radio in 2003, some folks thought we were off our nut. Today though, broadcasters agree: picking Axia is the right choice. With over 5,000 on air daily, broadcasters have voted Axia the world's most popular networked console.

Who can blame them? Axia fans say that Livewire™ networking is the most intelligent, flexible IP-Audio system in the industry. And that our huge number of partners, with over 75 broadcast products from phones to transmitters that connect to Axia networks,

makes life much simpler. They also appreciate our 5-year warranty and 24/7 technical support (not that they need it).

In fact, we calculate that thanks to our huge selection of frame, module and mixing engines, there are at least 32,209,982 different ways to order an Axia console. With that many options, you'd better get started now! Mmm... don't you just love that new-console smell?

AxiaAudio.com



Available in the U.S. from BGS: (352) 622-7700

© 2013 Axia Audio The Telos Alliance All Rights Reserved.

Your Tower May Be in the Crosshairs

Autumn brings hunting season, rust and other problems for your stick

WORKBENCH

by John Bisset

Read more Workbench articles online at radioworld.com

Our broadcast towers often are built in remote places, and autumn brings a special kind of vandal to such sites, one who is armed and thinks your tower, tower light and coax line are fair game.

Shooting damage can be a nuisance or it can be catastrophic. Such incidents also pose a threat to an engineer.

"No Hunting" signs are respected by responsible hunters, and you should use them. But what about after damage has occurred? Unless a bullet pierced your transmission line or antenna and caused an immediate, dramatic leak in air pressure (or worse), you may not even know your facility has been hit.

That's why a quarterly, even yearly, inspection by a rigger is so important. Yes, it's expensive. Treat it like insurance: What problems will the rigger find that could have escalated into a terrible disaster?

Fig. 1 gives us an example. This "guy with a rifle" (I won't honor him with the title of hunter) had amazing aim. But pity the tower rigger whose line is clamped to the tower and who snapped the photo. This kind of damage is scary!

In addition to the hole through the tower leg, your tower inspector can find



Fig. 1: A bullet pierced a leg of a tower; the damage was noticed by a tower rigger performing a quarterly inspection.

coax nicks or holes, broken support straps or hangers, and cracked or broken tower light lenses. As this engineer did, make sure the climber brings along a camera. Documentation of this sort opens the door for a great discussion with your GM (not to mention giving

you great visuals to share with fellow engineers in a future *Workbench* column — anonymity is assured).

The tower climber may also find things that need attention, such as the rusted line clamps seen in Fig. 2. It's easy to see from the pictures that this tower needs some help. But help costs money, and as long as the station is on the air, such problems may be set aside by upper management.

Pictures also serve to protect you, the engineer, against false claims that you're "not doing your job." In today's climate of lawsuits, take the time to type up the findings, submit them to the GM or owner, and keep a copy.

Your tower inspection should not only include the tower but the guys and anchor points. Visit the anchor points, walking the site with the rigger, asking for his professional opinion of things that could be improved or upgraded. With many stations preparing budgets this time of year, a new coat of paint on the tower may trump new sales computers!



Fig. 2: Tower inspections can also uncover things like rusted cable clamps.

Paul Sagi, an engineer in Malaysia and longtime *Workbench* contributor, wonders how many engineers are still using Ampex open-reel tape machines. In today's digital age, my guess is not many. However, I have visited stations where the production room holds at least one vintage reel-to-reel, just in case.

Paul has some experience repairing these machines, and offers a tip to readers. Remember the venerable Ampex 600B reel-to-reel? Great machines, but after years of use, the clutches sometimes seize up. The cause is the clutch-bearing grease hardening.

Ampex used eddy current clutches in these machines; the service manual warns that the machines need special jigs/fixtures, and can't be repaired in the field. At issue is a 1/10,000-to-1/20,000-inch clearance rotor-to-stator.

Paul dismantled the clutches any-
(continued on page 14)

YOUR ULTIMATE
SUPPLY & SERVICE SOLUTION



From our Facility to yours



Design & Integration



Repairs & On-Site Service Calls

LIGHTNER ELECTRONICS www.lightnerelectronics.com
Toll Free 1-866-239-3888 Shop online www.broadcastavsales.com



\$ % !

The right tool makes all the difference.

Internet Radio is the future, and until now staying on top of your streaming audio performance has been a real challenge. Limited software tools and unreliable PC based solutions just aren't cutting it.

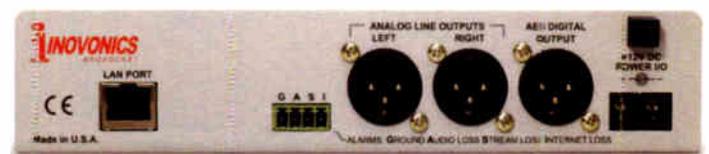
Introducing the **Inovonics 610**. Finally, a dedicated tool for uninterrupted monitoring of your Internet Radio stream. Professional outputs, live metadata display, alarm logging, and email alerts are just a few of the features guaranteed to let you know immediately when things go wrong.

Get the full picture at:

www.inovonicsbroadcast.com/model/610



610 Internet Radio Monitor



- ✓ Locks to your stream.
- ✓ MP3, AAC and Ogg decoding.
- ✓ Alarms: Audio, Stream & Internet loss.
- ✓ iOS, Android & web control.
- ✓ 100% Automated.
- ✓ Email and text message alerting.



WORKBENCH*(continued from page 12)*

way, including the bearing dust covers, used solvent to remove the old grease from the bearings, added fresh lithium grease and reassembled. Sure enough, there was no clearance. The rotors were frozen.

As he thought about the problem, Paul realized the magnetic field inside the clutch would be symmetric and centered. The small gap inside the clutch would present an intense field, and thus the field would exert a strong force on the rotor to self-center it.

Paul's procedure is to assemble the clutch but leave the screws a bit loose, so the clutch parts have a little freedom to move. Then apply the usual 110 VDC supply to the clutch coil, which will align the clutch. You may prod the sections a bit with your fingers, in case you have the screws a little too tight. Now, confirm free rotation, and gradually tighten the screws, all the time confirming free rotation. Remove the voltage source, and confirm free rotation; and you're done.

No jigs or fixtures; and the process does not take long. You can figure five minutes alignment per clutch.

It's odd that the engineers at Ampex never thought of using the magnetic field of the clutch coil to self-align the clutch.

Paul Sagi can be reached at pksgi92@gmail.com.

Allen Alleo has a fun website for engineers who like to experiment and build circuits. You'll find a variety of power supplies and motor controllers at www.bangkoktoshop.com. Reach Allen at alleo21@yahoo.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 44 years in the broadcasting industry and is still learning. He handles West Coast sales for the Telos Alliance. He is SBE Certified and is a past recipient of the SBE's Educator of the Year Award.

PEOPLENEWS

Barry Thomas is now director of engineering for the Wilks Broadcast Group.

Greg Coons, an agent in the FCC's Denver field office, has been promoted to resident agent to be based in Norfolk, Va.

Josh Jackson has been named to the newly-created position of vice president of content for **WBG Jazz 88.3 FM** in Newark, N.J.

Christopher Thomas has joined **Pesa** as executive vice president of engineering and chief technical officer.

**Dan Halyburton**

NPR President and CEO **Gary E. Knell** left this fall to become president and CEO of the National Geographic Society. **Paul G. Haaga Jr.** was named acting president/CEO; he is former vice chair and chair of the Finance Committee.

Dan Halyburton has made an investment in **Falls Media LLC**. The former president of **RadioTime** (now **TuneIn**) joins the company as vice president.

Greg Strassel has been named **Clear Channel Media and Entertainment's** senior vice president of programming. In other **Clear Channel** news, **Marlene Trevino** is joining **Clear Channel San Antonio** as its new market president.

**Tim Hager**

Deidre Richter has been tapped as **Clear Channel Media and Entertainment Dallas's** new market president. She will report to **Kelly Kibler Owens**, senior vice president of operations for Houston, Dallas, Austin and San Antonio. **Clear Channel Denver** has also appointed **Tim Hager** as vice president of sales.

The Broadcasting Board of Governors

**Josh Jackson****Greg Strassel****Deidre Richter**

had hired **Kevin Klose** as acting director of **Radio Free Europe/Radio Liberty** in January. He's now been appointed its president and CEO. The **BBG** offered **Klose** a multiyear contract, to be reviewed annually.

The **AES Educational Foundation** has announced the recipients of the 2013 **AES Educational Grants for Graduate Studies in Audio Engineering**. **Harman International** is providing two new grants to support graduate education in audio. These have been awarded to **Brecht De Man** and **Kai Siedenburg**. **Kathleen Gray** has been named the recipient of the **Emil Torick Scholar** distinction. The **John Eargle Award** is presented to **Elizabeth Marston**. Repeat awards were granted to **Arete Andreopoulou** and **Ross Penman**. Other awards were offered to **Javed Hamza** and **Rebecca Vos**. **Kevin Fallis**, **Charles Holbrow** and **Marlene Mathews** have also been offered awards.

Media rep firm **Katz Radio Group** has a new chief executive officer, **Mark Rosenthal**.

"The Financial Exchange

**Kim Carrigan and Barry Armstrong**

With **Barry Armstrong**," Boston's only daily business news show, on **WRKO(AM) 680**, has added **Kim Carrigan**, a Bostonian television news anchor, as co-host. The show has been renamed "The Financial Exchange with **Barry Armstrong** and **Kim Carrigan**."

NABEF and **Sutter** have tapped industry experts to serve as associate deans of the program. They are **Trila Bumstead**, owner, **Ohana Media Group**; **Anita Stephens-Graham**, co-founder and managing director, **Graham and Associates**; **Marc Jaromin**, president, **Mojo Brands Media**; **DuJuan McCoy**, president and CEO, **Bayou City Broadcasting**; and **Jeanette Tully**, CEO, **Aloha Station Trust**.



Complete Ground System Construction, Evaluation and Repair Services

MoM Prep Services

Fast, Efficient Full Site Construction Services

Reliable, On-time Installation Firm Quotes Quality Workmanship

www.amgroundsystems.com

866-227-2346

866-22RADIO



Serving the Technical and Construction Needs of AM Broadcasters for 30 Years

info-rw@amgroundsystems.com



GET CONNECTED

to your PR&E Networked Studio

FOR SPORTS BROADCASTS

with the new

IP200 CODEC



IP LINK 100:

Single bi-directional stereo audio channels



IP LINK 200:

Two bi-directional stereo audio channels

Your professional studio package using the Oasis Networked console is now accessible worldwide.

Oasis allows facilities to cost-effectively and easily migrate from analog to digital whenever they're ready!



Deliver the moment.



The Intraplex® IP Link family of IP audio codecs provides high-end features at an affordable price.

Offering an array of audio coding options, the IP Link codecs are suitable for use in Studio to Transmitter Links (STLs) as well as audio contribution and distribution networks. Support for IP multicast and multiple unicast streams enables one encoder to feed multiple decoders.

By incorporating dual WAN ports and a separate IP management port, the IP Link systems can provide a level of reliability not seen in comparably-priced codecs.

The IP Link audio codecs bring legendary Intraplex reliability to the IP codec market.

see more comments at harrisbroadcast.com/newsandresources/Testimonial.asp

Contact SCMS for more information on all Harris product

1-800-438-6040

sales@scmsinc.com



West Coast
818-398-7314
Doug Tharp

Mid-West
513-899-3036
Mary Schnelle

Central
315-623-7655
Bernie O'Brien

North-East
315-623-7655
Jim Peck

Pro Audio/South-East
877-640-8205
Ric Goldstein

Latin America
760-650-1427
Lily Massari

South West
772-340-0850
Ted Nahil

North Central
573-478-3737
Pam Leffler

Mid-South
877-391-2650
Bob Mayben

Southern Gulf
866-205-6905
Andy Cole

Bradley Division
800-732-7665
Art Reed / Bob Eburg

www.scmsinc.com

World Radio History

AES Swings Back East: New Tech, New Talks



Jacob Javits
Convention
Center

Courtesy of the Jacob K. Javits Center

Highlights include sessions on broadcasting during a disaster and the future of MP3 audio

BY ALAN PETERSON

East Coast broadcasters and audio professionals, take note: The AES is making its biennial visit back to New York next month.

The 135th Audio Engineering Society Convention, Oct. 17–20, marks a return to the Jacob K. Javits Center in New York City. It's a gathering for audio pros in all disciplines — motion picture production, music recording, live sound, audio research and engineering — in one of America's great cities. And there will be plenty for radio broadcasters to get interested and excited about.

Familiar and notable figures from the radio industry will address concerns rel-

evant to the modern broadcaster, including disaster preparation, the future of remote broadcasting and the unexpected and perhaps unsettling question, "Is the MP3 obsolete?"

And of course, there's that convention hall full of all the cool new equipment.

NEW PRODUCTS

The roster of manufacturers and exhibitors will no doubt change between now and October, but an early peek reveals some amazing new products.

Izotope first hit the streets more than a decade ago, with a free vinyl simulator. This year, the company is rolling out RX 3 Advanced, described by Jay LeBoeuf,

Make More Money: Automate Ad Sales!

These days, people can buy anything on the Internet...except radio advertising. But now, your station can sell ads on-line...and boost your bottom line! Now, the RadioAdStore.com can automate some of your ad sales...and help you make more money. There are business owners who listen to your station but don't advertise on it. Now you can invite such merchants to come to your website and buy ads on-line. Simply add a "Buy Advertising" button to your web pages.

Then our self-serve ad store does the rest to bring you new revenue. For details, go to

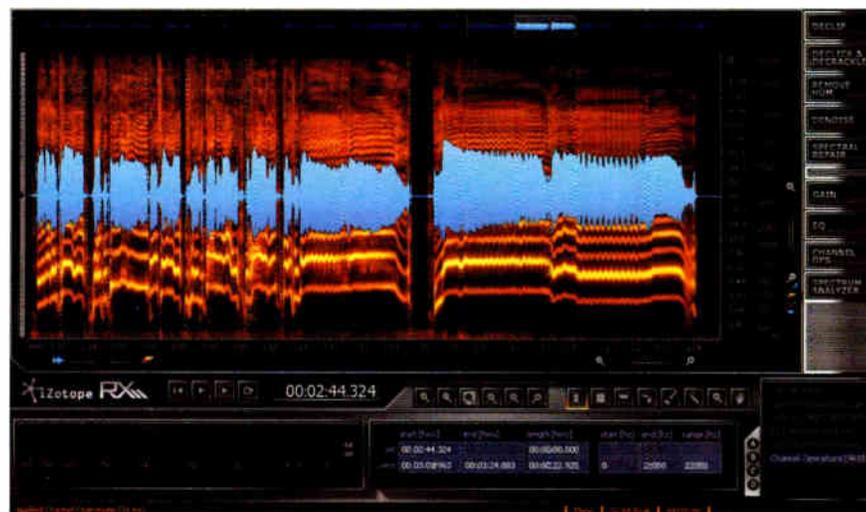
RadioAdStore.com

1-866-Dave-Scott
Former CEO Scott Studios

Dave Scott Companies



No risk!
If we don't sell and collect,
you owe nothing!



The RX 2 Audio Repair Kit. Izotope will be rolling out its successor, the RX 3, in New York.



Tascam DR-60D Solid-State Recorder

strategic technical director of Izotope, as a "Complete Audio Repair" kit.

"The DeReverb module reduces room echo," he told RW, "and it works as a plug-in or as a standalone audio editor. You can do all your cleanup right inside the program." LeBoeuf says the product is suitable for audio engineers, podcasters and broadcasters.

Tascam cassette and DAT decks have been inside radio studios for years. This fall, the company is helping get people out of the studio, with the debut of the DR60D, a solid-state four-track linear field recorder, primarily meant to pair with a DSLR video camera. But with an internal mixer, limiter and phantom power, the DR60D can well be used for radio press conference recording and roundtable discussions with up to four microphones.

No one can deny the versatility of using smartphone devices as audio recorders. Tascam addressed that as well with the debut of the iM2X stereo mic for the iPhone 4S. According to Marketing Manager Garyn Jones, "It uses the same high-quality condenser mics as on our DR-40 recorder, and it has its own A/D converter, bypassing the mic electronics of the iPhone."

Eventide, maker of the legendary Harmonizer line, is preparing for the release of the H9 "stomp box" processor. While rackmount gear is more



Processing power found in a small stomp box: The Eventide H9.

familiar to radio production people, the H9 packs the punch of five other Eventide processors into one box, and can be controlled remotely via MIDI or iOS Bluetooth. And of course, it features the big Eventide Knob we all like to spin.

For broadcasters, much of the equipment on display is too studio-oriented — but not all of it. Microphones will be well-represented by Audio-Technica, AEA, Cloud, Earthworks, MXL and Neumann, among others; and radio favorite Sound Ideas is on the list, bringing in its huge collection of sound effects and the Mix Music Library.

SESSIONS

Workshops, panel presentations and white papers are for when it's time to step back from the toys and actually get some work done. This year, many scheduled sessions are well worth your attention, some with familiar hosts.

The disaster known as Superstorm Sandy left behind a lot of damaged property and, as many readers will attest, a lot of stations were knocked off the air in New York and New Jersey. If that happened where you were located, would you know how to stay on the air and survive the ordeal? If not, you need to be in session B7: "Broadcasting During a Disaster." Friday, Oct. 18, 12:30–2 p.m.

(continued on page 18)

IP. It's the new ISDN.

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



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

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

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

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

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



Telos-Systems.com/zip-one

Telos
THE TELOS ALLIANCE

FEATURES

AES

(continued from page 16)

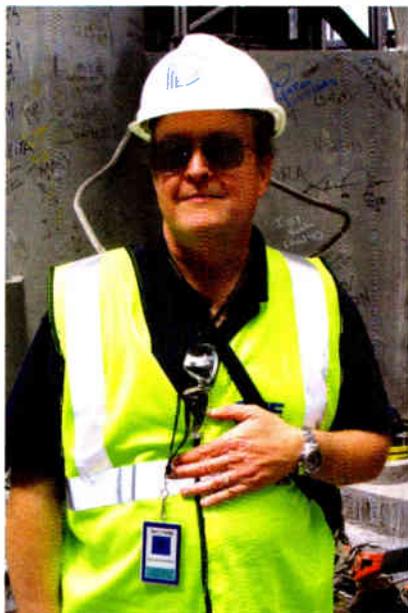
This session will be chaired by Glynn Walden, senior vice president of engineering for CBS Radio. He'll be joined by Thomas R. Ray III, now president of Tom Ray Broadcast Consulting, who can provide commentary and describe his own experiences with Sandy. He was director of engineering for Buckley Broadcasting in New York at the time Sandy struck, and recounted his adventures in the article "Riding Out Hurricane Sandy," Radio World, Dec. 5, 2012.

"Stations in New Jersey were underwater," he told Radio World. "At WOR(AM), we were off the air because we had no phones, no Internet, no cable TV."

The best way to stay on the air is to anticipate what can go wrong, with experience as one's guide.

"Take a look and see what your vulnerabilities are. You have to think things through, and fast," Ray said. "You have to determine the best and fastest method to get back on the air."

"For personnel at the transmitter site, you need to have food, water and a cot or a sleeping bag. You need more than one day of fuel for the generator. And if you don't have a generator, maybe it's time to get one."



Tom Ray here looks ready for anything, and he's a panelist for 'Broadcasting During a Disaster.'

Walden and Ray will be joined by Rob Bertrand of CBS, Howard Price of ABC/Disney and Richard Ross from WADO/Univision.

Big names from big companies like Orban, NPR, Fraunhofer and CBS New York are coming together to discuss the question, "Is it Time to Retire the

MP3 Protocol for Streaming?" — a late afternoon session on Thursday, Oct. 17, starting at 5:30 pm. Among presenters is Greg Shay, chief science officer of the Telos Alliance.

"I don't think it's time that it goes away," Shay stressed, "but there are additional possibilities opening up. When ISDN was the only thing we had, then



Greg Shay of the Telos Alliance will participate in the session 'Is it Time to Retire the MP3 Protocol for Streaming?'



IF YOU GO

What: 135th AES Convention
Where: Jacob Javits Center, New York
When: Oct. 17-20
How: www.aes.org/events/135/

[MP3] was the only thing you could do. Higher speed networks are becoming available, and you have more options."

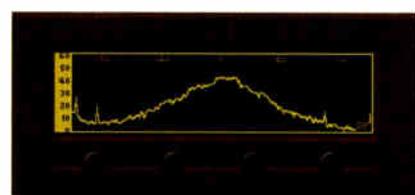
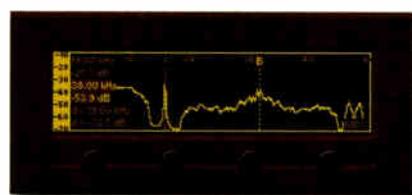
Numerous factors are at play today, prime among them the cost of hardware vs. cost of bandwidth, and listener expectation as to what is acceptable audio. "Network bandwidth is not a limiting factor anymore," he said. "You can do things all the way out to linear."

Up-to-date listings of exhibitors and presenters can be found at the Audio Engineering Society web page www.aes.org along with registration details.

Alan Peterson is a longtime RW writer, 35-year broadcast pro, SBE-certified audio engineer and enthusiastic convention-goer whenever the AES is in New York. He can be reached at apeterson@radioamerica.org.

DEVA[®] BROADCAST

DB4004 Modulation Monitor
 Product with no equal in the industry
 ... it's Simply the BEST !!!



Price: \$2700

Fully Digital DSP-Based IF Filter • iPhone, iPad & Android Compatible
Built-in Audio Streamer for Remote Listening • Easy to use WEB interface • FTP Server
Alarm dispatch via E-mail, SMS, SNMP and GPO • Built-in 50 channels Data Logger



Available in the US from SCMS, Inc. Call: 800-438-6040
www.scmsinc.com



WHO'S BUYING WHAT

WKMH(FM)'S NEW ANTENNA IS A TEAM EFFORT

WKMH(FM), owned by Spirit Broadcasting Group, recently installed a Shively Log Periodic Directional FM Antenna as part of an RF improvement project managed by dealer/integrator SCMS.

SCMS supplied the antenna, Harris 5 kW transmitter and Valmont 450-foot tower. The company's construction division, which has licensed contractor credentials, obtained local zoning, building permits and approvals for the installation of the tower. Tower Guys of Matthews, N.C., was the subcontractor handling erection of the tower.

The station airs at 88.7 MHz. Its licensed transmitter power of 4 kW produces a vertical effective radiated power of 51 kW; it serves Saluda, North Augusta and Aiken, S.C., as well as Augusta, Ga. Jeff Sigmon is chief operator.

Bob Cauthen, president of SCMS, told Radio World that Spirit Broadcasting

Group obtained four construction permits via the most recent non-com FCC window and will have a network of stations in South Carolina that will include Ft. Mill, Greenwood, Saluda and Summerville. These four stations are expected to reach a significant percentage of the state's population.

Cauthen made particular note of the



Aerial view of the WKMH(FM) Shively Log Periodic Directional FM Antenna in service.

Aerial photo courtesy John Owen and Aiken Aerial Photography LLC

use of a log periodic antenna. "The footprint that these stations can fit in is so small, that the antennas have to be very, very directional, and the patterns have to be designed in a manner that traditional FM antennas often cannot achieve the correct coverage. This is of course because of the crowded spectrum." For that reason, he said, log periodic antennas are being used more frequently.

NEW...
1 2 3 4 5 6 7 8 9 10 11 12

DIGILINK~HD

- Single station to Multi-site Group
- VPN Remote Voice tracking
- Your Music scheduler or ours
- Multi-sound card Console interface
- Live & Automated Games with Rain delay
- Share audio files across the hall or continent

ARRAKIS SYSTEMS INC.
www.arrakis-systems.com



Scalable, high speed Radio Automation for Multistudio, Multisite Applications



Digilink-HD (DHD) is designed from the ground up for today's fast paced, distributed content, single station or multi-site Group. It empowers local and remote talent to collaborate to deliver exciting content, build your audience share, and increase sales. DHD has the tools to enable you to work faster, work smarter, and do more. For On Air, DHD supports live on air, live assist, hard disk automation, satellite automation, and Games automation. DHD supports multiple sound cards for interface to a console and live crossfading. Audio files can be shared across the station or across the planet. To create live sounding automation and facilitate flexible use of talent, DHD features a powerful segue editor, voice track recorder-editor, and remote voice tracking over a VPN (virtual private network). The voice track recorder-editor supports complete control plus the ability to assign a music bed under the voice track with ducking. DHD supports any kind of programming and any size market or multi-site group.

4 On Air Station cluster only **\$500 / month**

www.arrakis-systems.com

970.461.0730

More Who's Buying What:

KTWN(FM) in Minneapolis deployed Wheatstone's baseband192 interface, creating a digital link between processing and transmission: an "all-digital" air chain. The station, owned by Northern Lights Broadcasting, went on the air with an AirAura X3 audio processor in July. The engineering manager is Rob Goldberg, who worked with colleague Mike Oberg on the installation. The interface is available in certain Wheatstone audio processing models; it offers AES-EBU output to feed FM transmitters equipped with digital baseband input. The idea behind such systems is to eliminate the need for an analog composite interface between processing and transmission.

Indiana Public Broadcasting Stations is installing a new networking system made by Harris Broadcast. Harris Broadcast said the new system, based on a high-bandwidth fiber and IP video network, will allow the consortium of eight PBS television stations and nine NPR radio stations to share and manage content more efficiently. It quoted Roger Rhodes, executive director of IPBS, describing the project as a "State-wide HD/SD Educational Network for Hoosiers."

Harris Broadcast noted the use of baseband video and audio processing, compression and IP multicasting. Products include a Selenio media convergence platform, Intraplex IP Link 100 and 200 codecs, and Magellan NMS system.

Send news for Who's Buying What to radioworld@nbmedia.com.

31-Band Audio Processing Explained

Recording engineers and pro audio folks know what to do with it. Here's an article that explains why you need it for radio.

We're asked periodically why we do the things we do. We don't have an answer for everything, but we have a few good ones for the features we've designed into our AirAura X3 and FM-531HD audio processors. Particularly about WHY 31-band processing is best.



Get more information here: october13INN.wheatstone.com

See all. Know all.

IP Meters lets you get a window on your entire network. A lot of windows, actually...



With your computer and WheatNet-IP, you can give your network the NSA treatment and know EVERYTHING that happens on it by metering it all in real time!

Get more information here: october13INN.wheatstone.com



small and powerful with no doubt about its heritage



got a smaller application? gotta have it!

L-8

WHEATNET-IP CONTROL SURFACE



phone 1.252.638-7000 | wheatstone.com | sales@wheatstone.com

OK, this spread is an advertising space paid for by Wheatstone. But honestly you'll find it informative, entertaining and compelling.



Your Digital Reality Check

What to expect from the all-digital chain and why what happens in the processor is more important than ever

Digital, like certain politicians, needs a reality check every now and then. As an industry, we tend to expect more out of digital than it can possibly deliver. It's easy to do because digital signal processing has been a good friend to us.

But let's be clear here. The all-digital air chain can't solve all our problems any more than our politicians can. It can't add frequencies where there aren't any and nor can it make up for crummy source material.

Get the whole story here: october13INN.wheatstone.com



M-4IP: Four Channels of Famous Wheatstone Mic Processing

Wheatstone's M-1 Mic Processor is a broadcast standard, making more voices sound the best they can, day in and day out. The new M-4IP gives you four channels of that famous processing, controllable on the WheatNet-IP Intelligent Network.

Get the whole story here: october13INN.wheatstone.com



Compact control surface descended from flagship LX-24...

Meet the all new L-8

There's always a small space that can benefit from having a top-of-the-line piece of gear. The L-8 is exactly that - not dumbed down in any way.

This cousin to the popular LX-24 is big in capability but scaled for news production, voiceover work and all those applications requiring a solid control surface that will deliver under deadline. The L-8 is based on all the same design principles as the LX-24 - a precision-built, low-profile, tabletop IP control surface that offers assignable sources to any fader and with hot-swappable individual fader modules.

Each fader provides access to four stereo busses, a stereo cue bus, and its own individual Bus-Minus. An LED source name display, an A/B source selector, and one programmable soft button are also available, and a SET button provides access to assignable controls in the master section. Snapshots of the L-8's configuration can be saved and recalled at the touch of a button, making setup for different working sessions a snap.

Get the whole story here: october13INN.wheatstone.com

Moving Along

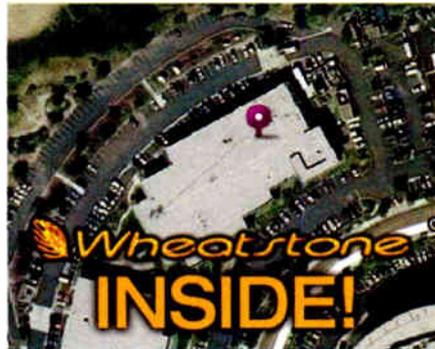
Seven Clear Channel San Diego studios get LX-24 Consoles

It's hard to find a broadcast engineer these days who isn't on the move.

The closest candidate is John Rigg, director of engineering for Clear Channel in San Diego. And by move, we mean actual address move - as in, moving the studios to a new location. Otherwise, we're sure that Rigg is constantly on the move with seven stations and 40 studios under his care in one of the nation's top rated markets.

What we find unique about Rigg, besides his acute sense of humor, is that he's updating Clear Channel's broadcast facility on Granite Ridge Drive one studio at a time. More often, we find that broadcasters make sweeping routing and console changes only when they build out an entirely new facility in a new location. But not Rigg.

Get the whole story here: october13INN.wheatstone.com



BSI Simian Proves Reliable for All

Feature-packed yet easy-to-use system scales for any size of station

USERREPORT

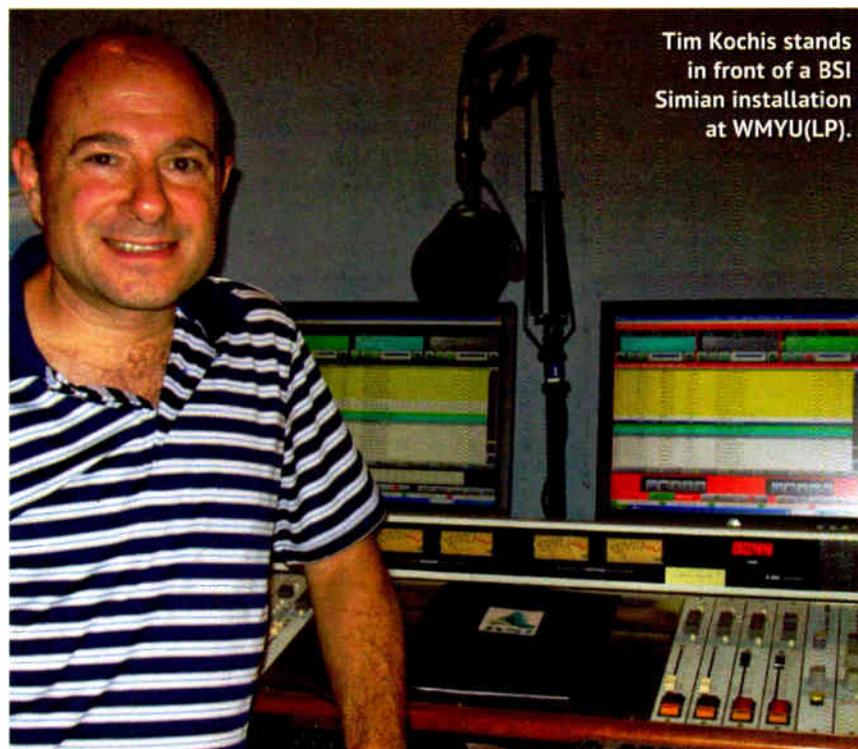
BY TIM KOCHIS
Engineer and President
Tim Joseph & Co.

COLETAH, TENN. — When you think about the equipment we have used at radio stations over the past many years, computers have become one of the most reliable. When it comes to the radio automation software, however, that could be a challenge.

I have used a number of automation systems, and none have been as reliable and feature-packed as BSI Simian Pro. BSI designed Simian as easy-to-use (and easy-to-learn). This approach designed Simian to be used for Webcast stations, small radio stations and all the way to a network operation.

COMPATIBILITY

I have had the opportunity to work with Simian on many levels, from small



Tim Kochis stands in front of a BSI Simian installation at WMYU(LP).

mom-and-pop stations to major-market stations including radio networks with 80+ affiliates, all using Simian Pro.

On the radio network level, I have Simian Pro in either live-assist or fully automated mode doing two background records while sending metadata to the Webcast, sensing network relay closures for news and sending relay closures through the satellite uplink system. Simian can handle the most arduous tasks with ease.

As with any computer, a properly maintained and up-to-date file system keeps everybody happy. In today's broadcast studio operation, automation is the center of the operation, a key element within the system ... without a good automation system your operation will be inefficient.

Operating and programming can be done directly through Simian's onboard tools or by radio music programming and commercial log software. Simian is compatible with many radio programming and commercial log software systems on the market. Again, versatility in real-world situations is important in the ever-changing broadcast environment.

I don't just talk about Simian — I actually have two Simian systems at my radio station and both systems work reliably, giving me walk-away time without worry. When clients ask me about the reliability, I let them know I program my station using Simian, and that the system itself has been running continu-

ously for more than three months.

Simian Pro is packed with features and programming options that are standard and practical. These include auto and live assist modes with a replace function for missing data and files, crash recovery that automatically reloads the last log and starts playing at the position in the log that it left off at, voice tracking, two record decks for live or background recording, hotkeys for the live performance, and configurable audio device pass-through volume mixing that works directly with our AudioScience card I/O.

Simian can back-time and flex-time audio to fit an exact period of time. For the webcasters, streaming metadata is easy with Simian. It will output song and title data directly to your streaming application via HTTP. Simian also has built-in metadata formats for popular streaming encoders — including Windows Media Encoder, Icecast, Shoutcast SimpleCast, Live365 and Optimod PC.

Another great addition, the Simian Gateway system allows users to log into Simian Pro utilizing a TCP/IP portal, giving you the ability to create and insert voice tracks remotely using Simian's voice track utility. The voice track editor can download intro and segue cuts that the Simian Gateway creates for the songs surrounding your voice track. Users can then carefully preview and set cross points for the voice track. The Simian remote clients are free; all that is required for them to connect to the studio is to purchase is the Gateway software.

OPERATION

The majority of the features found in Simian either matches or exceeds those of many more expensive systems on the market; those systems may not be as easy to use. I have built a number of radio stations, and work with my clients directly. If you have any knowledge of a computer system, you can operate Simian. I have learned this first-hand from some clients who have not spent much time behind a keyboard (let alone a radio station automation system), and with some basic training, they understand Simian within a short time.

Even though Simian can do complex operations, when programmed properly, it surprises a lot of my clients that they can walk away and let Simian run the whole operation reliably when needed.

From a cost standpoint, Simian is easy on the budget. Today, most of my clients want a system that can be amortized over a short time,

As for Simian technical support, BSI

(continued on page 23)

THIS WILL KEEP YOU
ON THE AIR



The ARC Plus Touch is designed front to back with one important mission... **Keeping you on the air.** From the intuitive touch screen to the new tablet-ready web page, from SmartPhone to dialup, you are never out of touch.

No time to install a new system? No problem. With Burk's new ARC Plus Touch and Plus-X Adapters there's no rewiring. **Just swap plugs and go.** The new adapters replace an ARC-16, GSC 3000, VRC 2500, VRC 2000, VRC 1000, TC-8, or even a Sine RFP-1, **in less than an hour.**

Easy install. No wiring changes. Less downtime.

SOLUTIONS YOU CAN USE.
EXPERIENCE YOU CAN TRUST.

BURK
TECHNOLOGY
www.burk.com/upgrade

Call today.
978-486-0084 x7200
www.burk.com/upgrade
upgrade@burk.com



TECHUPDATE

**DIGITAL JUKEBOX
DJB-II UPGRADES**

Recently, the Digital JukeBox DJB-II radio automation system was updated to operate on the latest Microsoft operating systems, with a new user feature set to provide more user operational efficiency, the company says.

The DJB-II product has new on-screen graphics, split workstation operations and dual monitor multi-tasking operation; overall, 25 new features. Since its debut at the 2013 NAB Show, more features have been added to the operational software, such as a new production wave editor, new Vox Phone Bit editor, new bidirectional on-air to PD/MD desktop active log editor, batch importing of TM format libraries, MP2 and WAV audio file Cart Chunk metadata recognition for import and export.

In addition to the upgraded DJB-II, also new from Digital JukeBox is Button Broadcaster Pro, a software product for volunteer-based radio

facilities. It provides a free-form style for live assist air studio talent; for automated segments, a built-in music scheduler is included. The product is aimed at Internet radio, noncommercial, Christian, college, university, LPFM, high school and indie stations.

The company says that Button Broadcaster Pro can be teamed with DJB-II for a solution where the combo gives daily log structure (timed log, EAS, legal ID, ads) and also "free-form" for volun-

teer jocks. According to the company, test projects showed station managers were pleased with operations while giving personnel unprecedented freedom to play "their own thing" (all in good taste, of course). This also allows the DJB-II audio library to remain admin protected while the Button Broadcaster Pro library is volunteer-managed.

For information, contact Digital JukeBox in Nevada at (702) 487-3336 ext. 1 for Sales, or visit www.digitaljukebox.com.



BSI

(continued from page 22)

has always been responsive whenever there's a question. The tech support team is knowledgeable and helpful solving all system issues, even when they're due to operator error.

I recommend purchasing a turn-key system by BSI; this makes sure you are getting a system optimized for broadcast use. This also gives you a tech support package for one year.

The system comes with other great BSI products that are useful tools in the studio — WaveCart virtual cart machine, Stinger clip player and Speedy CD ripper.

Simian comes in two flavors. Simian Pro is feature-packed while Simian lite is more for a Webcaster or very small radio station. Simian Gateway is sold separately as an optional add-on while the remote client for Simian is free.

From Internet radio to a broadcast radio station to a network, I have used Simian every time and Simian performance exceeds my expectations. If this makes my clients happy, that makes my job so much easier.

For information, contact Marie Summers at BSI in Oregon at (888) 274-8721 or visit www.bsiusa.com.

SURESTREAM



Like T1 - but cheaper.

(MUCH cheaper... AND more flexible, more readily available, more scalable and more efficient)



SAVE UP TO 90% ON COSTS

You can save up to 90% on the cost of your audio transport bills by replacing your synchronous or managed IP Links with the public internet. With DSL charges typically costing from 5-10% that of a synchronous link, the potential savings are massive and you can generate a return on your investment in under 6 months!



CONSISTENTLY HIGH QUALITY

SureStream enables you to maintain consistently high audio quality with no drop-outs, no jitter and a consistent delay.

It doesn't scale back your station's audio quality when there are problems on the link - it doesn't need to!



ROCK SOLID LINK RELIABILITY

SureStream offers you the same level of uptime and reliability as a "five nines" Telco service. You are protected not only from drop-outs and glitches but also from a complete loss of connection!

It also provides "Always-On Redundancy" for complete peace of mind.

With SureStream, the public internet finally constitutes a viable alternative to existing synchronous networks such as T1 and ISDN without any compromise to your station's sound.

ussales@aptcodecs.com
T: +1 305 249 3110
www.surestream.ws
www.aptcodecs.com



TECHUPDATES

RCS GOES MOBILE



RCS says its next generation of software applications focuses on mobile devices and tablet computing. With the mobile initiative, RCS says it puts the power of its programs in the hands of every user.

The new mobile platforms enhance the company's multi-station scheduling system, GSelector4 and the digital radio playout/automation system, Zetta.

RCS recently added Selector2Go to its mobile product line. This web-based mobile platform lets users schedule, work on logs and much more, from a smartphone or tablet.

RCS' Zetta2Go (shown) gives users hotkeys on a smartphone or a tablet, giving anyone with a device and an Internet connection a way to do a better show — from anywhere, the company says.

From programming to sales, to traffic to news to automation, RCS says it offers everything needed to build a radio station, a cluster or a network of stations.

For information, contact RCS in New York at (914) 428-4600 or visit www.rcsworks.com.

NETIA ADDS FEATURES IN 8.2

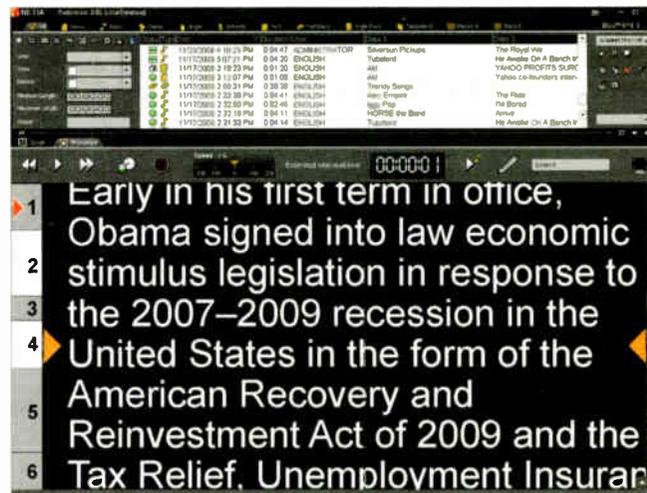
Netia unveiled version 8.2 of the Radio-Assist digital audio software suite at the IBC2013 show. The company says that this release of its flagship software features powerful enhancements.

Among them is the availability of the software suite's editing tools on iOS devices. Sharing the look and ergonomic principles characterizing the Snippet desktop interface, the new iPhone- and iPad-compatible iSnippet tool allows field reporters and other remote users to use Radio-Assist's audio editing capabilities — familiar from the desktop — on their portable devices.

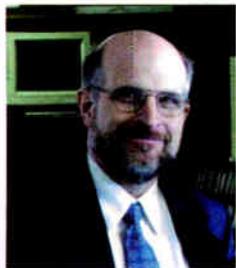
In a second enhancement to Radio-Assist, Netia has added a teleprompter module (shown) that gives presenters and journalists visual access to news scripts, which scroll continuously down the presenter's screen and are linked to the playout system in the studio. Customizable features such as text size, color selection, automatic speed control that adapts to reading speed and read length may be configured in user profiles that are tailored to presenter preferences.

Netia says tools such as the iSnippet and the teleprompter module demonstrate its commitment to supporting efficient, intuitive broadcast workflows.

For information, contact Netia in New Jersey at (888) 207-2480 or visit www.netia.com.



Early in his first term in office, Obama signed into law economic stimulus legislation in response to the 2007–2009 recession in the United States in the form of the American Recovery and Reinvestment Act of 2009 and the Tax Relief, Unemployment Insuran



"We've been utilizing Smarts automation since 1991 and now we are on our third generation. I'm still like a kid in a candy store with all your digital automation system can do."

- Joe Jindra, KNCK-AM & FM, Concordia, KS

"We run multiple pro and college games. We have closure on top of closure on top of closure. I walk away on a Friday, and I know when I come back on Monday, it will all have played perfectly."

- Kathy Lepak, KMFY FM & KOZY AM, Grand Rapids, MN



"John Schad and I have worked together for 25 years. Smarts has grown and kept up with the technologies as it was important to our size markets. We've gotten excellent service and support, and I appreciate that."

- Bud Walters, The Cromwell Group, Nashville, TN

Broadcasters trust us to get it right.



MARKETRON DEVELOPS NEW PAYMENT OPTIONS

Broadcast business software developer Marketron says that nontraditional revenue historically has been difficult to maintain and record via electronic invoices, due to archaic agency software, systematic change across the radio industry and today's workflow.

To help broadcasters avoid these difficulties and save time and money, Marketron is partnering with large agencies such as STRATA to provide compatibility for 4A+NTR invoices. Those invoices include



Marketron

complete NTR detail such as direct advertiser workflow and agency options available in multiple formats.

Through the Advertiser Portal, users can obtain a universal view of all invoices across

groups so agencies and direct advertisers may view invoices. The portal is self-managed by its users, and gives them access to account history, previous invoices and current balance on an on-demand basis.

Marketron has enhanced its Advertiser Portal and payment system with its newest service, PayNow, a paperless solution that accepts credit cards,

e-checks/ACH and GSA Smart Pay.

The company says that benefits of this system include reduced workload for collection efforts on sales staff and station resources, convenience for advertisers during the payment process and reduced days sales outstanding.

It adds that PayNow features a preferred partnership with Chase Paymentech that includes month-to-month contracts, complimentary statement analysis, no-hassle integration and setup and award-winning reporting and fraud tools. The free virtual terminal features recurring billing and profile management to store customer data.

For information, contact Marketron at (800) 476-7226 or visit www.marketron.com.

MUSIC 1 ADDS AUDITION MODULE

The Music 1 Windows-native music scheduling software has added an audition play to allow users to hear any song within Music 1.

The company says that Music 1 can schedule everything: including jingles, liners, links, voice tracks, long-form programs and automation system commands. The non-music scheduling functions are incorporated into M1. The traffic and billing module Traffecta is included.



Music 1 is networkable and portable. Music and program directors can install it on their laptops (no additional fee) and can take it with them on the road, do their scheduling from anywhere and then email or FTP the automation playlists back to the station.

A single install of M1 is capable of scheduling any number of stations, channels or streams from the one computer, the company says and it has built-in interfaces for most widely used automation systems.

Music 1 says it also sells and support Music 1 SE, a lower-cost scheduling software for Internet radio. SE is based on the source code of the full Version 7 with some scaled-down functionality; the company says this provides webcasters with an advanced and efficient scheduling tool that meets their needs at an affordable, buyout price.

SE is an option for broadcasters' HD channels or standalone webstreaming stations.

For information, contact Music 1 in Texas at (512) 392-2415 or visit www.music1.pro.

Can you afford to have this caller go off on your station?

What's the true cost of offensive, libelous and profane speech on your airwaves? Angry advertisers? Lost listeners? FCC Fines?



Program Delay Manager with **PD-Alert™** emails time-stamped audio every time the Dump button gets pressed, so you know what happened instantly. With simple web setup and control, plus delayed GPIO and serial data capability, we swear you won't find features and audio quality this good in other profanity delays!



It's about time

A Telos Alliance Company • www.25-Seven.com • (888) 257-2578

WIOE Likes Its Digilink-HD Experience

LPFM that teaches broadcast students needs a system that is easy to operate

USERREPORT

BY BRIAN WALSH
President/Manager
WIOE(FM)

WARSAW, IND. — I purchased my first Arrakis Systems Digilink automation system back in 1995.

I've installed other automation systems over the years, but I always remembered how reliable and user-friendly Digilink was, so in 2002 I decided that for the students broadcasting on WIOE(FM), Digilink Extreme was the way to go. In 2013 WIOE upgraded to Digilink-HD.

WIOE, Oldies 98.3FM is a nonprofit LPFM run by Blessed Beginnings Broadcasting of Warsaw, Ind. We work with the mass communications program of Warsaw Community Schools, so, as you can imagine, WIOE needs a system that is easy to learn, easy-to-operate and reliable.

FUN

The reliability and ease of Digilink-HD make broadcasting as much fun as the oldies music we play. When I learned of the Digilink-HD they were developing, I contacted Ben Palmer at Arrakis to learn more. The new system features remind me of other automation systems I worked with, but not as expensive.

Installation was simple. Transition from Extreme to DHD was easy since all of WIOE's files were in the correct Arrakis format already. The Digilink Extreme audio and control bridge was removed and the new replacement DHD audio and control bridge installed easily. It was a simple as unplugging the Molex



Arrakis Digilink-HD in WIOE's Studio A

connectors from one Arrakis bridge and plugging into another.

The first thing all of us at WIOE noticed was the sound — unbelievable audio quality. I have had staff and peers in the industry comment favorably about how the “new” Oldies 98.3FM, WIOE sounds.

WIOE has a large programming staff. DHD provides each member with their own customized “Hot Key” page. Everybody on air loves this new DHD feature. Our studio computer monitors are touchscreens and navigating Digilink-HD has proven simple and touchscreen-friendly.

DHD features a new program called DHD Tools. This can be operated on the main Digilink-HD automation computer

or on a separate computer inside another WIOE studio. DHD Tools is where the daily schedule is edited, production, including voice tracking is done and WIOE library maintenance performed. Before DHD Tools we had to all “share”

studio time to complete needed tasks. Now we can do everything from our office or another WIOE studio, networked together and not having to share studio time.

Remotes such as high school sports broadcasts are a breeze with Digilink-HD. The Game Player feature on Digilink-HD is improved over Extreme. Our high school student sports broadcasters learned the DHD Game Player quickly and without any mistakes on the air, where it counts.

Customer support with Arrakis has been outstanding. Support often consisted of a few emails between the Digilink-HD support team and me. Not even a phone call has been needed six months later.

As with any new automation system or equipment, the WIOE staff had to adjust with DHD. Staff issues are the small font in the Digilink-HD Library area and the removal of the software channel level audio faders. Ben tells me those soft faders will return soon in a software revision. Thank you, Ben!

But overall, I have to say that for the investment you can't go wrong with Digilink-HD. This is a powerful, feature-packed software and computer package for the money.

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

TECHUPDATE

BE AUDIOVAULT FLEX UPDATES TO 10.30

Broadcast Electronics' AudioVault Flex has been updated to version 10.30. With this update comes a significant new set of features, according to the company.

These include new Squeeze and Stretch controls to keep broadcasters on schedule. In addition there are new pitch controls allowing stations to change pitch non-destructively on single tracks or entire categories.

AV Flex comes with a new set of productions tools. Users familiar with AudioVault's AVRPS screen can now find these tools enhanced and available as a widget in the Flex interface and with a modern look and feel. New production tools also include Quick Prod Editor, for quickly modifying cuts before air, a new CD Ripper, Cart Builder, and an Inventory Editor that allows the user to modify any bit of metadata directly in the interface.

In addition, AV Flex has internationalized its user interfaces, adding immediate support for more languages and making it easier to support additional languages in the future.

A new version of AudioVault's AV Import utility allows for automated importing of audio from external sources on the Web, FTP and elsewhere.

Finally, BE says AV Flex provides a full-service customizable studio tool with new gadgets and color options.

For information, contact Broadcast Electronics in Illinois at (217) 224-9600 or visit www.bdcast.com.



STATION SERVICES

Find us on **FACEBOOK** for a steady stream of SALES TIPS, HOT LEADS, COOL IDEAS and CREATIVE RESOURCES to help YOU sell more advertising (and YOUR ADVERTISERS sell more stuff)!

**Sound Ideas
for Building BusinessSM**

Radio Features You Can Sell.
:30/:60 sec. - FREE DEMOS!



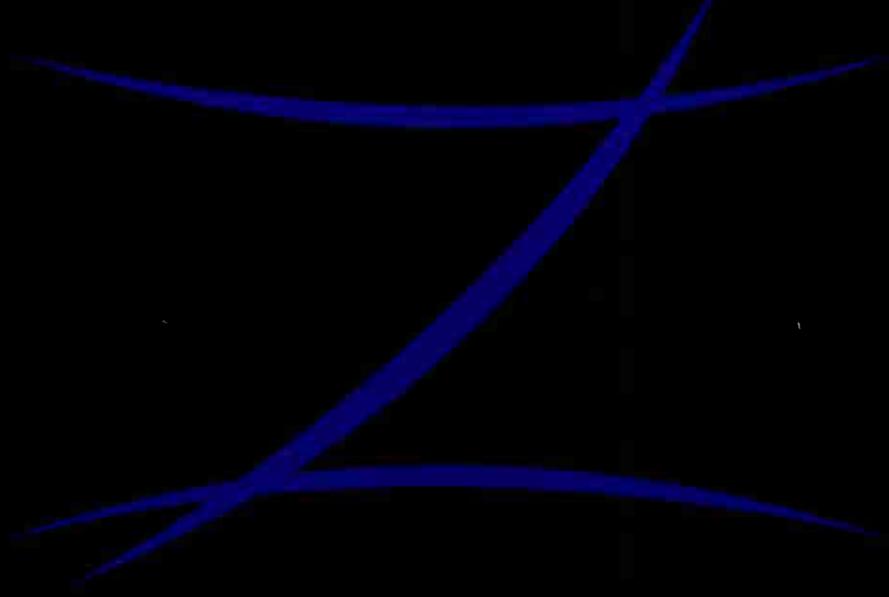
GraceBroadcast.com

**Sell Radio?
Join the crowd.**



RadioSalesCafe.com

ATTENTION PROVIDERS: Promote your services to Radio World's readers.
For information on affordable advertising call David
at 212-378-0400 ext. 511 or email dcarson@nbmedia.com.



Z E T T A®

Advanced Radio Playout

RELIABLE, INTUITIVE, FLEXIBLE

Zetta the newest automation/playout system from RCS designed for today's multi-tiered broadcasting demands. This is the complete solution for terrestrial or streaming radio stations. Designed with rugged durability and a sleek interface, Zetta feels totally familiar from the moment you see it.

RCS products share the same DNA, which means you get intelligent integration and support solutions 24 hours a day, 7 days a week, 365 days a year. Zetta works smoothly with GSelector – Music Scheduling, RCSnews – news production, and our traffic system, Aquira.

It was built by the world's largest broadcast software company, RCS - a trusted name by more than 10,000 radio stations worldwide.



TECHUPDATES

LATEST IDC STAR PRO AUDIO PROVIDES LOCALIZED AD INSERTION

According to International Datacasting, the second generation of the Star Pro Audio satellite receiver solution opens up new revenue-generating opportunities for radio networks with localized ad insertion. The new platform also enables time-shifting functionality, allowing broadcasters to play the right content at the desired time. Broadcasters can adjust for time zones and rapidly adapt to conflicting live programming schedules, the company says.



In addition to increasing ad revenues and improving flexibility, the Star Pro Audio Solution significantly lowers per-channel costs through shared hub support. Additionally, it uses up to 70 percent less bandwidth when compared to competitive solutions.

The Star Pro Audio Solution includes a copy split capability that allows operators to send select ads to specific regions or specific receivers. Stored audio files can be inserted into live or recorded programming. Cost savings are realized through shared hub support, which enables multiple radio networks to share one four-channel receiver instead of having each network deploy its own standalone, single-channel receiver. Additionally, the Star Pro Audio Solution requires just 120 kHz space segment for stereo, as opposed to 440 kHz for competitive systems, resulting in further cost savings.

For information, contact International Datacasting Corp. in Ontario at (613) 596-4120 or visit www.datacast.com.

DRS 2006 DEBUTS VERSION 4

DRS Systemtechnik has released Version 4 of its software.

The company says the DRS 2006 Software Package is a complete radio automation system that lets users turn a PC into a radio station without expensive hardware.

It says that there is no need to buy two or more sound cards or hardware mixers to get the mixing and production tools needed to create a professional radio program. The company says the system was developed by radio people for radio people; but because the automation software is economical and has only a few system requirements, it has also found use in nightclubs, restaurants, bars and supermarkets; and webcasters use the software to entertain audiences via streaming across the Internet.

For information, contact DRS Systemtechnik at www.radioautomation.com.



Control Room-7™

This control room goes with you!

Our 4th generation radio playout and automation system offers the most advanced technologies for creative and productive broadcasts.



Live assist, satellite or voice tracked automation, Control Room-7 has the features to gain market share and enhance your web presence.

Complete Remote Control from your notebook, tablet or smart phone allows you to work wherever you go as your listeners do.

Visit www.pristinesys.com for full details.



Pristine Systems Corporation
www.pristinesys.com 310-831-2234



TO SAY THIS AUDIO PROCESSOR MULTITASKS
 WOULD BE AN UNDERSTATEMENT



Capitol Gains Efficiency With Efficio

Radio and TV sales teams, multiple traffic systems, different locations united

USERREPORT

BY NIEL SOLLOD
 Director of Local and
 New Media Sales
 WRAZ(TV)
 Capitol Broadcasting Co.

RALEIGH, N.C. — Capitol Broadcasting Co. is a forward-thinking, technology-driven, locally-owned and operated television and radio broadcaster in North Carolina. CBC is well-respected in the industry as a technology leader, with many firsts and numerous national awards.

When it came to providing CBC's radio and TV sales teams with technology to manage accounts and maximize client relationships, we determined that Efficio Solutions would be the best fit because they, too, were an industry leader and well-respected for their technology and forward-thinking systems for media sales.

Efficio is a Web-based media sales solution utilizing a centralized dashboard and integrated sales modules. This centralization enables stations to manage advertising clients and all sales processes, from account management, CRM and budgeting to sales activity, yield management and collections.

Each business unit within CBC works collaboratively but independently of other divisions. We wanted a way to share information, but at the same time preserve autonomy. Adding to the complexity was our utilization of different traffic systems in our radio and TV stations, and a Web product that was sold by all the divisions. The goal was to help integrate sales analytics, provide salespeople with relevant data, and provide reporting up the chain for a global view of how we were doing with key accounts as a whole across all business units. I was on the committee to select the vendor for this task.

After doing our research, it became apparent to our team that there were few, if any, products that offered the ability to bring this data together in one centralized location and link our sales

teams with reports in one analytics tool. We interviewed several companies and ultimately Capitol Broadcasting decided to hire Efficio solutions. Efficio was tasked with bringing together everything in one database to help leverage our sales data to outperform the competition. With Efficio's Customer Relationship Management tool, we were able to use an all-in-one solution with our multiple traffic systems across multiple platforms.

Among its many useful features, Efficio's Corporate Rollup view allows senior management to see data from a top-down view. This saves time for managers, by eliminating the need to pull multiple reports. Efficio helps account executives be more effective, capturing their activities and tracking opportunities which gives them a desktop snapshot of their daily priorities. Via weekly one-on-one meetings, managers are able to provide better support to account executives, by going



Fox50's Local Sales Director Niel Sollod, right, conducts a one-on-one Efficio meeting with Account Executive Melissa Carney.

over their individual sales efforts in a guided fashion using Efficio as a platform for discussion and coaching. In turn, account executives are able to maximize their busy day by having all the pressing information in one place for the manager at all times. In the case of CBC, Efficio worked collaboratively with Colearn, a sales training firm, to

integrate the company's sales methodology so that the sales processes were uniform and recognizable for all users.

As CBC's needs evolved, Efficio provided software and a service, by making enhancements in the system which were tailored to changing business practices. For example, as opposed to manual importing of revenue data, Efficio was able to provide close-to-real-time auto upload synchronization with our different traffic systems at different stations. This provides more reliable information and serves to reduce wrong data from human error.

By utilizing Efficio across the company, Capitol Broadcasting has been able to find ways to collaborate internally that did not happen routinely before. For this one aspect alone, Efficio has made a profound impact on giving our sales teams a common platform to work together and at the same time maximize the individual potential of our business units, managers and account executives.

For information, contact **Chris Crawford, general sales manager, at Efficio Office Solutions at (877) 333-4264 ext. 2 or visit <http://efficiosolutions.com>.**

TECHUPDATE

ENCO RELEASES LISTGEN

ENCO Systems says a new tool in the DAD automation arsenal allows users more flexibility and control when creating daily playlists from music scheduling and/or traffic and billing file outputs.

As of ENCO's 13.0c software release, ListGen will be available to all new ENCO clients who purchase a DAD package; it is available as an upgrade for existing ENCO clients.

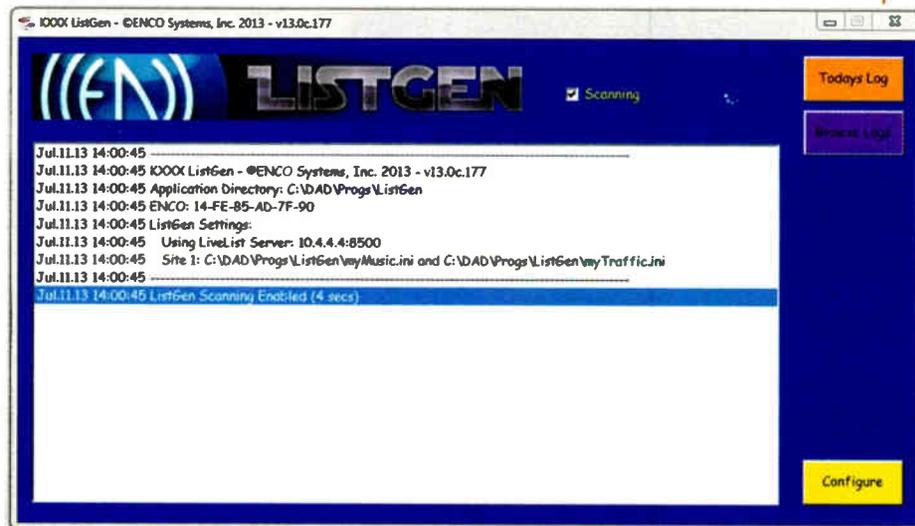
ListGen supports creating playlists from most music scheduling suites and/or traffic and billing suites, as long as the suite can output a flat text ASCII file, the company explains. The user chooses how they'd like the playlist creation workflow to operate at their facility, puts various log notes into their output files that are translated into DAD playlist elements and ListGen takes care of the rest. A station can import a music log days, weeks or months in advance, voice track within the log, make changes, then import traffic when it's ready. ListGen handles these tasks automatically with no operator intervention, inserting and merging the new content into the existing playlist.

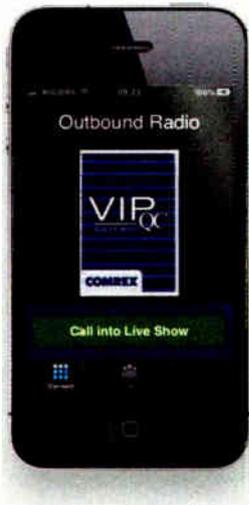
ListGen also works in combination with ENCO's LiveList platform, and this allows for changes to be made to a playlist in near real time even if it's loaded and in use in

an on-air studio. A user can re-export the day's music log and ListGen will scan that file, compare it to the original and change only the segments that have been updated and not touch the rest of the playlist. The same holds true for updated traffic and billing updates — a user re-exports the day's log and ListGen takes care of the rest.

Additional features include automatic email notifications with error reports when a playlist is created or updated, multistation support, integration with ENCO's Gateway file distribution system for multisite scheduling and collaboration with DAD to create a complete log of the day's playout activity for reconciliation purposes.

For information, contact **ENCO Systems in Michigan at (248) 827-4440 or visit www.enco.com.**





TO MAKE
<.... THIS SOUND LIKE THIS ...>



GET THIS



STAC VIP MAKES YOUR PHONES SOUND **AMAZING**

STAC VIP uses VoIP (Voice over IP) to manage *all* your phone calls for talk shows, interviews and contests. It handles calls from Skype™ as well as HD Voice-capable Smartphone apps.

To really get the full impact of what HD Voice can do for your call-in shows, you've got to hear STAC VIP. So...hear it in action right now: comrex.com/products/stacvip.html

STAC VIP
VoIP • POTS • HD VOICE • CALL MANAGEMENT SYSTEM

plugged into  Skype™

STAC VIP is Plugged Into Skype™

comrex.com

COMREX

19 Pine Road, Devens, MA 01434 USA Tel: 978-784-1776 • Fax: 978-784-1717 • Toll Free: 800-237-1776 • e-mail: info@comrex.com

TECHUPDATES**OMT'S iMEDIATOUCH WORKS WITH MUSICMASTER NEXUS SERVER**

OMT Technologies says that iMediaTouch's integration to the MusicMaster Nexus Server provides radio stations with enhanced workflow automation for music scheduling and content management.

The interface features real-time interactivity between MusicMaster and iMediaTouch content

management and scheduling systems. Music scheduling changes made in MusicMaster are updated automatically in the current automation schedule; the interface also provides talent the ability to choose a perfect song match to the music rules created in MusicMaster, OMT says. Schedule reconciliation is automatic and in real-time.

Additionally, the interface provides the ability to add tracks into iMediaTouch and automatically update these track additions in MusicMaster. Tracks can also be added into MusicMaster and a production order with metadata is automatically created in the iMediaTouch production system. The company says this interface is an important part of its vision for an integrated and interactive broadcast infrastructure.

For information, contact OMT Technologies in Manitoba at (888) 665-0501 or visit www.iMediaTouch.com.

WIDEORBIT DEBUTS FEATURES FOR INTERNET ORDERS, MOBILE AND AUTOMATION

Broadcast automation and business software developer WideOrbit says that its WO Traffic v6.8 sales, traffic and billing platform (right) has new features.

It has added mobile device support with the WO View Order Entry app for iPad and Android. This app allows sales execs to book new orders or submit order changes quickly from a mobile tablet device.

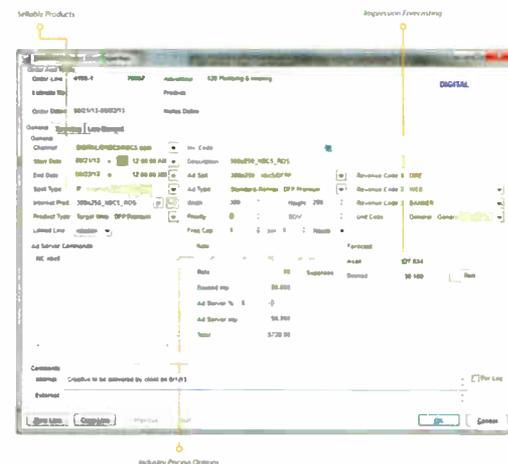
There's also a new Internet Orders Module that allows spot and digital advertising to be managed on a single system. A two-way integration with Google's DFP platform allows Internet campaigns in WO Traffic to flow to Google's DFP Premium Internet ad server platforms, and the actual impression delivery from DFP to flow back to WO Traffic for detailed invoicing of Internet campaigns.

The latest version of WO Automation for Radio, v6.8, adds several features. Audio files can be normalized automatically with one of five algorithms during import or record; the cue-in and EOM markers can automatically be set when a new audio file is imported or recorded; voice tracks can be manually inserted into the log and the cart number is generated automatically.

In addition enhancements to the waveform editor include the ability to set begin and segue marker or make a new file from a selection of a waveform. A separate traffic log can be merged with a sports log to allow unique commercials to run during sporting events.

For the WO Mobile mobile campaign solution for sending SMS alerts, MMS videos, sweepstakes, mobile coupons has added an integration of metric-driven SMS messages with the and WO Traffic core billing system. It also now allows a station's clients to sign up for weather alerts and closing alerts (schools, businesses, etc.) that may be sponsored by advertisers, providing new opportunities for advertisers and a new revenue stream for the station, the company says.

For information, contact WideOrbit in North Carolina at (828) 252-8891 or visit www.wideorbit.com.





**JACOB JAVITS CENTER
NEW YORK CITY**

CONFERENCE
Oct. 17 - 20, 2013

EXHIBITION
Oct. 18 - 20, 2013

Come to AES135 in New York City
as we celebrate our 65th Anniversary
and once again bring the biggest
names in audio together for
THE Professional Audio event
of the year. From Recording
and Networked Audio, to
Broadcast & Streaming, Project
Studio Expo, Sound for Picture,
Live Sound, Game Audio,
Acoustics and more, the **Audio
Engineering Society** is
what makes the latest
innovations come
alive, and where the
next generation of
technology is launched.

If it's about audio, it's at AES!

For more information and to sign up for your
FREE Exhibitor Plus Registration, visit our website at:
<http://www.aesconvention.com/>


NEWSBOSS PLANS TWITTER CAPABILITY

NewsBoss is a newsroom system designed specifically for radio. The company says that specialized tools for newsgathering, content creation, newscast management and on-air presentation enable the efficient and accurate delivery of the highest quality radio news content possible.

It adds that strengths of NewsBoss are its extensive features and flexible configuration, enabling it to be customized to the individual workflows of any type, including small, large, commercial and public broadcasters.

The NewsBoss Prompter on-air presentation application is designed for live newscasts.

NewsBoss is under constant development to meet the changing and challenging needs of radio news operations. Recently added features include: automatic archiving of linked audio clips, sophisticated dynamic level control adjustment in the single track audio editor, automatic drag-and-drop cut creation from the audio editor to a script, and a new "scratchpad" window, according to the company.

Currently under development and expected before the end of the year is an integrated Twitter capability, which will eliminate the need for third-party Twitter tools. NewsBoss users will have the inbuilt capabilities for the subscribing, aggregating, managing and searching of Tweets. Tweets also can be originated and retweeted totally within NewsBoss.

For information, contact NewsBoss at sales@newsboss.com or visit www.newsboss.com.



The Real HoJo Likes RadioTraffic.com

He gives you the things he thinks you need to know about RadioTraffic.com

USERREPORT

BY HOWARD JOHNSON
Group Manager
The Starcom Group

RAMSEY, MINN. — They laughed when I said I loved our radio traffic system from Radiotrafic.com.

I hate to admit it, but I was around in those ancient days when dialing up on your phone to AOL meant waiting forever just to check an email. They say that any technology, sufficiently advanced, appears to be indistinguishable from magic. Everybody tells you they've got the latest and greatest ... but try RadioTraffic.com side-by-side with what you're using now, and you'll see.

EASY

Unless you're living it every day, like we are, with multiple stations in a wide range of stations from here to Africa, this could seem boring.

Face it: The old, bloated systems were reliable and dependable (also, complicated and slow), but were never designed for instant gratification in the 24/7 multitasking world we live in. It's the difference between driving a Yugo or sitting behind the wheel of a Ferrari.

RadioTraffic.com makes us money, saves us time, improves our cash flow and upgrades our ROI.



Howard Johnson works with RadioTraffic.com.

Here are the some reasons I think you should consider making the switch today. But for us, this was a no-brainer.

First, it's painless. I understand your radio traffic director has been doing it the same old way for 50 years, and you're nervous about teaching him/her new tricks. However, the switchover from what you're currently using is painless and fast. Don't let fear be a barrier to making the right decision to ditch your antiquated system.

Yes, I know it worked fine in 1997,

but are you really up to speed? In a world where the competition stays up late at night thinking about how to take your money, can you afford to stand still?

It's costing you money every day you don't improve (in hours for your traffic director, and actionable information to run your company). Your traffic director will thank you when it's done.

This system is so easy even your salespeople can use it. And it answers fast, with spot-on reporting, instant

reports, everything at your fingertips. Anytime, anywhere and quickly.

They have fast and responsive customer service/tech support. Quick to connect and quick with answers.

I see RadioTraffic.com touts their win in 13 of 17 categories by radio traffic directors around the world. I can tell you from personal experience, their people know, not just the product, but the process of performing the traffic position. Some of the support people are former radio traffic directors. These are experienced broadcast pros who respond to your input.

Finally, it's bulletproof. It's reliable. It's dependable. You gain peace of mind, improve your cash flow, get better ROI and sleep better at night.

One of the brains behind RadioTraffic.com is Dave Scott — the guy who helped us move from carts and CDs to touchscreen music on hard drive and voice-tracking a four-hour show in 20 minutes, which aired on his Scott Studios automation. He's a known entity who's proven he knows how to save you time, money and effort.

We've all bought his stuff in the past, and we know it works. RadioTraffic.com's tech support people are always getting better and the product updates are automatic online, sometimes daily, requiring no interaction from you.

Everybody else is discovering the cloud, but RadioTraffic.com's been living there for years. Try it. You'll like it.

For information, contact **Dave Scott at RadioTraffic.com in Texas** at (866) 500-0500 or visit www.radiotrafic.com.

PRODUCTS & SERVICES SHOWCASE



WhisperRoom INC.
SOUND ISOLATION ENCLOSURES

Booth 3231

**Recording
Mixing
Mastering
Broadcasting
Voiceover
ADR
Foley
and much more!**



WhisperRoom, Inc.
(423) 585-5827 • Fax (423) 585-5831
www.whisperroom.com




WORLDWIDE

LPFM

HEADQUARTERS



Featuring the Highest Quality / Lowest Cost
FCC Certified LPFM TRANSMITTERS on the Planet!



LPFM Planet is brought to you by the good people at:

PROGRESSIVE CONCEPTS

305 S. BARTLETT RD., STREAMWOOD, IL 60107
EMAIL: sales@progressive-concepts.com
PHONE: 630/736-9822 FAX: 630/736-0353

www.lpfmplanet.com

OtsAV Awakens SomaFM

Multichannel Internet broadcaster benefits from extreme customization

USERREPORT

BY RUSTY HODGE
General Manager
SomaFM

SAN FRANCISCO — SomaFM is a multichannel Internet broadcaster, and we use OtsAV for most of our channels. A few of our music directors are Mac OSX-based and use a Mac-based playout system, but our most popular channels and the majority of our listeners are listening to OtsAV-powered broadcasts.

We've developed a workflow where we choose music from all the incoming tracks from either iTunes or Winamp, and build playlists of music there for the various music categories (e.g. high/low rotation, oldies, hot and new, etc.). Perl scripts take these playlists of MP3 files, and using the ID3v2 or v1 tags, will rename the files using the Ots file name encoding format to load the metadata for the songs, copying them from the local workstation to the OtsAV playout system running in our leased datacenter space.

SCHEDULING

These basic categories are then used within the OtsAV scheduler, which is pretty amazing. This is one of the killer features of Ots. It's more of a scheduling tool set than a GUI-based scheduler, but because of this it is extremely flexible. It's a simple programming language, but is versatile. You can fit playlists into a specific time-block, and Ots is smart enough to recursively go through your music database and based on your rules, find a way to assemble a playlist that will perfectly fit a block of time.

Alternatively, you can run it in a mode where it's not time-based, but rather based on iterations of groups of songs and other audio assets. For some

of our channels that don't run an hourly clock, we use this mode. I like that OtsAV doesn't "sound" like any of the more popular broadcast schedulers. I'm not sure what it is, but I attribute it to the flexibility of the scheduling tool and the great-sounding segues.

The other thing we love about OtsAV is the overall sound. Out of the box with no customization it sounds better than most other automation/playout systems. The process for auto-generating segue data is great and only rarely needs manual intervention (typically only when using tracks that are from continuous-mix CDs does one have to manually adjust the segues).

One "secret" of OtsAV is that it can be run easily over Remote Desktop. This works out great for remote broadcasts where we can control the system from a laptop from anywhere. In fact, many of our DJs/channel directors run their entire broadcasts remotely by connecting their laptops to our Ots systems

living in a datacenter in downtown San Francisco.

For doing Internet-only or terrestrial side channels, you can actual-

ly run OtsAV playout and the stream encoding software on a single box. The hardware setup we have standardized on is a Supermicro 5015A-EHF-D525 base system with 2 GB RAM, running Windows XP or Windows 7, an Orban 1101e audio processor board, Orban's OptiCodec-1010 stream encoding software (although you can optionally use the Shoutcast stream encoder). The playout, processing and encoding run on a single machine and the CPU load is rarely over 25 percent. The Supermicro systems are also very power efficient

which can add up over time in power savings.

If you're on a budget and can't afford a \$2,000 Orban audio processor board and encoder, you can use the built-in OtsAV audio processing system, which is surprisingly good. The wideband AGC excels in the fact that the attack and release times can be set to really long times (over 100 seconds!). I've yet to run across an AGC — hardware or software — that can be that set to those slow of times. It's really brilliant at gain riding.

On some of our channels we run just the Ots internal processor with really slow attack and release on the AGC and just a little bit of compression; mostly to correct for the occasional audio that changes too fast for the AGC to react to.

It also has a graphic EQ though we don't often use it. However, in the rare case it's super handy to have it there.

There are a lot of features of OtsAV we don't use (such as the virtual "scratching," the video features), but it's nice to know that the system has that versatility.

OtsAV offers a free trial for download at its website.

For information, contact OtsAV at www.otslabs.com/email or visit www.otsav.com.



TECHUPDATE

PRISTINE KEEPS CONTROL ROOM-7 CURRENT

Pristine Systems says its Control Room-7 automation system takes advantage of advancements in multicore computer processing, the Internet and modern operating systems.

The company describes Control Room-7 as not only feature-rich, but also robust, fault-tolerant and easy to use.

For music on hard drive, the system promises flexibility in a live assist environment as well as walk-away capability at any time, Pristine says.

Features include local and remote voice tracking, time delay newscast insertion, automatic time and tempera-

ture announcement. There are 42 hotkey players with multiple groups, current temperature and conditions display, quick copy Card Viewer, continuous "Now Playing" website and RDS text.

HD Radio and streaming server updates, off-air alerts can be delivered via text messaging and email. Six simultaneous players and two simultaneous recorders ensure the system is capable and easy to operate. Popular music schedulers and traffic systems are supported.

Satellite automation has schedulable 24 liner decks,

multiple audio switchers, TTL, RS-232 and TCP/IP device control, time delay satellite programs and advanced time-scaling so spot sets fit the amount of time allocated by your networks.

Remote control can be had via the Internet with desktop or notebook computers, iPhones, iPads, Androids and most other smartphones. That means live sporting event and remote broadcasts can be handled from the field with no operator on duty at the station.

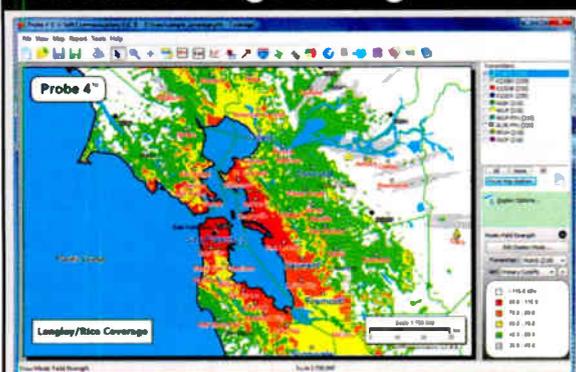
For information, contact Pristine Systems in California at (310) 831-2234 or visit www.pristinesys.com.



ABOUT BUYER'S GUIDE

Radio World publishes User Reports on products in various equipment classes throughout the year to help potential buyers understand why colleagues chose the equipment they did. A User Report is an unpaid testimonial by a user who has already purchased the gear. A Radio World Product Evaluation, by contrast, is a freelance article by a paid reviewer who typically receives a demo loaner. Do you have a story to tell? Write to bmoss@nbmedia.com.

Broadcast Engineering Software



- Create stunning "real-world" coverage maps, interference studies, and population reports with Probe 4™
- Find STL broadcast auxiliary and Part 101 microwave frequencies and generate PCN letters with Microwave Pro™
- AM Pro 2™, used daily by FCC engineers, performs skywave and groundwave allocation studies and AM coverage mapping.
- Map FM stations and discover upgrade possibilities using FCC minimum separations and contour-to-contour methods with FMCommander™



www.V-Soft.com

(800) 743-3684

ACOUSTICS

Acoustics First
-SOUND AND NOISE CONTROL MATERIALS-
Toll-Free Number: **888-765-2900**
www.AcousticsFirst.com

ANTENNAS

VAM LOOPS

FOR EAS RECEIVERS
FEMA RECOMMENDED

www.PixelSatRadio.com
(303) 526-1965

AUDIO PROCESSING (INCLUDES ON-AIR)

WANT TO BUY

Teletronix LA-2A's, UREI LA-3A's & LA-4's, Fairchild 660's & 670's, any Pultec EQ's & any other old tube compressor/limiters, call after 3PM CST - 214 738-7873 or sixtiesradio@yahoo.com.

AUTOMATION EQUIPMENT

WANT TO SELL

It's free and it has been expanded. The only cost is to keep us informed as to how the system is performing and let us know how you are using it. DIY-DJ, is a Linux based radio automation system and now sports a record scheduler (DIY-DJ-RECORDER) which

MISCELLANEOUS

ROTRON BLOWERS AND PLATE BLOCKERS, new & rebuilt for Elcom, Harris, CCA, CSI, McMartin, Goodrich Ent. 11435 Manderson St. Omaha, NE 68164 402-493-1886 Email: CGoodrich@conl.com

WANT TO SELL

Radio broadcasts of Major League Baseball, NFL, and some college football games that are on cassette tapes, approx 100 to 125 games, time period of entire collection os from the 1950's - 1970's, BO. Must purchase entire collection. Contact Ron, 925-284-5428 or ronwtamm@yahoo.com

WANT TO BUY

Collector wants to buy: old vintage pro gears, compressor/limiter, microphone, mixing consoles, amplifiers, mic preamps, speakers, turntables, EQ working or not, working transformers (UTC Western Electric, Fairchild, Western Electric, Langevin, RCA, Gates, Urei, Altec, Pultec, Collins. Cash - pick up 773-339-9035 or ilg821@aol.com.

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

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

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

Looking for a broadcast excerpt of a San Francisco Giant's taped off of KSFO radio from 1959, interviews with Willie Mays, Dusty Rhodes & some play by play excerpts, also features a homerun by Willie Mays and Felipe Alou stealing second base, running time is 18:02, also looking for SF Giants games and/or highlights from 1958-1978 also taped off KSFO Radio. Ron, 925-284-5428 or ronwtamm@yahoo.com.

Looking for KFRC signoff radio broadcast from 1930

**SPACE IS
AVAILABLE!**

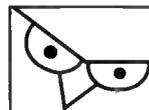
WANT TO SELL

1934 RCA 77A double ribbon microphone, originally used by Arthur Godfrey at WFBR Baltimore. 100% perfect condition. Contact Bill Cook, 719-684-6010.

WANT TO BUY

RCA 77-DX's & 44-BX's, any other RCA ribbon mics, on-air lights, call after 3PM CST, 214 738-7873 or sixtiesradio@yahoo.com.

CONSULTANTS



OWL ENGINEERING, INC.

Consulting Communications Engineers
5844 Hamline Ave. N., Shoreview, MN 55126

651-784-7445

- AM/FM/NCE Applications
- Allocation and Upgrade Studies
- Pre-Purchase Inspections
- ANSI and NRSC Measurements
- Tower Detuning
- Intermodulation Studies
- Radiation Hazard Evaluation and Measurements

• AM Directional Array, Design, Tuning and Proof using Method of Moments

Fax (651) 784-7541

E-mail: info@owleng.com

"Member AFCCE"

**Broadcast
Equipment
Exchange**
For more
information, ask
David at 212-378-0400 x511
or dcarson@nbmedia.com
RADIOWORLD

GRAHAM BROCK, INC.
BROADCAST TECHNICAL CONSULTANTS
Full Service From Allocation to
Operation AM/FM/ALX Services.
Field Work, Antenna and
Facilities Design
Over 45 years engineering
and consulting experience
912-638-8028
202-393-5133
www.grahambrock.com

**K&A
ENGINEERING**
Need a Low Power
FM License?
352-332-3157 Ext 4
kesslerandgehman.com

**EVANS
ENGINEERING
SOLUTIONS**
Full-Service Broadcast Engineers
FM Translators & LPFM Startups
Upgrade & Relocation Studies
Microwave Planning & Licensing
On-Site Operation Maintenance
(262) 518-0002
ben@evansengsolutions.com
Over 35 Years Experience - Member AFCCE

DISTRIBUTOR DIRECTORY

The following distributors serving the broadcast industry would be glad to help you with any of your requirements.

**CORNELL-DUBILIER
MICA CAPACITORS**

FROM STOCK

**JENNINGS VACUUM
CAPACITORS**

FROM STOCK

**HIGH ENERGY CERAMIC
CAPACITORS**

SURCOM ASSOCIATES

5674 El Camino Real, Suite K
Carlsbad, California 92008
(760) 438-4420 Fax: (760) 438-4759
e-mail: link@surcom.com web: www.surcom.com

RECEIVERS/ TRANSCIVERS

WANT TO SELL

American Made SCA
Decoders, 417-881-1846.

RECORDING & PLAYBACK HARDWARE

WANT TO BUY

Large or small collections of 16" transcriptions or 12" transcriptions, not commercial LPs. Bill Cook, 719-684-6010.

Schnader telecriptions 16 mm musical films produced in the early 50 s. Bill Cook, 719-684-6010.

Standard Short-tune series. Bill Cook, 719-684-6010.

STATIONS

WANT TO SELL

Radio Station. WV. Small Market. Group deal. Active or inactive. \$15,000 minimum. (478) 741-1710.

TAX DEDUCTIBLE EQUIPMENT

Donations Needed: All Volunteer, Non-profit Low Power community radios stations need Equipment. Will

offer tax deduction letter, You determine donation value, We will pay shipping. Equipment shared between three Wisconsin stations. Looking for Mics, Mixers, field equipment, etc. You name it. Email: Dan@WIECradio.org.

TRANSMITTERS/ EXCITERS/TRANSLATORS

WANT TO SELL

CCA AM 10,000 D - Call John KQSS 928-595-0263 between 10 & 6 PM Pacific Time.

Buying Or Selling
Used
Equipment?

You're in the right place!

RADIOWORLD

Broadcast Equipment Exchange



Se Habla Español

Rebuilt Power Tubes 1/2 the cost of New!

ECONCO

Se Habla Español

Tel: 800-532-6626 Web: www.econco.com
 Intl +1-530-662-7553 Fax: +1-530-666-7760



TRANSMITTERS/EXCITERS/TRANSLATORS

TRANSCOM CORPORATION
Serving the Broadcast Industry Since 1978
Transmitters and Broadcast Equipment for Radio & Television

Used FM Transmitters

100 W	2008	BE FM100C
250 W	2006	Crown FM250T
500 W	2000	BE FM 500C
3.5 KW	2000	Harris Z3,5CD
5 KW	1995	Harris HT5CD
5 KW	1998	Harris Z5CD w/2XFlexstars
5 KW	2006	Harris Z5CD, solid-state, unused
7 KW	2005	Harris Z16HD+
10 KW	1991	Harris HT10
10 KW	1993	Harris PT10CD
25 KW	1995	Harris HT25FM
30 KW	1988	Harris FM30K
35 KW		BE FM35A/T, upgraded in 2001*

*Over \$35,000.00 spent to convert to "T" in 2001

Used AM Transmitters

Please see our website for a current listing

Exciters & Miscellaneous Equipment

Phasemaster T12,000
 New Phase Technologies PT330D, solid state 3 phase converter
 BE FC30, SCA Generator
 Bird Model 8936, 10 kW air-cooled RF Load
 Sola Constant Voltage Transformer #23-23-230-8

Please visit our website,
www.fmamtv.com, for additional listings.



HARRIS nautel

CROWN BROADCAST

TV Transmitters- Analog and Digital
 Used FLO TV Transmitters**Axcera
 Rohde & SchwarzHarris Maxiva

New TV Transmitters- Analog and Digital
 OMB, Rohde & Schwarz and Technologic
 VHF and UHF TV Antennas
 (10 W to 10 KW) TV STL

800-441-8454 • 215-938-7304 • FAX: +1-215-938-7361

www.fmamtv.com • E-mail: transcom@fmamtv.com
 RETUNING & TESTING AVAILABLE • CALL US FOR A QUOTE!

TUBES



ISO 9001 Certified
The Choice of Successful Broadcasters Since 1934

NEW POWER TUBES

Triodes
 Tetrodes
 Pentodes

NEW SOCKETS & REPLACEMENT PARTS

Worldwide Availability

Made in U.S.A.

CALL 800-414-8823
 Int'l (650) 592-1221
 Fax (650) 592-9988

Visit our Web Site at
www.eimac.com



TUBES



EIMAC • TAYLOR • SVETLANA

New & Rebuilt Tubes - Same Day Shipping

Motorola • Toshiba • SGS • Thomson & Mitsubishi Semiconductors

800-737-2787 760-744-0700

rfp@rfparts.com www.rfparts.com

FOR THE BEST PRICE
 & 24 Hr service on transmitting tubes & sockets/parts, new & rebuilt call Goodrich Ent. at **402-493-1886** day or night,
www.goodrichenterprises.com.

Buying used equipment?
 Selling used equipment?

YOU'RE IN THE RIGHT PLACE!

SPACE IS AVAILABLE!

RADIOWORLD
Equipment Exchange

POSITIONS WANTED

Radio lover! Talkative/creative entertainer seeking to secure employment on-air/behind the scenes support positions within the programming/sports departments of a broadcasting firm. Chase, 254-313-2153 or clarencechase239@yahoo.com.

Relatable with great voice/character abilities. Strong Graphic Arts and IT talents. Very Social Media savvy, visually creative writer, animation plus musician. Troy, 214-315-2706 or tlhill1974@gmail.com.

Creative Broadcaster/VO with passionate soul who loves to uplift, edify and invoke positive change. Versatile communicator, outspoken, influential and results driven. Jennifer, 817-210-2798 or jsimmons1121@yahoo.com.

Extremely motivated and hard-working individual, with strong communication skills, dedicated to achieving success. Entertaining, outgoing, hypnotic personality, would add a unique style to your team. Nate, 405-819-8766 or NLagear@gmail.com.

EMPLOYMENT

HELP WANTED

Sales. WV. Small market. Exceptional commission. (478) 741-1710.

POSITIONS WANTED

Are you a small market station needing a good nuts & bolts engineer in the Los Angeles area? I will make your station shine! CET, fully FCC Licensed. Available for Full/Part-time/Contract work. Available immediately. Mitchell Rakoff, 909-446-6820, mitchellrakoff@yahoo.com.

Experienced radio station manager seeks new management opportunity. More than 39 years experience in radio. I can do almost anything given the change. Willing to relocate. Family-friendly format(s) preferred. Please send your job opening details to: radiogm@hotmail.com.

Extremely knowledgeable and articulate racing writer/talk show host Adam Amick is available for shows, correspondent, features, etc. Check out www.bleacherreport.com for samples. Call 214-384-5812 or email: adam@rubbinsracingshow.com.

Dreams Big! An intellectual, professional, creative, enthusiastic and passionate broadcaster with experience. On-air/Boards/Promotions. Responsible, dedicated with goal to take ideas, make better. Michael, 801-592-8659 or michael.olsen@gmail.com.

Great conversationalist/broadcaster good on-air prep. Friendly and easy-going, with strong understanding DRS, and Adobe software plus social media savvy, and love of music. Katrina, 219-781-0296 or Katrina.underhill@live.com.

Knowledgeable Sports talk talent with great personality and writing ability. Friendly and easy to get along with, focused, determined and fulfilled. Corey, 817-733-3366 or curibe2112@aol.com.

On-air radio personality specializing in sports and music. Hard working individual, with good technical skills, prep and running the board. Jordan, 970-241-6084 or abs-jordan7556@hotmail.com.

Positive reach/community oriented broadcaster. Focused on environment and education. Budget contentions, and productive - high morals. Seeks to be 100% and beyond. Bryan, 817-738-8475 or bryan76107@yahoo.com.

Problem solver/management eye, driven, and unwilling to fail. Honest, multifaceted/utility player who Gives 100% to the employer, get the job done guy! Andrew, 469-245-8917 or chefday01@yahoo.com.

Production/Copywriting/On-air/Mobile DJ skills plus Sports/Music arrangements. Listener Focused/relatable. Strong communication capacity. Resilient, organized and multi-tasked. Extensive Leadership/Management. LaTressa, 817-718-8213 or latressa.gowans@yahoo.com.

Why LPFM Is Good for Radio

A few reasons to celebrate as FCC filing window draws near

COMMENTARY

BY SANJAY JOLLY

This October, just a few days away, the FCC will open a filing window for non-commercial, low-power FM stations that could result in an unprecedented expansion of community radio. Since LPFM reemerged more than a decade ago, some 800 low-power FM stations have sprung up across the country, and that number could double or triple over the next few years.



Sanjay Jolly at the Allied Media Conference in Detroit in June.

LPFM is good for radio. The opportunities that it presents, especially now that restrictions keeping LPFM out of large and medium cities have been lifted, should inspire radio professionals and enthusiasts to actively support its expansion.

HYPER-LOCAL

Since 1996, consolidation has transformed the radio industry. Commercial conglomerates have replaced local programming with a few formats that are identical from New York to Wichita. While current radio formats have their

strengths, the sense of local identity and culture has largely been lost.

LPFM returns hyper-local radio to the airwaves. In a rebuke to the overwhelming effect of consolidation in FM, LPFM stations are licensed only to local non-profit organizations, and each group may apply for only one license. With a small transmitting area and relatively low barriers to startup, LPFM is a way to return the power of radio back to ordinary people. It is radio by the community and for the community.

Consider KOCZ(LP) in the Louisiana city of Opelousas.

Opelousas is home to Zydeco music, a Cajun-Creole tradition beloved in southwest Louisiana for centuries. Despite being well-loved and central to Opelousas's identity, Zydeco was absent from the city's airwaves for years. Then, in 2003, a local group started KOCZ(LP), playing Zydeco along with local news, jazz, R&B and Sunday gospel.

Ten years later, the other stations in Opelousas haven taken a cue from KOCZ, and the region's musical heritage is kept alive through radio.

The low cost and relatively sim-

ple technical requirements mean that LPFM brings radio to people who could otherwise never get involved, including churches, youth, local governments,



Prometheus's Pete Tridish, far left, working during a barn-raising in Petén, Guatemala, in 2004.

civic organizations, arts and culture advocates, and others. And by lowering financial barriers and establishing ownership limits, LPFM encourages the participation of women and people of color, both of whom have been historically shut out of media ownership.

To meet the needs of rapidly changing populations, LPFM stations often offer programming in Spanish and other languages not served by other local stations. Bringing new voices on the air is not just good for communities, it's good for radio and its relevance as a medium.

LPFM stations may also bring new talent to the radio industry in general. As many stations are staffed primarily

by volunteers, LPFM stations serve as training grounds for aspiring deejays, producers and engineers, laying a valuable groundwork for the future of radio leadership.

Finally, LPFM expansion makes *(continued on page 38)*

ADVERTISER INDEX

This listing is provided for the convenience of our readers. Radio World assumes no liability for inaccuracy.

PAGE	ADVERTISER	WEB SITE/URL
25	25-Seven Systems	www.25-seven.com
14	AM Ground Systems Co.	www.amgroundsystems.com
23	APT Worldcast Systems	www.aptcodes.com
19	Arrakis Systems Inc.	www.arrakis-systems.com
1, 11	Axia - The Telos Alliance	www.axiaaudio.com
39	BSI	www.bsiusa.com
3	BSW	www.bswusa.com
22	Burk Technology	www.burk.com
7, 31	Comrex Corporation	www.comrex.com
5	DaySequera/ATI	www.daysequerra.com
18	Deva Broadcast Ltd	www.devabroadcast.com
10	ENCO	www.enco.com
26	Grace Broadcast Sales	www.gracebroadcast.com
37	Heil Sound, Ltd.	www.heilsound.com
13	Inovonics Inc	www.inovonicsbroadcast.com
12	Lightner Electronics	www.lightnerelectronics.com
8, 30	Nautel Ltd.	www.nautel.com
29	Omnia - The Telos Alliance	www.omniaaudio.com
4	Power Gold	www.powergold.com
28	Pristine Systems	www.pristinesys.com
33	Progressive Concepts	www.progressive-concepts.com
16	RadioTraffic	www.radiotraffic.com
27	RCS	www.rcsworks.com
15	SCMS	www.scmsinc.com
24	Smarts Broadcast Systems	www.smartsbroadcast.com
17	Telos - The Telos Alliance	www.telos-systems.com
9	Tieline Technology	www.tieline.com
2, 20-21, 40	Wheatstone Corporation	www.wheatstone.com
33	Whisper Room, Inc.	www.whisperroom.com

RADIOWORLD
The News Source for Radio Managers and Engineers

Our readers have something to say:

“My favorite thing about RW is John Bisset's Workbench. That's the first thing I read, then I start at the front page and read cover to cover!”

Chris Tracy
Director of Engineering & IT
Clear Channel Radio Springfield
Springfield, Mass.

HEIL SOUND
www.heilsound.com

LPFM*(continued from page 37)*

efficient and effective use of the remaining FM spectrum. Across the country, LPFM will serve communities in the spaces on the dial where full-power stations will not fit. Concerns over LPFM interference on the third adjacent frequency have long ago been debunked, and on the second adjacent frequency, LPFM stations can now operate just as translators do, with the same robust interference protections and mitigation for full-power stations.

For communities with no room for new full-power radio, LPFM is the best use of the FM band.

ONCE IN A LIFETIME

For 15 years, the Prometheus Radio Project has worked to advance the cause of community radio. We helped push the FCC to create a new low-power service, worked with dozens of organizations to start stations and advocated for fair LPFM regulations.

Prometheus led the fight to win passage of the Local Community Radio Act, which directed the FCC to expand LPFM licensing and eliminated restrictions that kept LPFM off the air in major cities. Over the course of a decade, we built a grassroots network of LPFM advocates

Participants at a 2006 gathering for KPCN(LP) in Woodburn, Ore.



who lobbied Congress for community media access. And in 2011, the bill was signed into law by President Obama.

Now, on the cusp of October's LPFM filing window, Prometheus is helping local community organizations to take advantage of this once-in-a-generation opportunity. We are promoting public awareness through press and outreach, and we are directly supporting LPFM hopefuls to apply for station licenses. Prometheus offers free online training and educational

materials; the open source channel allocations software RFree; and a phone help desk for LPFM applicants.

Radio engineers, producers and other professionals have an important role to play in the success of LPFM. They can encourage organizations to apply, volunteer to support local applicants or apply for licenses directly. Many of those applying for stations are local groups with great things to offer their communities, yet are new to radio. The expertise of a local volunteer can go a long way in helping a new radio project to get off the ground.

If you are considering how you can support LPFM, a good place to start is Radio Spark (www.radiospark.org), an online community for groups applying for LPFM licenses and for those who want to help them. By connecting allies, Radio Spark allows experts and novices alike to ask questions, share resources, recruit volunteers and build networks.

If you're an engineer or other professional offering services to new LPFM stations, you can list yourself as a resource. You can also visit Prometheus's website (www.prometheusradio.org), where you can find training, handouts and more background on LPFM.

While the current radio landscape serves audiences in many important ways, LPFM will make radio better. It will promote local production, create creative new programming and expand the role of radio in people's lives. But for LPFM to achieve its full promise, people like you must actively support and participate in its success. Be a part of radio's future.

Sanjay Jolly is the policy director for the Prometheus Radio Project. Founded in 1998, Prometheus builds, supports and advocates for low-power radio stations. Learn more at www.prometheusradio.org.

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

READER'S FORUM**RADIO NEVER LEAVES YOUR BLOOD**

My eyes nearly popped out of my head when I saw the picture of "A Western Electric 25B Console" in the June 5 edition of Radio World. I was at KXXO(FM), thumbing through magazines while waiting for an appointment, when I came across your article.

That's the very console I used for many of my years at KGY. I can still hear the "thud" of the two lower switches on the RCA transmitter in the background as I went through the sign-on procedure at 5:30 in the morning. I'd take the transmitter readings and then play the national anthem before starting my program.

I worked at KGY from 1959 until 2011. I started as the receptionist and was there when they opened their brand new state of the art studio in 1960. I managed to get an air shift. I finally got the morning show in 1965 and stayed there — same time, same station — for nearly 46-years. When I left, I was general manager as well as morning DJ.

My proudest moment was being named Washington State Broadcaster of the Year in 2001. I will always be grateful to radio pioneer Tom Olsen

and his family for the many wonderful years I had at that station. As radio never leaves your blood, I'm still on the air part-time, doing special programs for KXXO(FM), another great radio station in Olympia, Wash.

*Dick Pust
Sunday morning host
KXXO(FM)
Olympia, Wash.*

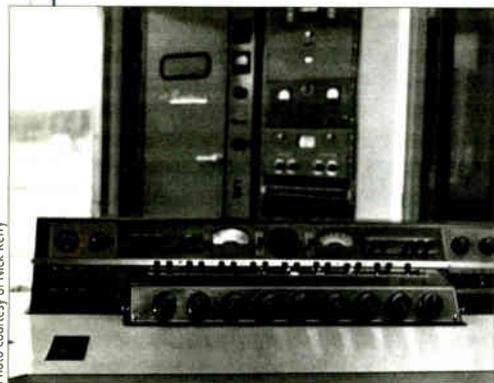


Photo courtesy of Nick Kerry

Next Issue of RADIO WORLD October 9, 2013
Next Issue of ENGINEERING EXTRA October 16, 2013

Website: www.radioworld.com
Email: radioworld@nbmedia.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

EDITOR IN CHIEF, U.S. Paul J. McLane
NEWS EDITOR/WASH. BUREAU CHIEF Leslie Stimson
GEAR & TECHNOLOGY EDITOR Brett Moss
U.S. ASSOCIATE EDITOR Alexis Hauk
TECHNICAL ADVISER Thomas R. McGinley
TECHNICAL EDITOR, RWEE Michael LeClair
PRODUCTION EDITOR, RWEE Karen Lee
CONTRIBUTING EDITOR John Bisset
INTERNATIONAL EDITOR IN CHIEF Marguerite Clark
LATIN AMERICA EDITOR IN CHIEF Rogelio Ocampo
LATIN AMERICA EDITOR Karina Gerardi
EDITORIAL ASSISTANT Emily Reigart

EDITORIAL CONTRIBUTORS

W.C. Alexander, Barry Blesser, James Careless, Harry Cole, Ken Deusch, Mark Durenberger, Charles Fitch, Harold Hallikainen, Craig Johnston, Paul Kaminski, Peter King, Mark Lapidus, Daniel Mansergh, John Merli, Laura Mir, Jim Peck, Mark Persons, Sharon Rae Pettigrew, Stephen M. Poole, Carl Lindemann, James O'Neal, Tom Osenkowsky, Rich Rarey, John Schneider, Randy Stone, Richard Strickland, James G. Withers, Tom Vernon

ADMINISTRATION & PRODUCTION

PUBLISHER John Casey
EDITORIAL DIRECTOR Paul J. McLane
PRODUCTION DIRECTOR Davis White
PRODUCTION PUBLICATION COORDINATOR Karen Lee
ADVERTISING COORDINATOR Caroline Freeland

CIRCULATION

GROUP DIRECTOR, AUDIENCE DEVELOPMENT Meg Estevez
CIRCULATION MANAGER Kwentin Keenan
ASSOCIATE CIRCULATION MANAGER Michele Fonville

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
CHIEF FINANCIAL OFFICER Paul Mastrorandi
CONTROLLER Jack Liedke
GROUP CIRCULATION DIRECTOR Denise Robbins
VICE PRESIDENT OF WEB DEVELOPMENT Robert Ames

VIDEO/BROADCAST GROUP

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

ADVERTISING SALES REPRESENTATIVES

US EAST: 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
EUROPE, AFRICA & MIDDLE EAST:
Raffaella Calabrese, rcalabrese@broadcast.it
T: +39-02-9288-4940 | F: +39-02-7004-36999
LATIN AMERICA: Susana Saibene, susana.saibene@gmail.com
T: +34-607-31-40-71
JAPAN: Eiji Yoshikawa, callerns@world.odn.ne.jp
T: +81-3-3327-5759 | F: +81-3-3322-7933
ASIA-PACIFIC: Wengong Wang, wgw@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
LIST RENTAL: 914-925-2449, danny.grubert@lakegroupmedia.com

Radio World Founded by Stevan B. Dana

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

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

Globe graphic ©iStockphoto.com / Edward Grajeda

Copyright 2013 by NewBay Media, LLC.
All rights reserved.
Printed in the USA



Charter sponsor
of Radio World's
Free iPad/iPhone
edition now at iTunes!

OP-X AUTOMATION

SIMPLE • POWERFUL • REDUNDANT



"Op X is easy to look at, simple to use, and really keeps the station moving. New York is the #1 market in the country and Op X makes us sound like it!"

-John Foxx
Program Director

SCOTT & TODD
MORNINGS

95.5 WPLJ



Ask us about
our iPad
app!

- Modular Operation in Op-X allows for a tiered system at a fraction of the cost of its competitors.
- Each studio client is capable of accessing all Audio Server modules on the network.
- Remote voice-tracking allows for creation of content for remote studios also running Op-X.
- The revolutionary design of Op-X's clock builder turns the previous task of scheduling satellite programming into a few simple clicks.
- Share serial devices from any machine using the Op-X Serial Server.
- Importing logs now gets its own module that takes confusion out of the process.
- Engineers will enjoy Op-X because it's easy to install, maintain, and has automatic backup features.

iPad app Features

- Live show real-time control from almost anywhere
- A powerful tool for remotes or voice tracking
- Take a show on the road
- Start, stop, copy and paste functions from the log
- Insert audio items into the log
- Initiate audio playback from hot buttons
- Run macro command from hot buttons
- Secure access to your system



**Broadcasters
General Store**
352-622-7700
www.bgs.cc



RADIO AUTOMATION SOFTWARE

