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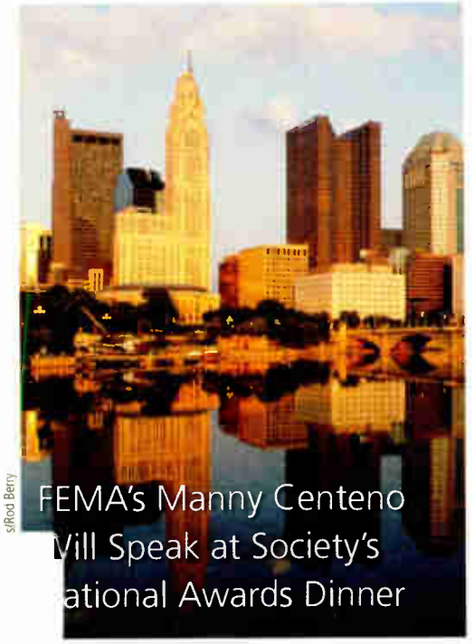

FEMA's Manny Centeno Will Speak at Society's National Awards Dinner

(Rod Berry

BY JOHN L. PORAY

The author is executive director of the SBE.

Each year the Society of Broadcast Engineers holds its annual meeting in conjunction with an established regional broadcasters' event. This year,

SBENEWS

we are pleased to be hosted by the Ohio Association of Broadcasters and their Ohio Broadcast Engineering Conference.

The SBE National Meeting events will be held Tuesday and Wednesday Sept. 27–28. The OAB conference, in its ninth year, will be held Wednesday, Sept. 28 and includes an equipment and product exhibition some 40 exhibitors expected. Lunch is included in the low registration cost. he schedules for the organizations' events have been planned to complement other, allowing those in attendance to participate in the activities of both. vents will take place at the Crowne Plaza Hotel in downtown Columbus and

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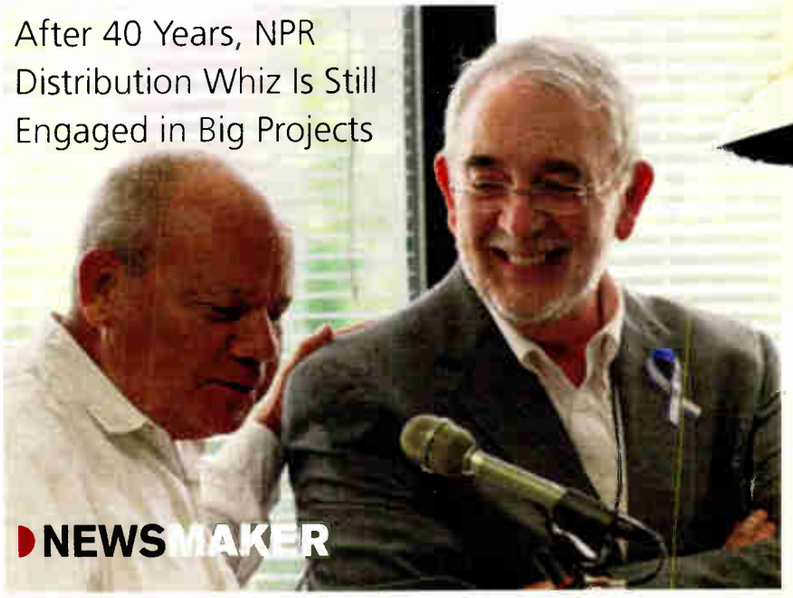
Loewenstein Looks Back, and 'Forward'

After 40 Years, NPR Distribution Whiz Is Still Engaged in Big Projects



NEWSMAKER

NPR Vice President for Distribution Pete Loewenstein, right, is congratulated on his 40th year at the network by VP for Technical Operations and Broadcast Engineering Marty Garrison.

WASHINGTON — As NPR's vice president for distribution, Pete Loewenstein oversees the Public Radio Satellite System, which disseminates content from some 200 program producers to approximately 800 pubcasters.

The PRSS ContentDepot distribution system streamlines how public radio stations and producers select, send, acquire and automate programming. It uses a combination of Internet and satellite technologies to automate content delivery as well as enable delivery of program-related metadata and emergency communications.

Loewenstein has been in his current position since 1985 but joined NPR as a studio technician in 1971, the network's first year, and recently passed his 40-year mark there.

He and his team now are involved with "PRSS Forward," a project to upgrade certain hardware and software components of the system. One aspect involves replacing streaming decoders and storage receivers at some 400 stations. In a phased rollout, International

(continued on page 5)

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World Radio History

Selected content from Radio World's "The Leslie Report" by News Editor/ Washington Bureau Chief Leslie Stimson.

GREATER MEDIA SIGNS UP FOR ARTIST EXPERIENCE

I've been wondering when radio groups would do something with iBiquity Digital's Artist Experience, the ability to synch digital audio with images and text.

Now developer Allen Hartle tells me Greater Media has agreed to use his "JumpGate HD" RDS and HD Radio data processor to transmit Artist Experience data along with the HD signal of all of its FMs and HD2 channels.

That amounts to some 30 stations, spread out over five markets, Greater Media Vice President of Radio Engineering Milford Smith tells me. Those markets are Boston (five HD1s and five HD2s), Philadelphia (four HD1s, four HD2s), Detroit (three HD1s, three HD2s), Charlotte (two HD1s) and New Jersey (four HD1s).

Greater Media intends to start installations in the fourth quarter, and "turn on" the service early in 2012.

Up to now, Clear Channel has been the sole radio group that I know of doing Artist Experience.

I talked to Clear Channel about Artist Experience at the spring NAB and reported that its stations are transmitting this advanced data application in "beta" mode in 18 markets. iBiquity told me at the spring show that Broadcast Electronics has an AE solution and the Broadcast Traffic Consortium was working on one. When iBiquity announced AE last fall, stations had to license album images from Sony Gracenote.

JumpGate HD builds on Hartle's experience with RDS and iTunes Tagging, adding software code to its data processor to support AE. Hartle says he delayed starting work on the project until Jump2Go could secure a cost-effective source of artist images.

Hartle is working with Rovi, which now owns both the Muze and AMG database products, on the Artist Experience offering. He says the AE licensing fee charged by Jump2Go is $50 per month plus the one-time cost of the JumpGate HD data processor that replaces a Windows PC in your air chain.

Here's how it works: A song plays, JumpGate collects the data information and pushes that back to its server. Rich data comes back and is pushed into various systems, be they and RDS or a streaming encoder, or an HD Radio signal. "We create more destinations for this rich data," said Hartle.

Part of the push for using Artist Experience is to make radio's displays on new receivers sexier and more interactive — or, as iBiquity's Bob Struble has told me, it makes the radio display more like other displays being used in mobile and personal devices on the market.

HD Radio devices on the market that can display Artist Experience include the next generation of the Insignia HD Radio player, the NSHD02, as well as the Cydle P29H MP3 player, the JVC KW-NT30HD and KW-NT50HDT car navigation HD Radios, and some OEM HD Radios in new cars coming on the market.

It takes about 30 seconds for the HD Radio system to transmit the graphic metadata to the tuner; however, this all happens in advance of the on-air event. The receiver buffers the image; when the on-air event changes, JumpGate HD sends a trigger, telling the receiver to now display the "queued" image. To the listener, the image change is instant, according to Hartle.

A second reason for stations to update their data transmissions and use AE, proponents say, is to make money.

JumpGate HD

Stations theoretically can transmit more than album or DJ art to the newer HD Radio receiver displays; they can transmit metadata for special commercial images as well — and presumably charge advertisers more for those ads to stand out.

"We wanted a cost-effective solution. After the banking problems of 2008 it became apparent that if [Jump2Go] weren't part of a solution to help stations make more money, we wouldn't be in the building at all," Hartle tells me.

Hartle's company has been conducting on-air testing of its technology on Entercom's KNDD(FM), Seattle. The station also was an on-air test bed for Hartle's earlier company, The Radio Experience (since acquired by BE) before the resurgence of RDS about a decade ago. With the new product, enabled receivers also display RT+ for those FMs transmitting RDS data.

He gave kudos to iBiquity for being collaborative and helping the process along, such as supplying him with proprietary receivers for in-house testing. "They've opened the doors to their technology and given us direct access to their developers. We're meeting the people who write software code. It makes all the difference in the world."

I'm glad to hear more stations plan to do Artist Experience; it's about time, given that receivers that can display the new features are in the marketplace.

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World Radio History

At Braves Network, It's About the Imaging

Surround Sound Is Intended to Give Listeners an 'Immersive Experience'

Radio companies sometimes take criticism for a lack of innovation, from outsiders and often from within the industry. But some, at least, continue to explore technical innovations to make the listening experience better and improve the value of their investments.

In one such example, surround sound broadcasts now can be heard on the Atlanta Braves Radio Network. This is described as a first in Major League Baseball.

Audio technology developer DTS Inc. is working with the network, Dickey Broadcasting Co. and Cumulus Media to deliver broadcasts with Neural Surround Sound encoding. Their goal is to provide listeners with a "fully immersive" listening experience. Dickey owns WCNN(AM) and Cumulus owns WNNX(FM), the Braves' flagship stations.

I doubt most consumers today would relate the word "radio" to the phrase "surround sound." But DTS, somewhat quietly, has been trying to change that; and the latest step feels like a notable one.

Cumulus Media is a big player in commercial radio. It is the second largest U.S. radio broadcast company based on station count and fourth largest by revenue. The Atlanta Braves Radio Network has 150 affiliates, making it baseball's largest.

DTS is familiar to some engineers in the public radio realm, where its technology has been used by the likes of American Public Media, Minnesota Public Radio and "JazzSet."

DTS says that with the Braves network, some 900 stations in the U.S. now air DTS Neural Surround Sound in one form or another. The first stations turned it on in 2004. DTS acquired Neural Audio in 2008 to gain a stronger foothold in the broadcast and automotive markets.

That 900 is impressive, given skepticism in some quarters that surround could find a place in radio. And I am pleased when I see broadcasters, especially in commercial radio, talking about ways to improve the listening experience.

Gary Kline is vice president of engineering and IT at Cumulus Media and is familiar to RW readers. He says the baseball surround project enables the network to increase the quality and "envelopment" of the game for listeners, "so they feel like they're sitting in the grandstands."

The gear is built by DaySequerra, which licenses it from DTS. It is installed at Turner Stadium with the radio network's mobile package. According to the announcement, the setup enables the audio staff there to distribute 5.1 surround sound over a stereo transmission path.

"Using the stereo format at the highest resolution possible, DTS Neural Surround Sound enables the Braves' broadcast production team to preserve the integrity of the surround mix for a superior listening experience," the companies stated. "For the sports enthusiast, every play will be transformed with clearly defined vocals and effects, and crisp high and low frequencies that create a more immersive sound experience."

The gear encodes 5.1 surround sound to a stereo mix that represents the 5.1 original; that stereo mix contains surround steering information and can be stored, mixed and transported like a normal stereo mix.

Kline said any Braves FM affiliate with a satellite receiver wired in stereo can take advantage. "We encode the surround on the normal two-channel stereo signal and feed that to the bird," he told me.

"The Braves satellite feed is stereo and always has been since Dickey Broadcasting began running the network. We added surround encoding to the stereo flagship and network affiliate feeds this season. Our first official surround broadcast was the first pre-season home game, April 29."

The team also did beta testing at spring training in Florida. "For those tests we used WSJZ(FM) in Melbourne as our test receive station. Those tests were to determine microphone placement, console bus wiring, decode quality, etc."

FROM THE EDITOR

Paul McLane

As far as the listener, he said any FM stereo radio will take advantage of the stereo encoding and that the games "sound great" thanks to the existing audio chain.

However, "When you have a radio which can decode surround, as more and more home stereos and vehicles are coming equipped to do, then you can take full advantage of the imaging. HD Radio brings you even closer to the action with a clean digital reproduction of the sound."

Kline said the sound in digital "is amazing. Especially when the popcorn guy is in the stands."

Count me in for anything that makes the radio listening experience better — and double that if it nourishes radio's historic audio relationship with our nation's best sport.

Trying to expand the radio experience in a different way is Clear Channel, which this month launches the New iHeartRadio platform with a glitzy festival in Las Vegas.

The addition of user-created custom stations to the iHeartRadio platform is an unapologetic expansion into Pandora's turf.

Clear Channel marketing says its 11 million songs are "more than 10 times the number of songs offered by Pandora" and that its library actually "contains more albums than Pandora's does songs."

Clear Channel believes it has better "music intelligence capability," combining background selection algorithms and research with the expertise of its human radio programmers.

There's no monthly cap on listening. Custom stations will have commercials, though not at first. Among other cool features, an onscreen control slider lets a user "tune" his or her custom station to play more familiar songs or adjust to a "discovery" mode to play a broader variety. And as before, iHeartRadio offers access to the streams of traditional stations too.

The service promises to be a clever mix of what makes radio unique with what consumers have come to expect in music discovery. Many people will be watching to see if Clear Channel can out-Pandora Pandora while Pandora is trying to out-radio radio. But I think this development, like the surround project, is more evidence that radio's biggest companies see the value in investing in new approaches to building their businesses.

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LOEWENSTEIN

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Datacasting Corp. has begun shipping SFX 4104 Pro Audio satellite receivers to PRSS affiliates. Most stations receive two receivers; the units have eight audio outputs, double the capacity as the old receivers. NPR Distribution says the new receivers also provide more audio distribution capability and processing power.

Another part of the distribution project is to build a new National Operations Center for NPR's future headquarters, with a planned 2013 move-in, while updating the current NOC as well. The operations center runs 24/7 and is responsible for coordinating 1,300 transmissions each week to the channels scheduled by NPR Distribution. The NOC also is the NPR uplink for Washington.

Radio World reported on PRSS Forward in March of 2010. News Editor/Washington Bureau Chief Leslie Stimson spoke with Loewenstein for an update as stations begin to take delivery of new satellite receivers and a thought or two about his career.

RW: *NPR is planning to move its headquarters to another location in Washington not far away. Meanwhile, PRSS has a system upgrade project going on at the same time. What is the status of PRSS Forward?*

Loewenstein: There are four blocks in the project. We've named them Blocks M, O, V and E.

The first one relates to the receivers that we're deploying to the system, the new technology and the upgrades that go along with that in the NOC here.

The next part would be the buildout, the new NOC. Even though we're not in the building yet, we've started building out the new tech that ultimately we'll be physically picking up and moving to the new building when we get there. That's block "O."

Block "V" is the work we're already involved in to upgrade local stations' antenna systems. In some cases it's replacing the antennas entirely if they've become badly damaged or out of compliance. ... The final one, Block "E," is where we physically move ourselves into the new headquarters.

RW: *You're demoing much of the existing space at the new location now. What's happening in 2012?*

Loewenstein: We'll be starting to build out in the new facility in the fall 2012. We will be packing up and moving out of our current building, as the schedule stands, in the late spring/early summer of 2013. ... We'll be doing a lot of work over there well before that. In fact, we have a satellite antenna that's transmitting over there already.

The construction work in the building itself is the first step. They're doing a lot of work now to get the basic building structure completed. That includes a lot of demolition of parts of the old building, then a whole new structure built up around what's there.

RW: *Meanwhile stations have begun to get the new PRSS receivers...*

Loewenstein: The receivers that we are deploying with the new technology have been sent to [some] stations and the remaining stations will get theirs ... through the fall. So by around Thanksgiving, everybody should have their new receivers delivered to them. Then we'll begin a period of at least six months or so where we're running the two systems in parallel. ...

This is really meant to be a follow-on to the existing system, but it's basically adding new technology and new capabilities into what they've been used to using. It's an overlay to what they're currently using at their station.

The antenna work that I referred to earlier is for those who have very old facilities that need to be upgraded in order for them to be operating properly. Some of them are 20 to 25 years old and weren't replaced during the last round we went through a number of years ago.

RW: *How is the interconnection system upgrade funded?*

Loewenstein: All of this work I've referred to is funded through a federal appropriation that came in three installments, 2008, 2009 and 2010, as part of the satellite replacement part of the Public Broadcasting Act.

Periodically, roughly every 10 years or so, there has been a special fund created to replace the interconnection system infrastructure at the national and local level. That's separate from the normal public broadcasting appropriations that happen every year. We in public radio and public television, in the past have had access to these rather major infrastructure upgrades over every 10-year period, including satellite capacity and ground facilities and operating systems.

RW: *Any concerns that bubble up from stations as you progress, and is there anything else we should know PRSS Forward?*

Loewenstein: From my point of view, we have had probably the least anxious set of station concerns around this "refresh" than any of the ones that we have taken on in the past. But we're a bit early in it right now, as far as the stations just beginning to get their hands on some of the new things we're rolling out to them. ... We want to hear feedback from stations as this rollout continues as to what concerns or issues they're turning up.

I guess the fun part — if you can call it that, and I do — is that we're actually starting to see the physical manifestations of a lot of the thinking, meeting and planning work that's been going on now for a long time.

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World Radio History

LOEWENSTEIN

(continued from page 5)

The other exciting part is that we're starting to hear back from the users out in the system for things that we've done to make enhancements ... that are now causing people to notice improvements that are being made to the overall system performance.

RW: For example?

Loewenstein: There have been some major improvements to the overall interface to the ContentDepot portal, the place where stations and producers spend a lot of their time ... I think many would report now that they're having a much easier time managing how they come in and subscribe to programs.

Even on the input side of the system ... [in the past] each little individual segment of a program you had to load as a separate process. You can now go in and load an entire series with one transaction rather than having to do a whole series of them. ...

Some of those improvements that we have been making all along are strictly driven by feedback. But others are being baked in as we're rolling out some of the new software that supports the new systems that are going in. ...

RW: Once they get receivers, you're going to do beta testing and run both systems in parallel for awhile.

Loewenstein: The notion here is, "When you get your stuff, unbox it, put it in service." Play with it. Get used to it, but still continue to rely on your current system as the main method you use to get your programming.

Then we will find a point, probably around the end of the calendar year, where we declare that all is now ready for people to start using the new stuff as their primary source of getting content in. Then we can start retiring some of the old stuff.

RW: PRSS is doing Internet distribution as well.

Loewenstein: There's been a big blending of technologies over the last few years. Satellite is still an extremely important center of our universe, but we also have a very significant investment in using Internet technology, both as a method of bringing content into the satellite system and using the satellite as a delivery vehicle. ... It's one of the subsystems that's really necessary for the system to operate.

If you are at a local station, for example, and you need to subscribe to a program that we're going to deliver to you over the satellite, you come in and use an IP connection to a portal that has the way you get in and make your subscription.

If you're a producer and you're loading up a file program, you would send your program in to the ContentDepot through an Internet portal connection, and then the satellite takes over and pushes it out to the stations with a lot of enhancements that make it easy for the station to bring it into their local operation.

So it's really a blend of Internet and satellite technologies that we're using today. Anytime we find anything we can add into our technology mix that makes things work better, and cheaper and more efficiently — those are things that we've been adopting over the years.

RW: NPR Labs is also part of part of NPR Distribution.

Loewenstein: In many ways [NPR Labs is] modeled after the business operation of PRSS, which similarly earns its own revenues and has its own expenses that are separated out from everything else that goes on here. ... We have many parts of our two shops that can collaborate with each other because we frequently have common interests or common needs where we can find ways to collaborate and get some efficiencies out of that.

RW: What kind of things are PRSS and NPR Labs working together on?

Loewenstein: Another aspect of the PRSS Forward project ... In addition to being able to deliver all the things we ever did in the way of programs to stations through the satellite, the new technologies that we're rolling out have a rather drastic amount of data delivery capability. A lot of the things that we're working on now are ways to enhance the connection of the national interconnection system with the local stations to be able to deliver — in addition to their audio content — data services that will be valuable to their local communities. ...

Those are just beginning to be possible though the things that we're in the midst of working on in conjunction with the Labs team.

RW: Where did you grow up?

Loewenstein: I grew up in a little town in Virginia. over in the Shenandoah Valley, not far from here.

RW: How did you get interested in radio?

Loewenstein: I admit to being somebody who's been entranced by radio from about as early an age as I can remember. Radio is something that to me, still has magic characteristics to it. ... The idea that you can have the ability globally to speak to people without a wire being connected to them is kind of an amazing thing to me.

From my earliest times I was fascinated by the fact that I could listen to radio signals from all around the world in my bedroom at night, tucked under the covers with a transistor shortwave radio. Over the years I became a ham radio operator and had the experience of, on a Christmas Eve, having a conversation with people at the South Pole research station, using the power that would light up a light bulb in your home.

RW: You were one of the original NPR employees and you were honored this year on your 40th anniversary.

Loewenstein: May 3 was the 40th anniversary of "All Things Considered." I was there for the first ATC broadcast 40 years ago, in the studio in the control room as a technician, having first come to work at NPR right before that.

I had the privilege of sitting in the anteroom and watching the show on May 3 this year. If I closed my eyes and listened to what I was hearing, obviously the quality of the content was significantly more mature than it was in those first hours of that first show; but the basic sound I was hearing was very much the same sound I heard 40 years ago. ... [But] the production of the content that goes into the show is so drastically different today because of the advent of digital production, digital recordings.

RW: You're not cutting tape with a razor blade anymore.

Loewenstein: Even the gathering of the audio from the beginning is being done with a different variety of gear; the producing of the segments is different. ...

Instead of people running into the room every two seconds with their hair on fire with a 10-inch reel of tape under their arm to be slapped onto the machine two seconds before the intro was done, everything was very calm, collected.

There was probably still somebody with their hair on fire two or three rooms away or maybe a floor away, but none of that was manifested in the studio. It was all being brought in from a digital workstation somewhere else in the building or even from a producer's desk where they're working with desktop production materials that didn't require five people in a studio to get it all produced. ...

At some point down the road, radio as we now know it may look very different; but it already looks a lot different than it did 10 years ago and certainly looks a lot different than it did 40 years ago. But it's going to be around, from my point of view, for a long time.

RW: You've been involved in a lot of projects over the years. Which one was the most fun?

Loewenstein: None of us would truthfully say we knew what we were getting into on May 3 of 1971. I think that was fun. It was probably terrorizing to a certain extent because even though we had done a couple of dry runs and drills, we knew we were starting something that had to be right.

That's a very different experience than dealing with a project that I think a few of us would have liked to have never done, which was having to deal with a failed satellite, Galaxy IV, back in '98. ...

It was a great thing to see the system come together around a major crisis like that. But what it also did, probably in the most dramatic way you could imagine, it was a reminder ... of the huge importance of having the interconnection system there and functioning.

Jane Holmes and Loewenstein, shown in 1973, were part of the original operations staff that managed NPR technical facilities, such as studios, recording center and remote assignments, and scheduled the national interconnection system. The magnetic boards were used to keep track of facility bookings and schedules for the interconnect circuits. Holmes (whose name at the time was Jane Tish) recently retired from NPR.

World Radio History

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World Radio History

NEWSROUNDUP

IEEE SYMPOSIUM: Organizers promise deep dive discussions of HD Radio tests results in Brazil as well as Greater Media's asymmetrical HD sideband transmission results at the IEEE Broadcast Symposium in Alexandria, Va. Up to 2.5 continuing education units are available for the symposium, Oct. 19–21 at the Westin Alexandria Hotel. Discounted hotel rooms are available through Sept. 23. Advance registration deadline is Oct. 1. Info: *bts.ieee.org/broadcastsymposium/registration.html.*

MULTIPATH: Stations have told Omnia Audio they intend to field-test FM stereo single-sideband suppressed carrier transmission. In a letter to the FCC regarding experimental authority for field testing, Omnia President/Founder Frank Foti noted that the agency has begun to grant such requests and he updated the commission on the project. SSBSC can improve FM stereo transmission by modifying the L–R stereo subcarrier signal, according to Foti. He believes the approach also would reduce multipath, better protect the baseband spectrum and be compatible with existing radio receivers. The National Radio Systems Committee has convened a sub-group to look into the transmission method. Omnia has mapped out a field testing plan and plans to report its findings to the NRSC.

SHIVELY: Howell Laboratories, parent company of antenna maker Shively Labs, said Paul Wescott retired as president. Wescott headed Howell Labs since 1977; he also was an early investor. Wescott, 80, is succeeded by vice president and COO David Allen, who's held several positions since starting with Howell Labs in 1982.

EAS TEST: The FCC confirmed that the Nov. 9 national EAS test will last about three minutes. From the White House, FEMA will originate a "live" Emergency Action Notification code to EAS participants. The public will be told EAS has been activated, including the audio "this is a test." The FCC's Public Safety and Homeland Security Bureau said Washington will be the origination code for the test. The bureau believes most encoder/decoders will automatically forward the EAN with the Washington code and not require further configuration. Equipment manufacturers expect to post related information on their websites, such as how to drive EAS over multiple streams. The test will end with transmission of the End of Message code, not the Emergency Action Termination code.

PUERTO RICO: The Puerto Rico government originated an EAS test for the first time. Previously the commonwealth used NOAA Weather Radio to originate EAS alerts, said FEMA Integrated Public Alert and Warning System Program Manager Manny Centeno. FEMA, broadcasters and cable operators helped the Puerto Rico Emergency Management Agency transmit a message on Aug. 24. Some 78 percent of the 80 radio and television stations relayed the test, Centeno said. In capital city San Juan, the figure was higher, at 89 percent. The Puerto Rico test was the most recent EAS test approximating a national message since January.

BEASLEY ENGINEER OF THE YEAR: Don Melnyk of Beasley's Philadelphia cluster is the company's Engineer of the Year. Among his accomplishments, he handled duties for a Wilmington FM station after a temporary staff reduction from three engineers to one, according to Beasley. "While managing regular engineer duties for all stations, Don was intricately involved with planning an upgrade and continues to oversee rebuilding and construction of the Philadelphia facilities."

Don Melnyk

Ralph Hogan

SBE PRESIDENT: Members of the Society of Broadcast Engineers voted for Ralph Hogan as their new president; he had been vice president and ran unopposed. Hogan is DOE for KJZZ(FM), KBAQ(FM) and SunSounds of Arizona in Tempe, Ariz. Hogan and other officers begin one-year terms on Sept. 28.

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World Radio History

SBE

(continued from page 1)

the Columbus Convention Center across the street. Special hotel guest rates and discounted parking have been arranged by the OAB.

The SBE National Meeting opens on Tuesday at 2 p.m. with a meeting of the national SBE Certification Committee. This group is responsible for the development of the society's certifications, including examination development and policies.

At 6 p.m., the national SBE Board of Directors comes together for its annual fall meeting. The agenda always includes a variety of issues, anything from operational policies to discussion of positions the society will take on regulatory issues.

On Wednesday the annual SBE Fellows Breakfast will take place, with a dozen or more members attending who have been elected to the Fellow membership rank. In accordance with tradition, the previous year's Fellow recipients will serve as unofficial emcees. Current officers of the SBE as well as the local chapter chairman and conference chairman are invited. The breakfast has been sponsored since its inception in 1997 by SBE Sustaining Member Kathrein Inc., Scala Division. The SBE is grateful for their continuing support.

At 1 p.m. a meeting of SBE frequency coordinators from Ohio and surrounding states will be led by national SBE Frequency Coordination Committee Chairman Joe Snelson, CPBE, 8-VSB. Snelson will bring coordinators up to date on broadcast auxiliary spectrum use and answer questions from those in attendance. Snelson will be joined by SBE General Counsel Chris Imlay.

The SBE Annual Meeting will begin at 4 p.m. This official business meeting includes brief reports from the president, secretary and treasurer, program and service updates and announcements from members of the board. The meeting will include the induction of the newly elected officers and six of the 12 directors who serve on the board. The society is making plans to stream the annual meeting live so members across the U.S. and overseas can participate in real time.

At 5:15 p.m., activities turn to recognition and fellowship with the annual SBE Awards Reception and Dinner. The reception features finger foods, beverages and live music. SBE Sustaining Member Vislink News and Entertainment, a long-time supporter of the SBE, will make the reception possible through their sponsorship.

The SBE National Awards Dinner follows at 6 p.m. and is sponsored by longtime SBE Sustaining Member Telos Alliance.

The program, emceed by the SBE president, includes a keynote presentation from special guest Manny Centeno, EAS national test project manager for FEMA's Integrated Public Alert and Warning System. He will inform participants about the upcoming first-ever national test of the Emergency Alert System that will be conducted on Nov. 9, and aspects of the new CAP-EAS.

The dinner will include the formal presentation of the SBE National Awards, including the SBE Engineer of the Year Award to Al Grossniklaus, P.E., CBNT, director of engineering for WTHR(TV), Indianapolis.

SBE Educator of the Year Award will be presented to Steve Lampen, multimedia technology manager at Belden Inc. in San Francisco. Nautel will be awarded the SBE Technology Award for its Advanced User Interface (AUI) and associated productivity technologies.

John Davis, CBNT, will be presented with the Best Technical Article Award for "Choosing a Network Switch for Audio-over-IP," published in Radio magazine. Chapter 24 in Madison, Wis., will receive three chapter awards including Best Chapter Website, Best Regional Convention and Best Chapter Newsletter.

Other chapter awards will include Most Certified Chapter, Chapter 118, Montgomery, Ala. in Class A, the smaller chapter division; and Chapter 131, Inland Empire in Class B, the larger class division.

Awards for chapters with the greatest percentage growth of new members will be presented to Chapter 44, Shreveport, La., in Class A and Chapter 25 Indianapolis in Class B. Awards for the chapters with the highest percentage of member attendance at meetings will be presented to Chapter 136, Rio Grande Valley in Class A and Chapter 76, Eugene, Ore. in Class B.

As with every SBE program, a team of volunteers is involved. The SBE National Awards Committee does a great job reviewing nominations and selecting winners. It is chaired by Tim Anderson, CPBE, DRB, CBNT and includes members, Jim Leifer, CPBE and Frank Maynard, CPBE.

The dinner concludes with the presentation of three SBE Fellows for 2011, named earlier this year. The prestigious group includes Charles (Chuck) Kelly Jr., Arthur Lebermann, CPBE and Barry Thomas, CPBE, CBNT. With the addition of these recipients, the number of members who have been elected to the Fellow rank over the 47-year history of the SBE rises to 69.

To attend the SBE National Meeting and Ohio Broadcast Engineering Conference, registration is available at *www.oab.org*.

The SBE will hold the 2012 National Meeting in Denver, in conjunction with the annual VidExpo and SBE Chapter 48. In 2013, the National Meeting will head back to the Midwest to Indianapolis, and team with the Indiana Broadcasters Association's Broadcast Engineering Conference.

Newly named SBE Fellows Chuck Kelly, Arthur Lebermann and Barry Thomas will be honored.

WORKBENCH

(continued from page 10)

ware, and still does, from McMaster-Carr (*www.mcmaster.com*). They have several warehouses in the United States, with an excellent selection of hardware in various materials, e.g., stainless steel, brass, nylon and steel.

There's no minimum order, and they probably have what you are looking for. The company also stocks all sorts of odd pieces of hardware that today's broadcast engineer is seeking. Rather than guess about what big-box hardware stores will have in stock, try the McMaster site.

A wonderful source of tools and materials is MSC (*www.mscdirect.com*). They have hard-to-find machine tools, cutters and drill bits. Their selection includes left-handed drill bits for removing broken screws and bolts (though no *left-handed smoke shifters*).

Ron Foo now works as an R&D engineering technician for Seek Tech Inc. in San Diego. The company makes underground utility locating equipment and pipe inspection equipment. Reach him at *ronfoo@gmail.com*.

Entravision's Robert Smith recently expressed his frustration toward equipment design engineers who decide to place serial number information on the *sides* of rack-mounted equipment.

Not a good idea. Most racks offer little light. And even if you can get your eyes in the cramped space, few engineers are adept at reading sideways.

But Robert writes that sometimes you can get lucky. In this case, he could squeeze his hand inside the rack and use his Droid cell phone camera to take a picture of the identification plate. This is one reason the cellphone or digital camera ranks number one as the most valuable tool for engineers.

Digital shots also can identify unlabeled parts and assist with troubleshooting when talking to a service engineer.

Find Robert Smith at *robertsmith@entravision.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.

John Bisset has spent 43 years in the broadcasting industry and is still learning. He works for Tieline Technology, is SBE Certified and is a past recipient of the SBE's Educator of the Year Award.

Fig. 2: Try your cell camera if you need to read a serial number that's on the side of rack-mounted equipment. This isn't a great photo, but it did the job in a tight place. The important thing is that we can make out the number.

World Radio History

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World Radio History

WideOrbit Revs Up Motor Racing Network

WO Automation Is at Work in the Studio, at the Track or on the Road

USERREPORT

BY DOUG WATSON
Chief Engineer
Motor Racing Network

CONCORD, N.C. — When Motor Racing Network selected a replacement for its automation system, we knew we wanted three things: stability, flexibility and good support. We found all of that and more with WideOrbit.

Motor Racing Network is based in Concord, N.C., and provides live lap-by-lap coverage of the top three NASCAR series — Camping World Truck Series, Nationwide Series and Sprint Cup Series — as well as NASCAR Live, NASCAR Performance Live and various NASCAR-related long- and short-form programs. We also provide lap-by-lap coverage of the Grand Am Road Racing Series. We provide programming to 650 affiliates and the Sirius/XM NASCAR channel, so performance and stability are vital.

Unlike a radio station, MRN's operations take place in many locations: our main studio in Concord and on-location at many race tracks around the country. We have three production trucks: a 53-foot truck, a 40-footer and an 18-footer. These trucks contain mobile studios that we use as our broadcast facilities during NASCAR races, and the Concord studio is used to originate long-form programs.

DIFFERENCES

Linking much of this far-flung operation together is the WideOrbit automation system that we use, WO Automation for Radio. It interfaces directly with our Axia audio routing system. We use WO Automation for Radio to play the beds and national spots for these programs, and it also controls GPI hardware to send commands to our affiliates to trigger their IDs, liners and stopsets.

MRN is most famous for our live broadcasts of NASCAR events; and one of the most exciting things we do is prepare for a race broadcast. One of our mobile studios will be sent to the track a few days before the race. While the truck is en route, our traffic manager in Concord uses WideOrbit's traffic solution, WO Traffic, to prepare the commercial log for the race. We also copy the current commercials from the WO Automation for Radio system in Concord onto a USB hard drive.

Motor Racing Network audio engineer Todd Costello mans the board inside one of the mobile trucks with WideOrbit Automation for Radio on one screen.

Once the mobile studio arrives at the track, our producers record interviews and other special segments that will be heard in the race broadcast. We load these segments into WO Automation for Radio for playback during the race and program hotkeys with the interviews, beds and other items. This makes the content easily accessible for playback during the broadcast.

The day before the race, the producer arrives from Concord with the disk containing the spots and traffic log. We load the spots and log into WO Automation for Radio for use during the race.

When the broadcast begins, we use WO Automation for Radio to send GPO signals to our affiliates to fire liners, IDs and commercial breaks. The automation system also manages rain delays by sending signals to our affiliates. This makes it possible for our

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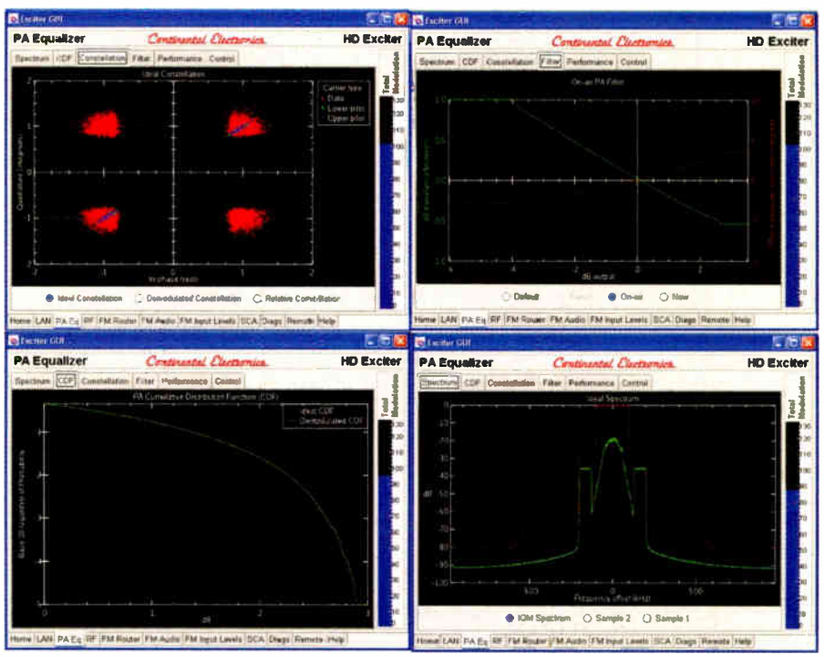

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So, it's time to upgrade your studio. Hey, let's be real - it's way past time. You knew those analog consoles were only good for 10 years when you bought them... 15 years ago. They need resuscitation so often, you keep a defibrillator in your tool kit.

Still, your GM says it'll cost too much to replace them. That's when you make like MacGyver and whip out your secret weapon: Radius, the new IP console from Axia. You show him the pictures. You tell him what Radius can do, with its 4 program buses, automatic mix-minus, instant-recall console snapshots, one-touch Record Mode, convenient talkback and rugged machined-aluminum construction. You show him the built-in Ethernet ports you'll use to eliminate the miles of expensive cable in your ceilings, and you can tell he's already counting the money he'll save.

Then you hit him with the haymaker: at just $5,990, Radius costs less than you'd expect to pay for some flimsy, stripped-down, feature-free board with less brainpower than your wireless mouse. After he picks his jaw up off the floor, you get to tell the jocks about their cool new Axia consoles. And go home a bonafide money-saving, airstaff-pleasing Engineering hero, smiling with the knowledge of the envious looks you'll get at the next SBE meeting...

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World Radio History

TECHUPDATES

OMT DEBUTS iMEDIATOUCH VERSION 4.2

A new version of the iMediaTouch Radio Automation suite is available from OMT Technologies.

New features in iMediaTouch V4.2 include support for Windows 7, "quick links" to a variety of social networking sites, auto-duck feature for liner EOM adjustment, new audio library blade in On-Air, retooled library screen in Log tools, Info and Backsell tabs added to voice-tracking and a "wildcard feature" added to iMediaImport to allow for hundreds

of downloadable audio elements from external FTP sites using simple id3 tagging.

OMT also has added features to its iMediaArchive application designed for large NPR music stations looking for mass library storage and enhanced search capabilities within their database to support such fields as composer(s), soloist(s), conductor(s), chorus, master genre and so on.

Users can pull up audio content from within the iMediaArchive library screen and insert the files into the MediaTouch on-air log. Talent also can create hour-to-hour playlists with iMediaArchive, then load the playlist into iMediaTouch simply by highlighting the hour where they want the playlist to insert.

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

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MRN

(continued from page 14)

affiliates to automate MRN broadcasts fully. During the race, the board operator plays the spots and all of the prerecorded content from WO Automation for Radio. We even have hotkeys for on-air sequences for green flags, red flags and checkered flags.

The race broadcasts are high in energy and unpredictable, so sometimes we have to change the log on very short notice. This is where WO Automation for Radio's Playlist Editor is handy.

Playlist Editor lets you make instant changes to the log from anywhere and those changes are seen immediately in the air studio. The audio engineer in the mobile studio has Playlist Editor open, and when we need to insert another segment into the log on the fly, it's easy. The change appears instantly on the on-air screen.

After the race, the mobile studio begins its trip to the next track and the as-run files are sent to Concord for traffic reconciliation. We are using WideOrbit's traffic system, WO Traffic, to schedule the spots for the race, and it has changed our traffic manager's life. For example, reconciliation of the logs from the remote automation was a nightmare in our previous traffic system that took 2 to 3 hours a week. With WO Traffic, it now takes 10 minutes.

The board operators love the widgets feature in WO Automation for Radio. We have widescreen touch monitors in the mobile studios so the operators can arrange their screen however they want.

Every radio engineer looks for a system with knowledgeable and accessible support, and I found it at WideOrbit. As a previous SS32 customer, I knew that WideOrbit offered good support. Since we upgraded to WO Automation for Radio, the WideOrbit team has bent over backward. Everyone has been knowledgeable and helpful, and we never need to wait long for a response or answers.

For information, contact Jim Hammond at WideOrbit in Texas at (214) 451-4070 or mobile at (469) 744-1350 or visit www.wideorbit.com.

World Radio History

Simplicity Made Smarter

Pilot LOGITEK

DIGITAL CONSOLE

Less than a decade ago building infrastructure at even the most modest radio facility was difficult and costly. Today, AoIP is making it possible to replace miles of cables and closed systems with routers that use standardized network protocols. The **JetStream Mini** brings you the benefits of this new technology, and nothing is easier to use, faster, or less expensive. Add a **Pilot** control surface that includes the basic operating features your staff will need and you have the most cost effective AoIP networked audio system available.

JetStream MINI IP Audio Networking System

The Pilot is easy on the eye and the budget and like the JetStream Mini, Logitek has built it with ease of use and durability in mind. The Pilot is a tabletop control surface that includes all of the basic engineering features your staff will need- and more- including 4 Program busses, 3 monitor sections and 24 mix minus busses. It is available in frame sizes for 6 to 24 faders.

Looking for lots of power in a small footprint? The JetStream Mini lets you load up to 64 channels of I/O into a 2 rack unit and the Pilot will service even the most constrained spaces with ease. Configure your system with microphone inputs and analog/digital I/O to suit your specific needs; our use of standardized IP protocols ensures advanced AoIP networking with fast and easy setup... all for a price that won't break the bank.

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Logitek

World Radio History

TECHUPDATES

ZETTA WORKS WITH GSELECTOR AND AQUIRA

RCS says that its Zetta automation system is rugged and has a simplified sleek design, with a user interface set up so new users get more out of the system without having to go to school for it.

Zetta integrates with RCS' music scheduler GSelector; RCSnews; and the traffic system, Aquira.

Aquira provides real-time access to sales and inventory data and a range of scheduling, billing and reporting options. It helps users manage clients, prospects and sales team call activity. The scalable platform supports single-station, multi-station and multiple-location broadcast groups centrally. A secure database lets users manage the scheduling and billing of advertising orders across multiple stations via a central location.

Contracts are handled from order entry through to single or multi-invoice billing. Account and contract management, invoicing, spot analysis, avails, sales and others are available.

GSelector is a multi-station scheduling system. With a single point of entry and flexible configuration,

GSelector virtually eliminates unscheduled song positions. According to RCS, a patented goal-driven demand-based scheduling engine is unique among music scheduling programs. Users create a station, design clocks, enter and code songs. GSelector will schedule them according to their natural demand. The user can adjust overall rotations, sound and flow with simple attribute sliders.

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

MUSIC 1 ADDS UPGRADES

The latest version of Music 1 Windows-based music scheduling software adds a traffic and billing module called Traffecta.

Version 7 also adds an auditioning player, allowing users to click and hear any song while working with M1. The player is incorporated into the M1 scheduler and is not dependent on any automation system.

Music 1
Scheduling The Future

Traffecta handles spot orders, consolidates and rectifies schedules and then bills and reports, all within Music 1.

Music 1 can schedule broadcast elements including jingles, liners, links, voice-tracks, long-form programs and automation system commands. The nonmusic scheduling functions are incorporated into M1.

Music 1 says its program 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 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. It has built-in interfaces for most widely used automation systems.

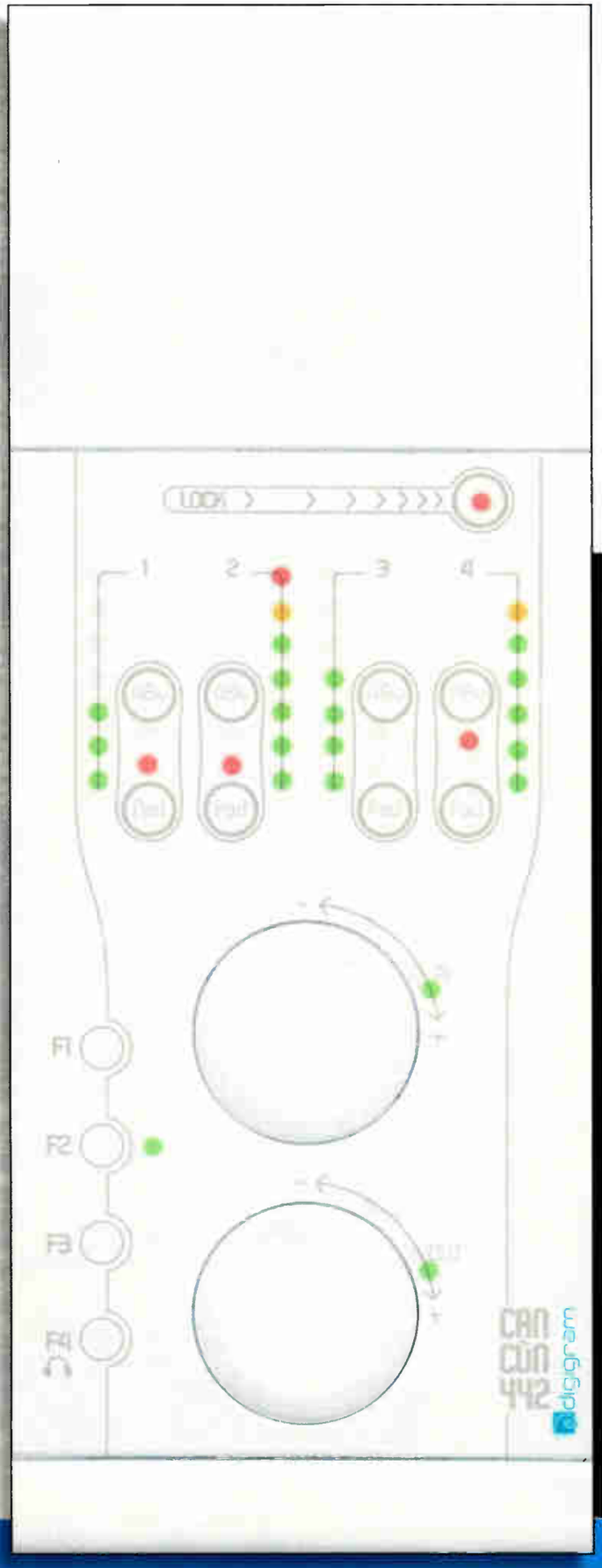
The company also has released Music 1 SE, a scheduling software for webcasters. According to Music 1, SE is based on the source code of the full Version 7 with some scaled-down functionality, thereby providing webmasters with an efficient scheduling tool at a low buyout price. Music 1 SE also is an option for broadcasters' HD channels.

For information, contact Music 1 in Texas at (512) 392-2415 or visit www.gomusic1.com.

World Radio History

When the first take will be your only take, the Digigram CANCUN gives you everything you need.

Built on a long tradition of no-compromise sound cards, offering no less than 2x500 MIPS dual-core processing power finely crafted and embedded into an ultra-robust yet stylish casing, Digigram CANCUN 442-mic and CANCUN 222-mic are the tools that serious reporters and on-the-go audio professionals have been waiting for.



- Simultaneous analog & AES I/Os in a compact form factor
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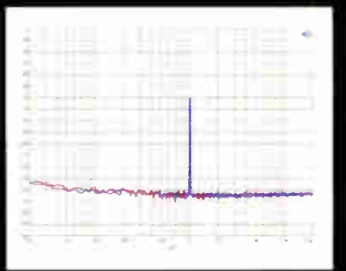

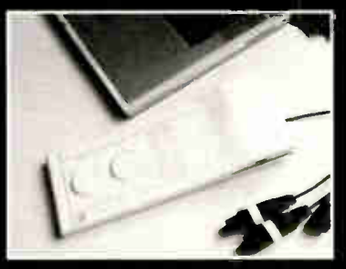

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World Radio History

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No matter how well you maintain your life, there are bound to be ups and downs. Of course, just by selecting WheatNet-IP, you're already practicing the best possible regimen of preventative medicine. Its robust architecture and hyper-intelligence ensure that it's out there racing to the finish line, every minute of every day. Each BLADE (what we call our super smart nodes) knows the full configuration of its network, ensuring there is no single point of failure. And while all networks have a backup system, we go way beyond that: WheatNet-IP offers as many points of recovery as you have BLADES in your system.

But, every now and then, something MAY happen that might call for the replacement of a BLADE. In the exceptionally unlikely event that a BLADE should fail, just plug an alternate in and you are up and running. Since each BLADE has the entire WheatNet-IP Intelligent Network's configuration embedded in its DNA, the new BLADE inherits its function immediately and you are back up and running. Pretty cool, eh?

Wheatstone

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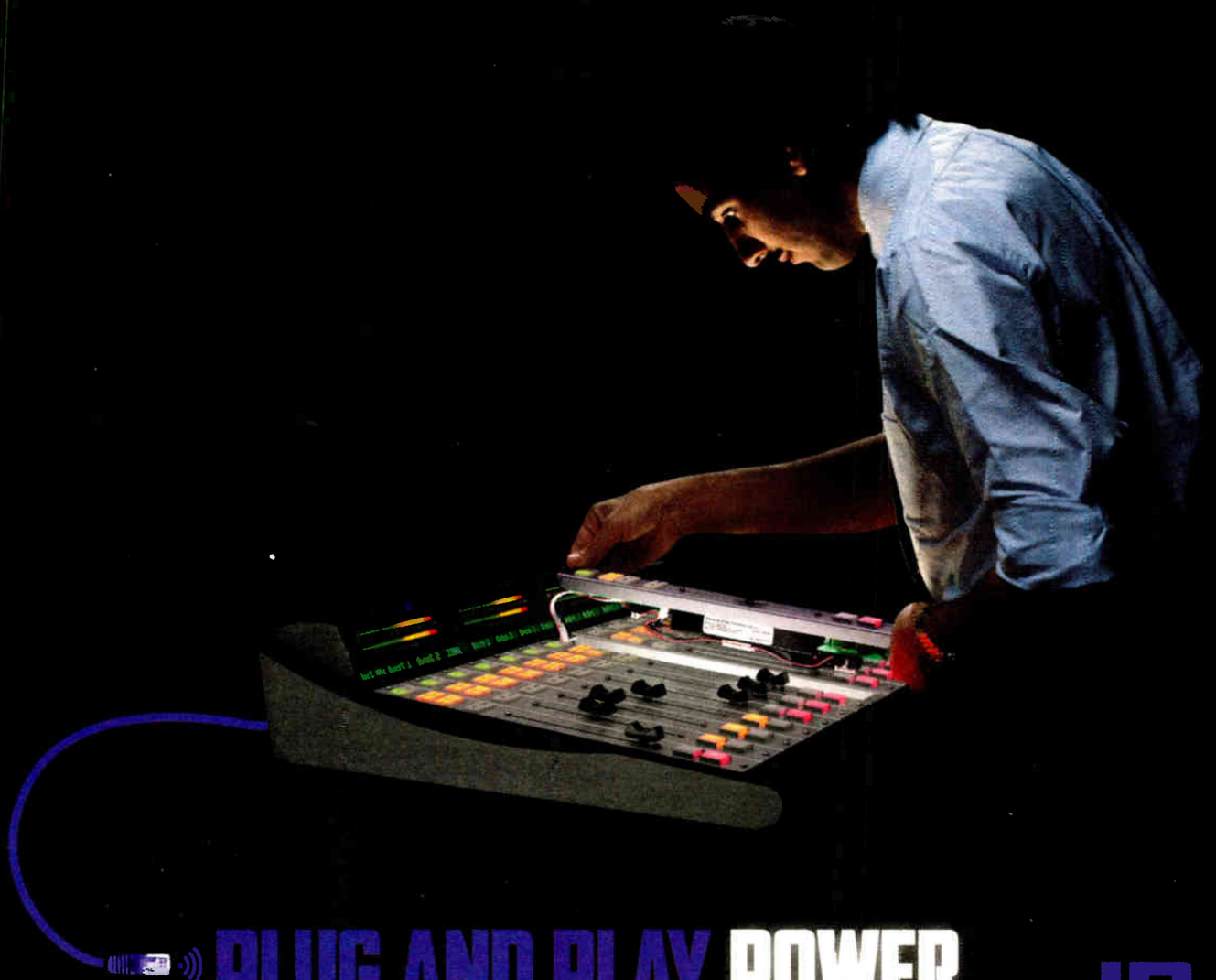
World Radio History



PLUG AND PLAY POWER IP-12

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AUDIOARTS

World Radio History

WGUC Watches DAD Grow Up

Classical Station Got in on Automation System Ground Floor

USERREPORT

BY MIKE MCANINCH
IS Manager
Cincinnati Public Radio

CINCINNATI — "Intelligent, mature and confident radio station seeks long-term relationship with automation system …"

If there were personal ads in the pages of Radio World, ours surely would have read something like that. On June 16, 1993 WGUC(FM) in Cincinnati replaced our cart machines with a newfangled digital automation system called DAD (Digital Automation Delivery) from a company named ENCO Systems.

WGUC(FM) was an established classical music and NPR news station for some 30 years, but ENCO (the maker of DAD) was just starting out. WGUC was their customer number 11.

The initial equipment consisted of a Novell server and three DOS-based workstations. The workstations had no internal storage. They booted from a floppy drive and connected to the server to playback audio from there.

It was great for playing back promos, underwriting, etc., but what about the music? Storage space was expensive; but in 1999 we purchased a whopping 300 GB RAID system to attach to our Novell server.

That was not nearly enough space for our entire library; however, we managed to put a good chunk of our active playlist on it by encoding it as MPEG 2.

CHANGES

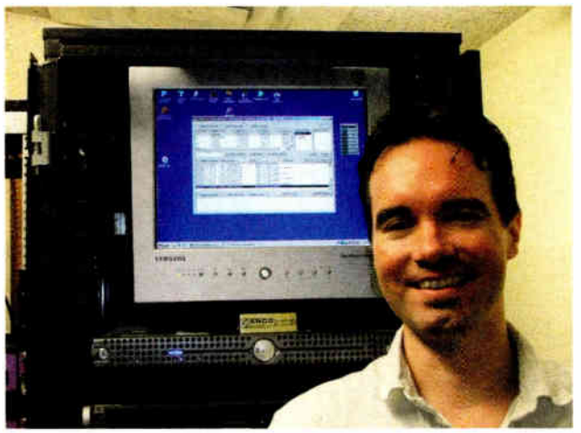
In 2005 big changes were taking place inside and outside our organization.

We purchased WVXU(FM) from Xavier University. With that, the management decided to have a full-time classical station on WGUC and a full-time NPR/talk station on WVXU. At the same time, the Public Radio Satellite System was preparing to roll out its new program distribution system, ContentDepot.

We replaced our old Novell workhorse server with a new 1.2 TB Windows server to meet the audio storage requirements for two stations and the new ContentDepot system.

By 2011 our workstations (including ones acquired in the WVXU purchase) were reaching the end of their lifecycle. The hardware was so out of date it was no longer supported by the latest versions of the software.

We undertook a reexamination of what and how we do things. We contacted multiple vendors to see how well they could fulfill our wishes. In the end ENCO was again chosen for our automation system. The decision was based on price, capability and support.



Mike McAninch: 'Our latest incarnation of DAD takes into account that, unlike in the past, storage is cheap.'

We already owned the software, which helped curtail the costs. Patrick Campion, our salesperson, was also helpful at getting us the most value for our money.

An installation of DAD can be as simple or complex as you need it to be. Up to this point ours had been somewhere in the middle. With this new install, we have — at least from an engineering point of view — definitely gone more complex. That is why excellent customer support also was a crucial component in our decision-making.

Our latest incarnation of DAD takes into account that, unlike in the past, storage is cheap.

We have an 8 TB server that acts a central repository for all our audio. It pushes that audio via ENCO's Gateway utility to the on-air workstations which have 4.5 TB of storage for playback locally. The Cutserver utility acts as a traffic cop monitoring this movement and updating it in the database. This setup was chosen because classical music and ContentDepot can both be storage and bandwidth hogs.

The Watchdog utility keeps an eye on the vital components, and if they stop working, it will restart them. Through the use of a third-party utility called KaVoom we can access any DAD workstation or server from another. This allows us to monitor and run multiple studios from one location.

It has been 18 years since we started using DAD. In that time new technologies have continued to enter the world of radio. Due to its power and flexibility DAD has been able to absorb those changes and do far more than we ever anticipated.

We are confident that DAD will continue to evolve and meet the requirements of the broadcasting community.

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

TECHUPDATES

AIRTIME IS OPEN SOURCE

Airtime is an open source software program for scheduling and remote station management. Web browser access to the station's media archive, multi-file upload and automatic metadata verification features are coupled with a collaborative online scheduling calendar and playlist management.

The system is developed by Sourcefabric, a not-for-profit organization open source media organization in Europe. It's free to download, while support, hosting, custom installation and feature development can be purchased from the organization.

Its scalability allows implementation in scenarios ranging from an unmanned broadcast unit accessed remotely through the Internet, to a local network of machines accessing a central Airtime storage system. Airtime supports the playout of files in commonly used MP3 format and the open, royalty-free equivalent Ogg Vorbis.

Airtime manages the Liquidsoap stream generator, which is at the heart of the system. Liquidsoap generates streams from files in the Airtime media archive, which is indexed in a PostgreSQL database. Live shows are recorded automatically with Ecasound, using the sound card line input.

Editors and station controllers can use Airtime to build playlists and manage files (upload, add metadata, manage advertisements) inside the station or via the Internet, using a standard browser. The scheduler in Airtime has a calendar view, organized by months, weeks and days.

For information, contact Sourcefabric in Ontario at (416) 832-6436 or visit airtime.sourcefabric.org.

JT INTRODUCES FREE PLAYRIGHT

PlayRight is a self-contained, free, Windows-based cart player for live broadcast application.

The user selects the player, inserts the file and presses the play button or corresponding key on the keyboard to control the cart.

The player turns red if bad files are detected, helping to prevent on-air accidents. Multiple players can be loaded, and sequenced, to simulate a live segue operation.

Players in sequence can be skipped individually when needed, and the entire sequence optionally can be looped, to start the sequence over again.

A unique tagging feature (available from the JT Communications Automatronix demo) allows the user to tag files so that seamless segues can be attained while using PlayRight. The screen can be sized to fit needs.

PlayRight can be downloaded free at playright.jtcomms.com.

For information, contact JT Communications in Florida at (352) 236-0744 or visit www.jtcomms.com.

World Radio History

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World Radio History

BSI Op-X Is a Hit With Atlanta Fans

Dickey Broadcast's Move Is Smooth as Op-X Teams With WheatNet

USERREPORT

BY ROB JENNERS
Production Director
WCNN(AM)

ATLANTA — Vision, plan and implement. Those are the minimum steps needed to complete most projects.

The vision was to move Dickey Broadcasting Co.'s three sports stations — WCNN(AM), 680 The Fan, WFOM(AM), 1230 The Fan 2 and WIFN(AM), 1340 The Fan 3 — into a facility with Cumulus Media Atlanta's stations WWWQ(FM), Q100, WNNX(FM), Rock100.5 and WWWQ-H2(FM), 99X.

The plan was to move all three stations' studios, programming, sales, traffic and business offices without missing a beat. The implementation was made possible by teamwork and cooperation among everyone involved.

PLANNING

After several working versions of a floor plan for the consolidation, it was decided that we were going to construct one additional "talk" studio, and remodel five other studios to make it work.

The only way we could accomplish this was to have multipurpose studios. During the morning, most of the studios are used for morning show production. In the late morning, some of these studios change to commercial production, imaging and voice-tracking. In the evening, studios could change to pregame or network studios for Atlanta Braves baseball, Atlanta Thrashers hockey and/or Atlanta Hawks basketball on one or all of the three Dickey Broadcasting signals.

Key to the success of making this work was the installation of WheatNet-IP audio networking and Broadcast Software International's Op-X radio automation system.

We needed to repurpose Harris Pacific Research & Engineering RMX Radiomixers from Dickey Broadcasting's old location. We were able to install a new Wheatstone Evolution 6 console with three WheatNet IP Blades in the control room for 680 The Fan's talk studio. We installed WheatNet IP Blades in two of the production rooms and three Blades in the Technical Operations Center.

This IP audio network allows any of the three Dickey Broadcasting stations to be on the air from any of these three studios or, just run in the "box" out of TOC with ESPN or Fox Sports programming and Op-X.

From a production standpoint, Op-X allows a much easier method of transferring files to the server and building clocks for live and automated programming.

The Op-X File Manager allows you to manage WAV files on your local PC and spots on the file server at the same time. Locally, you can assign spot titles, ISCI codes (if needed for commercial inventory), set beginning and ending dates and times and set segue tones. On the file server, you can edit the title and dates of any audio file without having to transfer it back to the local PC. You also can transfer large groups of files simultaneously and assign audio directly into a designated rotator (or "cart") when files are transferred to the server.

The Op-X Clock Builder is far more intuitive than other comparable automation programs and allows simple build-out and management of hourly clocks. For stations that use automation, satellite shows can be built in the Clock Builder tool to manage closures and relays from a network satellite receiver. This allows even complicated talk-format stations (like news or sports talk) to switch between satellites while in automation without the need for a board operator.

The Op-X Import/Merge program allows a quick, simple way to import commercial and music logs onto the Op-X file server.

If your station's clocks match the traffic manager's export file, your entire day is pushed onto the server in a matter of seconds. You also can edit and modify the log once it is merged to the file server, allowing you to add or remove elements that may not have been in your clock initially.

If you want to add simplicity and reliability to your life, use Op-X and you won't be disappointed.

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

TECHUPDATE

RADIO-ASSIST 8 ADDS VIDEO TOOL

Netia's Radio-Assist 8 line of digital audio automation software is equipped with tools for multimedia workflows.

The new CamDirector module adds direct camera control and automated video switching. Using automatic voice detection, it enables automation of production of studio interviews, shows or on-set events by triggering switching of cameras to follow the speakers and mics in use.

Broadcasters can create live feeds or recorded programs for repurposing to broadcast, streaming, podcast and mobile platforms. Netia says automation of switching processes enables users to maximize the value of interviews and other events for distribution to multiple platforms.

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

World Radio History

TECHUPDATES

AXEL COMPLETES WORKFLOW MANAGEMENT WITH XMAM

The most recent release in the Axel Technology range of software for workflow management is Xmam.

Xmam is a Web-based multimedia archiving, cataloging and asset management suite to store and retrieve radio media files from anywhere. No software installation is required.

Google-style searches and previews are available using any computer or smartphone. The company says Xmam adds value to archives and extends their availability from anywhere while expanding the power to share, access, distribute and sell multimedia contents.

Axel Technology's DjPro, production/automation/scheduling/live assist package is now available in the Enterprise edition.

DjPro Enterprise is an integrated, modular workflow management system for radio broadcasting, from ingest to audio recording and editing, scheduling and on-air broadcasting.

The modular configuration can be customized according to the requirements of the station, adapting workflow to the internal organization and integrating through open architecture with Axel programs such as Digiware and Ram-Comm.

Digiware is a program for playlist creation and management. Its graphic interface and flexible operation have been designed for programming, managing and comparison of different channels and playlists.

The browser allows flexible searches throughout the archive using various categories or criteria. The playlist can be modified in real time, seconds before going to air.

Ram-Comm is a multistation application that takes care of advertisement, client information, sales, campaigns, contracts, scheduling, billing and invoices.

For information, contact Axel Technology in Italy at 011-39-051-736555 or visit www.axeltechnology.com

ARRAKIS RIDES THE NEW~WAVE

The Arrakis Systems New~Wave is a Windows-based automation software solution intended for professional radio operations. New~Wave is designed for playing audio files from hard disk, Internet streams, FTP-stored audio files, MP3 players, smartphones, text-to-speech and other sources.

New~Wave brings together technologies to play live broadcasts, automated broadcasts and podcasts, and to stream for Internet radio, at the same time. According to the company, New~Wave is quick to learn and easy to use but incorporates sophisticated features for advanced users. It is fault-tolerant and will not allow dead air in automation. Also, if connected to an Arrakis Advanced Radio Console (ARC series), the console and software constitute an integrated radio workstation. New~Wave supports the Microsoft Windows 7 operating system.

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

World Radio History

RadioTraffic.com Brings Good Karma

Midwest Sports Specialist Breaks Multimarket Traffic Problems

USERREPORT

BY JILL CULLEN
Business Manager
Good Karma Broadcasting

MADISON, Wis. — Good Karma Broadcasting LLC was formed by President/CEO Craig Karmazin in 1997. At the time it consisted of two stations in Beaver Dam, Wis., and one in Madison. In the next four years, GKB purchased stations in Watertown and Janesville, also in Wisconsin.

Good Karma Broadcasting has a passion and competence in sports marketing. The first venture was the purchase of WEFL(AM) in West Palm Beach in 2003. The following year GKB entered the largest market in its home state, as Milwaukee's WAUK(AM) became the third GKB sports station in the state of Wisconsin. Two years after, the company entered the Cleveland market with the purchase of two stations.

In 2008, GKB entered the Spanish sports market in Milwaukee with WRRD(AM) and the creation of ESPN Deportes 1510. More acquisitions have followed. Currently we have eight ESPN affiliated stations, including seven in top 100 markets.

DEVELOPMENT

What started as a broadcast company has grown into a marketing enterprise with an expertise in digital, mobile, event, radio, television partnerships, sponsorships and personality endorsements.

I began with the company in 1998 as a receptionist. I have since grown into the office/business manager dabbling in continuity and traffic, but my key role is the accounting side of our business.

Our company is no different than any other in trying to save expenses. We started shopping around for traffic systems in November of 2010. We demoed several, including RadioTraffic.com.

The defining factor that led to our final decision was the cost. Compared to other systems, I've asked, "How can this price be right?" Well it's proven to work for us and with us.

When we were going through the demo, the presenter informed us how quickly the system would be installed and said total training time would be 12 hours. Our team was shocked at the time. But once we were ready for training … true to their word, 12 hours.

We began with the dreaded conversion project.

Our team of six dedicated their evening and weekend hours to the mundane process of inputting contracts and back balances. Our conversion took a little over three weeks, not bad considering the database of our partners and the amount of contracts we had to enter. Our training sessions consisted of an hour each, beginning with the building of the templates and logs. We moved onto orders and back balances, and finished with log reconciliation and the automation side of things.

Our conversion was pretty simple and error-free. We are still learning new things every day. We are fortunate to have great teammates to bounce ideas off of when we don't understand how something works.

A great feature RadioTraffic.com offers is a forums Web page. It's a resource for companies to see how things are working at other companies or give you a vision on how to do something a different way. You can also include product enhancement ideas that give the developers at RadioTraffic.com creative ideas that actual users are looking for.

With our radio group, every market is different. Every GM/SM/PD wants their log to look a certain way. With that, every traffic manager sets up their station differently. We've used the forums, and sent emails to the developer with suggestions that meet our needs.

ELECTRONIC INVOICING

The biggest timesaver for me is electronic invoicing. We haven't utilized all its benefits yet, but once we are there, our paper costs and output should decrease by 50 percent. Many agencies and local direct partners are going green and don't want to deal with the headaches of paper invoices.

With the click of a button, monthly invoices are emailed directly. With another click, I input the agency invoices to a clearinghouse we have partnered with. It's virtually effortless.

Our traffic team has used the color-coding option to separate conflicts. Our continuity director inputs the co-op scripts as she receives them, no longer entering them all on the last day of the month. Monthly billing that once took of team of eight approximately 40 hours is now completed in about 15 hours.

RadioTraffic.com has accomplished a huge task on our end: electronic signatures and a notary seal stamp to invoices. This will give a time savings of 50 percent of our workload as we will not have to sign or notarize invoices anymore.

We are a demanding group and if we have a problem, we want answers now. The RadioTraffic.com team has been supportive. If we need action, they are there. If they don't have the answers, they find them.

I still have to refer back to our old system for spending history and some reports; I often wonder how we made 11 years on it. Having the ability to log onto a computer and download RadioTraffic.com makes it user-friendly wherever you are.

As Good Karma continues to grow, we hope to help RadioTraffic.com grow. Our ideas give them new heights and ways to expand and enhance their product.

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

TECHUPDATE

NOA BEEFS UP ARCHIVING TOOLS

NOA Audio Solutions, a developer of audio archiving systems, offers actLINE, a product family that works with NOA's existing jobDB and mediARC systems. ActLINE gives users a set of tools that allows them to reshape content during the archiving process.

The actLINE software family contains 12 tools for triggering workflows, moving files among workflows, decoding and transcoding files, recombining segmented archives and more, while integrating with the jobDB workflow system and the mediARC workflow, media and metadata system.

For example, UniPort WaveScanner is a universal decoder that converts a variety of audio files to WAV files. The MediaButler transcoding platform transcodes files from linear format to other formats.

Jean-Christophe Kummer, NOA managing partner stated, "Instead of using a combination of products from different vendors, customers can perform all of the functions with one integrated system from a single service console, which helps save time, ensure compatibility and lower costs."

Besides UniPort WaveScanner and MediaButler, actLINE includes AutoCut, CEDAR Dehiss for NOA, CEDAR Declick for NOA, Dactylo, CLIP, DBScripter, eMailer, UniPort FolderScanner, UniPort FileCollector and the Service Console.

For information, contact NOA Audio Solutions in Austria at 011-43-1-545-2700 or visit www.noa-audio.com.

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World Radio History

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VX is so scalable, it can manage multiple simultaneous talkshows in the largest facilities. Yet it's cost-effective even for a few studios. Audio is clean and consistent, because dedicated, third-generation Telos hybrids manage each individual call. Even conferences are crystal-clear. You can deploy VX "virtual phones" in production rooms, news workstations, or anywhere there's a PC with a USB mic and headset. Got a hot talkshow that suddenly demands more lines in a certain studio? Just a few keystrokes at a computer and you're set.

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World Radio History

Paradis Makes the 'Smarts' Choice

Skylla Automation System Fits the Bill for Minnesota Broadcaster

USERREPORT

BY BRETT PARADIS
Owner
Paradis Broadcasting

ALEXANDRIA, MINN. — Paradis Broadcast's operation consists of three radio stations in Alexandria, Minn. Our community of license is, essentially, 16,000 people living within a county of approximately 36,000, located about 120 miles northwest of Minneapolis/St. Paul on I-94. We have a full-service news-talk AM station, along with a classic rock FM, and a hot AC ('90s and now) FM.

We installed a new Skylla automation system from Smarts Broadcast Systems in May of 2010 to handle all facets of on-air and production demands for the three stations. Now that we've had more than a year to work with the Skylla system, I can report that we have been very pleased.

KXRA(FM) afternoon drive announcer Mike Lommen works with the Smarts Skylla system on the screen.

SIMPLICITY

On all three stations, we do a considerable amount of live programming, along with network-provided programming for evenings and overnights.

We needed an automation system that would, among other things, handle the following kinds of situations: simultaneous record and playback in any studio at any time; seamless flow from "live" or voice-tracked programming, to fully automated, with no interruption of any kind; simple, flexible, voice-tracking capabilities; user-friendly interfaces/screens that allow the operator to make changes quickly and easy access to inputting commercials and other production work from any Skylla producer-equipped Windows computer in the building. This allows us to put rough audio into either of our two production rooms, and then do the editing and finalizing of that production work from our own computers on our desks elsewhere in the building. This frees the production rooms for others.

In addition, we required a server system in a RAID format, along with the ability automatically to back up the audio, text and data files offsite if desired.

One other thing we found to be important: We hired a great installer from Smarts, who spent the better part of two weeks with us, not only setting up all of the hardware, software and programming, but also teaching our staff how to use the system. While this part of the installation may not be inexpensive, we found it totally worthwhile.

We have found the people at Smarts to be open to our suggestions on how to update the software to accommodate certain procedures, and they have responded quickly to any actual software problems that might come up. Also, we have been using Smarts Traffic and Billing software along with Skylla automation, and we have found them to work together well. The ease of log reconciliation each day is a great feature, along with the software's ability to give us a list of any missing commercials and to provide us with all of the reports we need quickly.

For information, contact John Schad at Smarts Broadcast in Iowa at (800) 747-6278 or visit www.smartsbroadcast.com.

World Radio History

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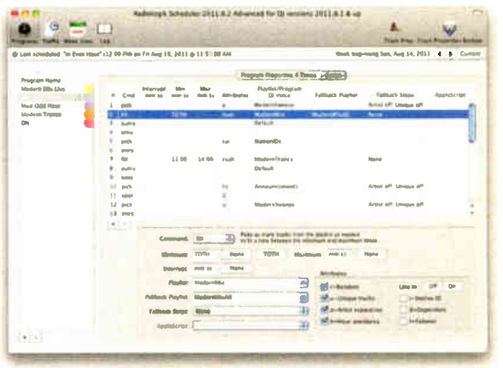
World Radio History

Radiologik Automates on the Mac

Virginia Broadcaster Likes Apple's Reliability and Applications



USERREPORT

BY PETE STOVER
General Manager
WWED(FM)/WWEM(FM)

FREDERICKSBURG, VA. — The decision to select Radiologik DJ and Scheduler came after our station was convinced that we needed to move from a Windows-based platform to a Mac system.

Several factors were considered; greater reliability, less vulnerability and station-wide integration of operations were three. Our conclusion was that a Mac-based system offered all of these.

We need reliability, of course, to operate the station's programming. We want to avoid crashes. Day or night, we want our programming on the air whether attended or unattended. Macs are noted for their reliability.

One of the reasons Macs are reliable is because they are less vulnerable than other PCs to viruses that cause crashes or

destroy valuable software or program files.

Our station also was interested in leveraging the office and media-related applications that Apple offered.

Email; interoffice communication, from sharing chats to appointments; Web publishing; creating and distributing station publicity or programming with others outside through social media — all of these activities and more were available in every computer Apple offered. And when networked with a Mac server, these resources could be available in the office, in the field or on the road using portable devices in the Apple family.

MAC SOLUTIONS

For the broadcaster, though, one important element was missing from the Mac system: broadcast software to operate station programming.

Radiologik DJ and Scheduler are made by MacinMind Software, one of the few Mac-based software providers specifically for radio.

After downloading the demo version, checking out the features and talking with developer Jay Lichtenauer of MacinMind Software, we were

(continued on page 32)

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World Radio History

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World Radio History

RADIOLOGIK

(continued from page 30)

convinced that Radiologik DJ and Scheduler could handle all of the radio operations that we required. Whether live-assist or full automation, the software provided the all-important playback of our Christian music, teaching and information format for our two stations and web stream in a seamless stream of audio through DJ.

Playback is commanded through the Scheduler software package. While there's a bit of a learning curve, mainly to get accustomed to some of the terminology, the software is intuitive. When interpretation or explanation is needed, the software manual and how-to videos produced by Jay are available to guide us. If we are really stuck, Jay has been quick to answer email to provide tech support or speak personally on the phone.

Radiologik relies on iTunes as the basis for storing program material. It's an application with which many in and outside radio are familiar. Some additional features in DJ and Scheduler allow you to fine-tune the audio quickly and efficiently.

Having used broadcast automation systems and software since 1983, we have found Radiologik DJ and Scheduler to be the best choice by far.

For information, contact Jay Lichtenauer at MacinMind Software in Illinois at (847) 603-8865 or visit www.macinmind.com.

TECHUPDATES

AUDIOVAULT FLEX 10.10 NOTED FOR OPERATING EASE

Version 10.10 of Broadcast Electronics' AudioVault FleX began making its way into studios this year and has several upgrades that the company feels will make a difference in everyday studio operation.

For example, BE has moved the voice tracker module to the user interface screen and combined it with a segue editor so it's easier to lay down a track and edit in multiple voicetrack transitions. In addition to a single-track editor built into the on-air screen and advanced segue editor with audio gain envelope for tricky program transitions, AudioVault FleX 10.10 upgrades include true "live" mode for on-air announcer spontaneity, tabbed gadget docks for navigating expanding radio operations and click-and-drag file marker for creating continuous audio loops or hooks leading into a break. The new version has new screen layouts that can be personalized and preset for greater workflow flexibility.

With its IP audio networking and studio synchronization features, broadcasters have the ability to access music anywhere in the network quickly, syndicate shows individualized by affiliate and collaborate with talent across a cluster.

The AudioVault platform has tools for creating, scheduling and delivering content. BE says it can be configured for any size operation, from a single station to a multi-site network.

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

PRISTINE LAUNCHES CONTROL ROOM-7

Pristine Systems Corp. has announced the launch of its fourth-gen radio playout and automation system, Control Room-7.

According to the company, CR-7 puts to work recent advancements in multicore computer processing, the Internet and Window 7 Professional. Pristine calls the system feature-rich, robust, fault-tolerant and easy to use.

For music on hard drive, Control Room-7 offers flexibility in a live-assist environment as well as walk-away capability.

Features include local and remote voice-tracking, time delay newscast insertion, automatic time and temperature announcement and current temperature and conditions display. Also: 42 hotkey players with multiple groups, continuous "Now Playing" website and RDS text, HD Radio and streaming server updates, "Off Air" alerts via text messaging and email, and six simultaneous players/two simultaneous recorders. Popular music schedulers and traffic systems are supported.

For use with satellite automation, add schedulable 24 liner decks, multiple audio switchers, TTL, RS-232 and TCP/IP device control, time delay satellite programs and time scaling so spot sets fit network allocations.

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

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Mediatron says its Radiocube is an automation solution for smaller stations, LPFMs and Internet operations.

The Radiocube OnAir and Radiocube OnAir XS are easy to install, maintain and understand. The line supports major audio file formats and third-party DirectX plug-ins. Radiocube provides logging functions and imports playlists from major third-party automation systems.

Radiocube products can be downloaded from *www.radiocube.com* as a fully functional demo version or the licensed version for immediate use.

The separate Cart Machine package is available for newsrooms or any other workplace that needs a playout module. Cart Machine is compatible with Radiocube and allows drag & drop between the two. Sixteen Cart Machine players can be operated at one time. The package is compatible with major audio file formats and supports DirectX plug-ins.

For information, contact mediatron in Germany at 011-49-89-35895670 or visit www.radiocube.com.

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TECHUPDATES

POWERGOLD RAMPS UP MODULAR COMPATIBILITY

Powergold Music Scheduling Software has introduced Modular Compatibility, a resource feature that the company says allows tight interfacing with any automation playback system and traffic system.

"We believe radio stations are becoming more hesitant in purchasing expensive 'turnkey' systems, which include a complete package of music scheduling, automation and traffic from a single company," said Powergold Chief Technology Officer Lance Olvey.

He said stations are "moving the modular way by reviewing each component from different companies separately" and choosing the best individual parts.

Powergold sees Modular Compatibility as a money-saving opportunity for radio organizations because stations can now go to the radio supermarket and browse through numerous automation playback and traffic systems, picking individual products the station wants. Powergold's Modular Compatibility will assure a compatible interface.

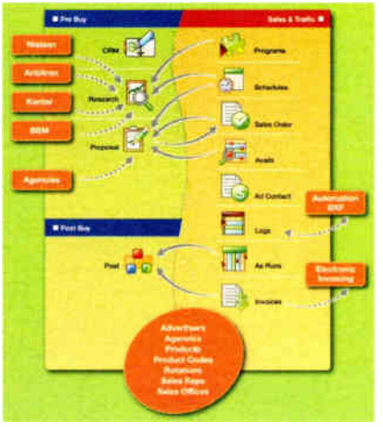
That means a user can create a daily music schedule using Powergold, import traffic from any system into a Powergold schedule and create one combined music and traffic file to import into any automation system. Through Modular Compatibility technology, changes made throughout the day in the automation system are fed back into Powergold to reconcile what happened.

Later, if a station decides for example that it wants to change to a different traffic system, Modular Compatibility means the user presses a couple of buttons, and the interface to the new traffic system is complete. The same applies to automation systems.

For information, contact Powergold Music Scheduling at (800) 870-0033 or visit www.powergold.com.

BROADVIEW ONESOLUTION INTEGRATES MEDIAOFFICE

BroadView Software's OneSolution is a traffic, sales and programming suite for radio management. Software-



based functions for media management, such as research, sales proposals and traffic, are available in an integrated toolkit.

OneSolution has added research, sales proposal and post tools powered by OneDomain's MediaOffice package.

The integration of BroadView's traffic and programming with MediaOffice means approved sales proposals become sales orders in traffic without straddling two software packages. The company says this simplifies workflow, saves staff time and reduces errors; it also eliminates software management issues inherent to running multiple systems in tandem, such as ensuring qualification between different software versions.

Reporting capabilities to suit individual requirements can be created.

For information, contact BroadView Software in Ontario at (416) 778-0623 or visit www.broadviewsoftware.com.

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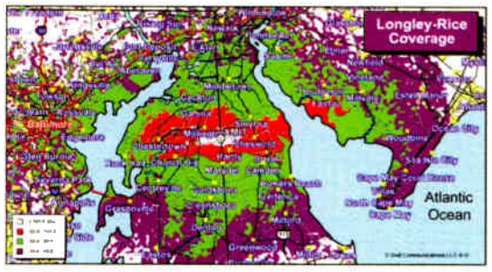

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Equipment Wanted: obsolete, or out of service broadcast and recording gear, amplifiers, processing, radio or mixing consoles, microphones, etc. Large lots preferred. Pickup or shipping can be discussed. 443-854-0725 or ajkivi@gmail.com.

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 SanFrancisco 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 Andy Potter, running time is 0:22 & also the KLX kitchen the program guest is Susanne Caygill, a discussion of women's affairs with a long promotion for Caygill's appearance at a local store. Anne Truax, Susanne Caygill, running time is 13:44. Ron, 925-284-5428 or email ronwtamm@yahoo.com.

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Broadcasting Is There When You Need It

In Emergencies, NAB Says, 'One-to-Many' Is More Robust Than 'One-to-One'

The National Association of Broadcasters submitted comments this summer to the Federal Communications Commission as part of an FCC study of the reliability of communications networks during emergencies. Here are excerpts, as submitted by NAB executives Jane E. Mago, Jerianne Timmerman and Scott A. Goodwin.

The "one-to-many" broadcast architecture is more robust than the "one-to-one" broadband architecture for delivery of critical information during emergencies.

Because of the differences in their network architecture, even with additional reliability enhancements, wireless networks are simply not as durable as broadcasting during emergencies. The architecture of cellular network technology — a one-to-one, node-based structure — is ideally suited for interactive communications, but lacks robustness under heavy usage, which typically occurs in emergency situations. Broadcasting's one-to-many architecture, in contrast, cannot be overwhelmed by increased usage.

When Hurricane Katrina made landfall on Aug. 29, 2005, cellular infrastructure in New Orleans was devastated. The few cellular towers that survived were overloaded by residents attempting to make phone calls. When phone networks failed and residents of New Orleans were cut off from the rest of the world, they "huddled around battery-operated devices, seeking comfort and news from the on-air voices."

The 'one-to-many' broadcast architecture is more robust than the 'one-to-one' broadband architecture for delivery of critical information during emergencies.

During the crisis that followed in the aftermath of Hurricane Katrina, several radio stations were able to continue broadcasting. While New Orleans was flooded and residents had no source of information or connection to the outside world, 15 radio broadcasters banded together and began transmitting news and information 24 hours a day from a station in Baton Rouge.

Similarly, in the hours and days following the recent devastating tornado in Joplin, Mo., "[t]elephone lines were down" and "[c]ell phones didn't work." In sharp contrast, local radio stations were able to continue broadcasting without interruption. Several radio stations began broadcasting emergency information 24 hours a day while simultaneously allowing residents to send out personal messages in search of loved ones.

The point-to-point architecture of wireless broadband networks essentially means that each user has his or her own path in the cellular network. This type of design allows two people standing next to each other using the same type of device and operating on the same wireless network to access totally different types of information. The first person can be watching a video and the second person can be looking up directions to the closest Chinese restaurant.

But, if those two people and hundreds or thousands of other people near them are trying to access the same information at the same time — like they may well during an emergency — the wireless network will quickly be overwhelmed. And, no amount of additional spectrum or other redundancy can overcome this issue.

Mobile device connections begin with a link between a user's mobile device and a base station (often a cell tower). These base stations cover a certain geographic area and receive all data transmitted from mobile phones within that geographic area. The base station then transmits the data (in the wireless broadband context, this data is often a small packet requesting data be sent to the mobile phone) to a mobile switching center. The mobile switching center connects the data to a transmission network where the data is sent to its final destination. The data requested by the user is then sent through the same transmission network and back through the mobile switching center. From there, the data is sent to a base station that transmits the data to the individual's mobile phone.

With this unicast design, a base station needs to send data to every mobile phone individually, even if those phones are accessing the same data (as they would during an emergency). This creates a serious risk of overloading the cell network when too many people attempt to access the network at the same time.

In contrast, television and radio broadcasting creates one or just a few data streams and transmits that data over a specific geographic area using a high-powered transmitter.

This data can be received by anyone who has a receiver located within the transmission range of that broadcaster.

(continued on page 38)

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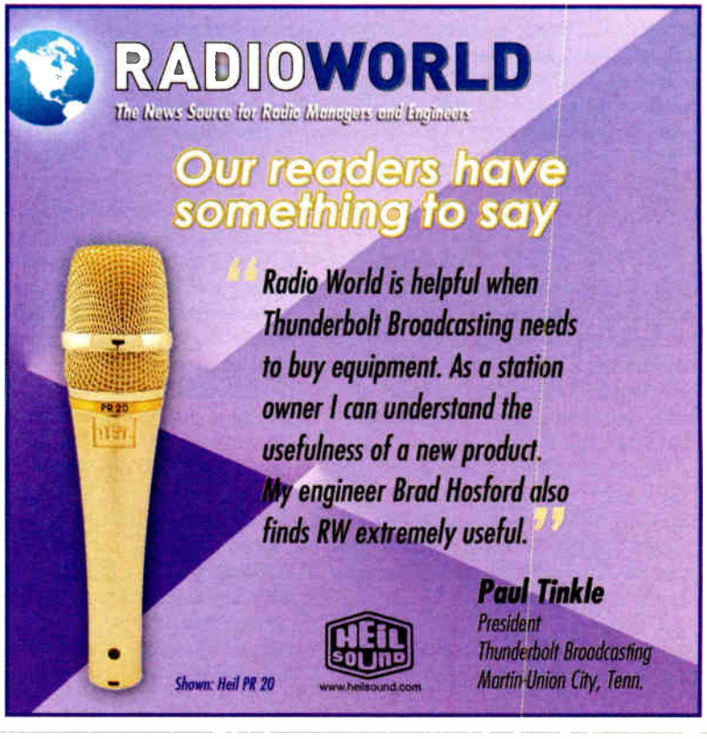

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READER'S FORUM

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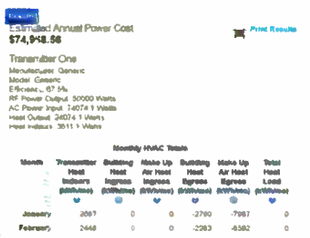

The transmitter efficiency calculator is amazingly accurate ("This Calculator Is Cool Stuff," June 1).

I entered the measured transmitter efficiencies for WQYK(AM) in Tampa, and selected the commercial power rate. It was within 1 percent of the monthly electric bill.

This calculator is a winner!

Dr. Frank Berry
Tampa Bay, Fla.

DON'T FORGET THE LIGHTS

Good program, but they left out tower lights, the second-largest energy consumer. That is a significant oversight, and requires additional calculations to determine total energy consumption and cost.

Mike Vanhooser
Nova Electronics
Dallas

FM NOISE

I could not agree more with Steve Johnston ("Johnston Laments FM Noise," June 15).

I regularly connect a spectrum analyzer to OTA TV or FM antennas and witness enormous RFI. When the trigger is set to "Internal," the noise peaks appear to be random. But if you set the trigger to "Line," you'll instantly see noise peaks sync up at about 8.3 ms time intervals, or 1/120 Hz. That is, the noise is synchronous with 60 Hz, perhaps associated with zero crossings.

Forty years ago the FCC protected the broadcast spectrum with a pretty heavy hand. But what's evolved over time are a plethora of external switching power supplies ("wall warts"), imported and domestic, and numerous other AC powered devices that seem to be substantially unregulated, much less policed.

So while I agree with Mr. Johnston's conclusion that better control of RF noise is needed by the manufacturing industry, I lament that there's probably little motivation for them to do that. Competitive pricing pressures encourage shortcuts, and often the EEs who contribute designs to production are inexperienced and unaware.

What is needed are more rigorous requirements for compliance testing.

Tom Ballister
RF/Audio Consultant
Truckee, Calif.

THIS PROCESS HAS NO PURPOSE

What do low-power FM radio, FM translators, FM boosters, noncommercial educational FM radio, AM radio and television all have in common?

When filing an application for a proposed station, a licensee in each of these services need only demonstrate that its transmitter and antenna location(s) do not interfere with the signal contours of neighboring stations. This policy is easy to understand and makes perfect sense.

This is not so in the commercial FM world. Licensees of commercial FM facilities alone must also provide a second, hypothetical FM allotment site to the FCC before a minor modification application may be granted. This second, hypothetical allotment site often is located quite far from the intended antenna location, and is afforded no protection in the FCC's FM database against competing applications.

Using the FCC's own standard contour prediction methodology, a licensee may file a proposal that does not interfere with any other station, yet if a fully spaced allotment site is not specified, the application will be dismissed. A fully spaced allotment site may not technically exist, even though the proposal provides no predicted interference. No matter; the licensee has almost certainly thrown away $940 in FCC application fees.

The FCC must eliminate the continued requirement of a hypothetical allotment site. There are thousands of lower-class commercial FM radio stations that could upgrade to a higher power level were it not for this senseless rule, which is only applicable to the commercial FM service.

SSR Communications Inc. recently filed a petition for rulemaking with the FCC to end this purposeless process. Several similar proposals have been ignored by the commission in the past. Today, however, broadcasters need every possible advantage to compete and stay relevant in the modern arena of content delivery. The time is right for the FCC to move on this proposal.

Matthew Wesolowski
SSR Communications Inc.
WYAB(FM)
Jackson, Miss.

NAB

(continued from page 37)

Since there is no uplink or return path in the broadcasting model, no stress is put on broadcasting network. Therefore, a broadcaster's data stream will continue, uninterrupted, regardless of how many individuals decide to view or listen to the broadcast.

Because of this ability to blanket "an unlimited number of users with the same information" simultaneously, without delays or "clogs," it has even been observed that "homeland security depends on broadcast."

We note that, theoretically, a cellular network provider could build a system capable of handling the increased cellular and broadband traffic that accompanies emergency situations. Building thousands of extra base stations, mobile switching centers and other excessive redundancies could be sufficient to handle extreme spikes in data requests.

However, it is simply not realistic, as a financial or practical matter. According to Heidi Flato, a spokesperson for Verizon Wireless in Northern California, it is not practical to build a cellular network for emergency situations. "To build for that sort of need, for that sort of circumstance, it's like building a second [San Francisco] Bay Bridge just in case the first one falls down," she said. Consequently, wireless services, including broadband, will likely remain a supplement to, and not a replacement for, broadcasting during emergencies.

NAB went on to recommend that the FCC support efforts to include broadcast chips in mobile phones; consider the impact of spectrum reallocations on the dissemination of information during emergencies; and support efforts to recognize broadcasters as "first informers" through programs like state and local credentialing, so that during emergencies, station staff can access their facilities and receive priority access to essential supplies like fuel.

Read the full comments including footnote references at http://tinyurl.com/rwnab2.

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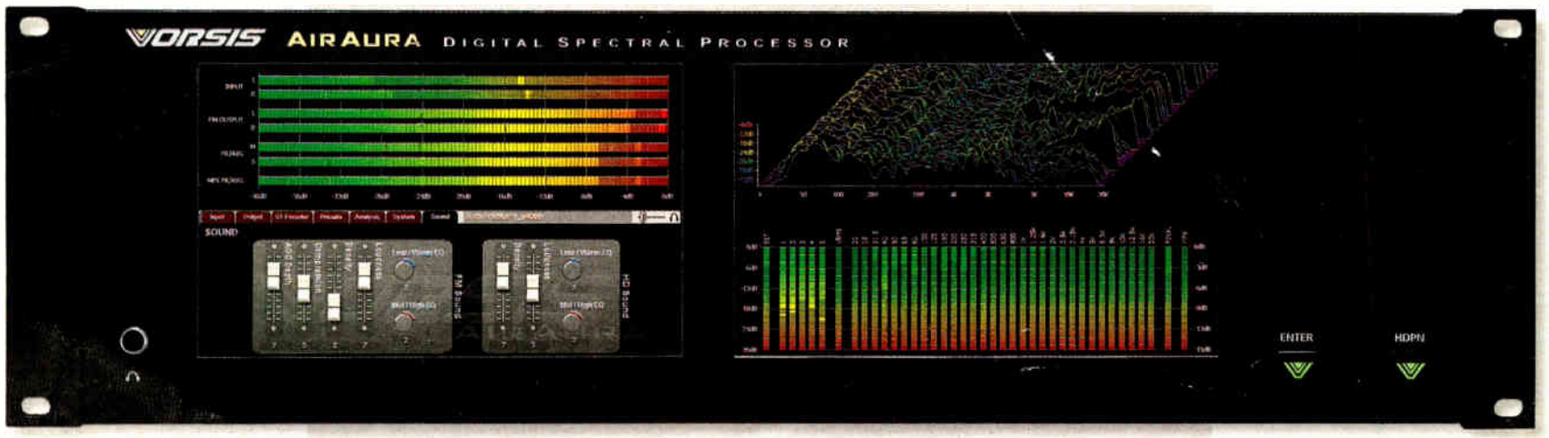

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