



### Keepers of Radio's Soul

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# Radio World

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The Newspaper for Radio Managers and Engineers

October 10, 2007

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NewBay Media The Leslie Report: Insider news about the radio industry. Sign up at radioworld.com

## HD Radio, Meet the iPod

Tagging Garners Attention; Polk, JBL Radios Combine Radio and iTunes

by Leslie Stimson

IBOC proponents say merging HD Radio with iPod technology makes HD-R "cool."

It's a state they hope translates into return on investment for stations and carves a path for the digital radio technology to be included in other mobile, portable music players and digital devices.

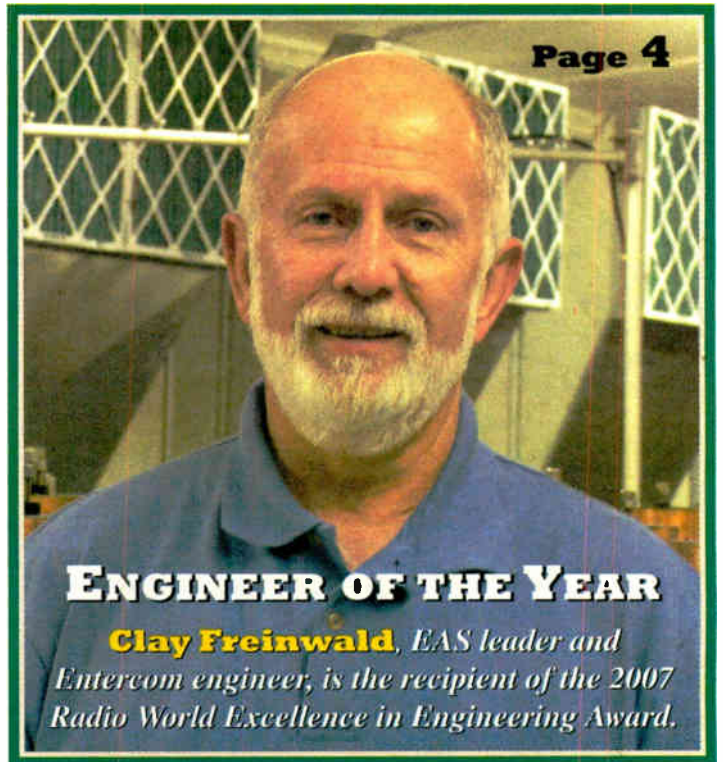
An HD Radio chip that can be integrated into an iPod has yet to develop. But the two worlds came closer together in September when Apple said it is enabling tagging for iTunes on certain new HD Radio receivers that also feature iPod docks.

Polk and JBL stepped forward with radios that incorporate the feature, and radio's largest group committed to implementing the tagging of content. More were expected to do so at the NAB Radio Show.

The news introduced a relatively new concept to the vernacular of digital radio proponents: tagging. Apple sees HD-R-enabled tagging as a feature that makes iTunes purchases easier for customers. The company has sold more than 100 million iPods, according to CNN Money.

Ibiquity Digital and the HD Digital Radio Alliance say giving consumers the ability to tag their Apple iTunes for later purchase using HD Radio will lead to products for automotive use in 2008. Asked about this, Apple declined comment, saying it doesn't discuss future products.

Apple is the first such HD Radio deal for music purchasing. See TAGGING, page 8 ▶



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### ENGINEER OF THE YEAR

Clay Freinwald, EAS leader and Entercom engineer, is the recipient of the 2007 Radio World Excellence in Engineering Award.

## NOTAM Changes Worry Engineers

by Randy J. Stine

WASHINGTON A move by the Federal Aviation Administration to privatize its Flight Service Stations has generated concern among some broadcasters about the competence of the contractor hired to collect and disseminate See NOTAM, page 3 ▶

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◆ NEWS WATCH ◆

## Content Delivery No Longer Just Broadcasters

**AMSTERDAM** “Broadcasters no longer enjoy a monopoly on content delivery,” said CEA President/CEO Gary Shapiro in a keynote address at the IBC2007 Conference in September.

“Ears and eyes once devoted exclusively to broadcasters are now being drawn in by new forms of content and new methods of delivery.”

In growing numbers, consumers are

purchasing the tools they need for “anytime, anywhere” access to information and entertainment. Shapiro told broadcasters they could share in a bright future if they can learn to anticipate consumer demand, adapt quickly and take advantage of their existing assets.

## WiFi, WiMax to Hurt Car Radio

**GLENDAL, Calif.** Close to 10 years after WiFi and WiMax technologies are available, in-car, traditional and satellite radio listening will take significant hits in

listening.

That’s according to Bridge Ratings, whose study projects the growth of WiFi in-car should reach more than 50 percent of the U.S. population after nine years of market availability.

The number of Internet radio listeners accessing wirelessly will grow to 77 million by 2010 as wireless technology penetrates the average U.S. lifestyle, according to Bridge.

Wireless Internet use in-car faces hurdles based on WiMax technology development, how quickly auto manufacturers are able to equip new cars and what type of early adopter consumer will want the technology.

In its study of 2,200 persons 16+, Bridge asked early adopters how likely they would be to buy a car or equip a current vehicle with a wireless Internet device.

By year five of in-car WiFi acceptance, traditional radio can expect to see the amount of time spent listening to fall below 19 hours a week; by year eight — when Bridge projects that more than 23 percent of the U.S. public will have adopted wireless Internet technology in-car — weekly time spent listening to traditional radio will fall below 18 hours per week.

## Sat Drop Precipitous?

Satellite radio listening will drop even more than that of traditional once wireless Internet is entrenched in the car, Bridge (see above) projects.

This study, as well as previous Bridge research conducted for the satellite radio industry, show that satellite subscribers consumer satellite radio at a far greater weekly rate than do listeners to traditional radio.

According to Bridge, satellite radio should experience a more severe drop-off in weekly time-spent-listening due to the variety of programming available on Internet radio and the lack of comparable subscription expense.

## News Roundup

**NPR AND WGBH** in Boston made an offer to acquire National Public Broadcasting, a sponsorship representative for public radio and TV stations. The entity would seek national underwriting for 120 radio and 60 TV stations, as well as all NPR programming, some PBS shows and

See NEWSWATCH, page 6 ▶



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# NOTAM

► Continued from page 1  
"Notice to Airmen" reports.

NOTAMs are filed when broadcasters discover that towers are not properly lit because a light or lights have gone out. A broadcaster is required to contact the FAA of an outage and again when the problem has been corrected.

Privatization may be saving the government money but it has led to complaints from broadcasters. Issues include the timeliness of NOTAMs appearing in general aviation pilot briefings and lack of communication regarding the use of a new nationwide toll-free telephone number to report obstruction lighting outages, according to engineers contacted for this article.

The FAA contracted with Lockheed Martin in 2005 to provide services offered by the agency's automated flight service station (AFSS) system. FAA spokesman Paul Takemoto acknowledged that some concerns have been raised since Lockheed Martin began an aggressive schedule of facility consolidations this summer.

The company "has had problems ramping up as they consolidate the 58 Field Service Stations down to 17 with three main hubs," he said. "Anytime you have a major consolidation going on you can expect a few problems. There have been some wait time issues. We believe




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Lockheed Martin has addressed many of those issues and improved upon them."

The three AFSS hubs are in Washington; Ft. Worth, Texas; and Prescott, Ariz.

Lockheed Martin issued the following statement from its Seattle AFSS office in August: "We acknowledge that our tran-

smission of NOTAMs, which could cause pilots to have inaccurate information after filing their flight plans. The obvious danger is the increased risk of an aircraft colliding with an unlit tower, they say.

Other engineers worry that the new system could be overloaded as a result of inclement weather or emergencies.

**The consolidation has resulted in the FAA using a single, nationwide phone number for broadcasters to call to report outages.**

sition from the FAA to Lockheed Martin has caused some frustration among our customers. We are diligently working to resolve issues that have caused inconveniences."

### Complaints

Nevertheless, the closure of the AFSS offices has spurred complaints among several broadcast engineers.

Some have complained about local AFSS offices shutting down without any notification. Others are concerned about delays in the dissemination and cancella-

tion of NOTAMs, which could cause pilots to have inaccurate information after filing their flight plans. The obvious danger is the increased risk of an aircraft colliding with an unlit tower, they say.

Lowell Kiesow, chief engineer for three non-commercial stations in Tacoma, Wash., said of the FSS outsourcing, "It is worse than the government, it's a government contractor!"

The consolidation has resulted in the FAA using a single, nationwide phone number for broadcasters to call to report outages. Broadcasters' calls are now directed to one of the three Lockheed Martin hubs instead of local field offices.

"I miss the localism when we were reporting to folks who knew the area," said Bill Croghan, chief engineer for

Lotus Broadcasting in Las Vegas. "Even though my reporting AFSS was in Reno, they had at least some idea of the Las Vegas area airports. However, I'm all for privatization if it results in a more efficient service at a savings to taxpayers."

The outsourcing is expected to save the government money. According to the FAA, the total evaluated cost of the Lockheed Martin contract — five years plus five option years — is \$1.9 billion, with estimated savings of \$2.2 billion over 10 years.

Some broadcast engineers worry that the consolidation is driven by cost-cutting rather than by efficiency, which will de-emphasize what is regarded by many as an important service.

Larry Estlack, director of technology for the Michigan Association of Broadcasters, said broadcast engineers in his state understand the importance of the NOTAMs being handled properly.

"They know the importance of flight safety and feel uncomfortable with the new system," Estlack said.

Estlack said he only became familiar with the NOTAM changes "after an engineer called me to say the phone number he calls for tower light outages had been disconnected."

See NOTAM, page 5 ►

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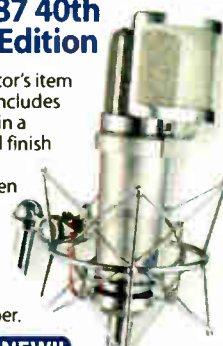


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FROM THE EDITOR

# This Is Not a Test: Freinwald Honored

When broadcast leaders recently realized they needed to meet with regulatory and weather officials to plan changes in the Emergency Alert System, it was Clay Freinwald who arranged the meeting.

That typifies the role he has played as radio has participated in, and helped define, the nation's evolving alert infrastructure.

Clay Freinwald is the recipient of Radio World's 2007 "Excellence in Engineering" Award.

## Mountain cats

His interest in technology came early, with a fascination with ham radio, and taking apart radios, TV sets and alarm clocks. Through the electronics program at his Seattle-area high school he got a hands-on education in engineering and production that led to a full-time job as a combo engineering/on-air man at a 1 kW AM directional.

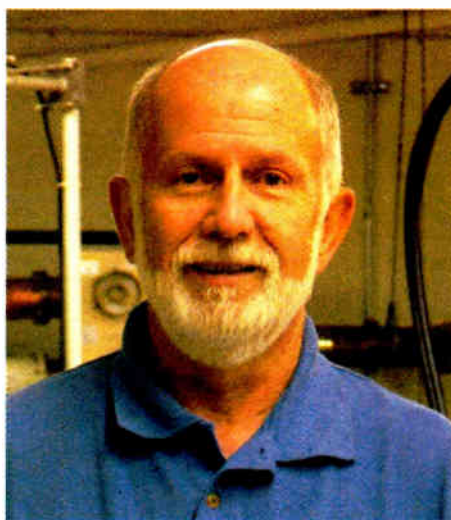
In 1966, he fielded separate offers to work as a chief and as a country jock. He credits Chuck Ellsworth with the advice that made up his mind: "Programming is a revolving door. You have a lot of technical talent, Clay. Capitalize on that."

Soon after, he noticed that KMO(AM) in Tacoma was having a problem and dropped in to help, launching a long relationship with that station. He has worked as a chief, cluster or corporate engineer under several owners including Tribune Publishing, Viacom and Entercom, helping move stations from Tacoma to Seattle and building transmitter sites and studios.

He was a cluster DOE for Entercom, then spent six years as a corporate engineer, traveling extensively and implementing HD Radio in numerous markets.

After recent changes in Entercom's structure, Freinwald now is an RF systems engineer, a suitable role for a man who built major facilities at Tiger Mountain and Cougar Mountain, not to mention a 50 kW, four-tower directional AM — "some good, seven-figure projects."

Tiger is home to eight FM main transmitters and an ERI combiner, and the facility has been adapted to accommodate



Clay Freinwald at Entercom's Seattle Cougar Mountain facility.

HD Radio; Cougar has eight standbys and one main, as well as an eight-station Shively combiner, and there too stations are looking to digital.

"The time is coming when we'll have to have backup HD facilities. We've had a couple of cases where we had to shut-down the HDs on a Sunday morning." Programmers have made clear that's not an option. Freinwald also does contract work for clients such as KING(FM) and Bustos Media.

## Vision for EAS

He has worked for four decades in the same market. If you don't live in Seattle yet you know his name, it's probably because of EAS.

The work is volunteer. At KMO he became involved as assistant state EBS chair; soon John Price, coauthor of an SBE primer on the new EAS, took him to lunch and did some serious arm-twisting. Freinwald agreed to become state chair and formed the State Emergency Communications Committee in 1996 to write and implement an EAS plan.

"I took EAS in quite a different direction than most states; we were not going to repeat the very things that made EAS

so subject to criticism. We built a state relay network based on mountaintop VHF transmitters; but we don't have daisy chains or LP stations. The LP2 in Seattle is the National Weather Service, which is fully automated and integrated with EAS."

The key ingredient in Washington State's EAS plan is an active SECC that has representation from the FCC, NWS, state and local governments as well as radio and television stations. Many on the SECC have been there for more than 11 years.

Subsequently elected to the national SBE board, his committee assignment was, of course, EAS. "I started making

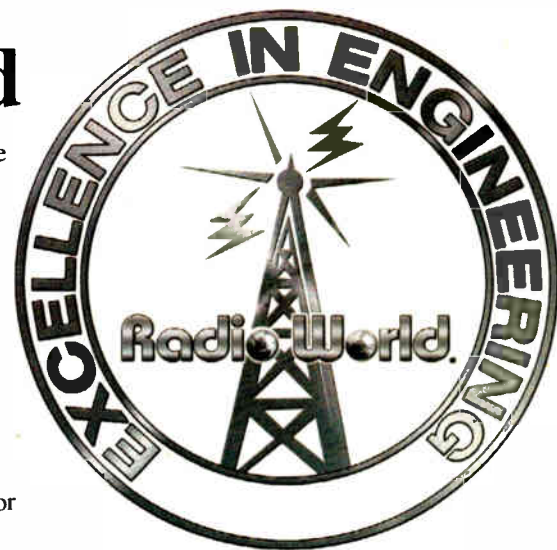
**Broadcasters are no longer the kingpin of the public warning thing; we're relegated to being another tool in the toolbox. Which is good.**

— Clay Freinwald

myself available and running around the country talking about how to make EAS more effective."

Freinwald (SBE member number 714) is completing a term as society vice president. He has chaired the national EAS committee since 2000 and was coauthor with Rudman of the society's "Vision for EAS," published last year. Freinwald said he is "fiercely proud" of colleagues on the EAS committee including Adrian Abbott, Richard Rudman, Art Botterell, Gary Timm, Alan Alsobrook and Jerry LeBow.

In 2005 SBE made one of its largest filings as part of the commission's



Further Notice of Proposed Rule Making, EB Docket 04-296. The society wrote, "EAS has reached a point where simple modifications or Band-Aid approaches are no longer applicable. The most recent [report and order] augmenting the EAS is a clear call for the application of additional technology to not only correct existing issues, but make changes in the way the systems works in order to enable the EAS to move forward and serve more U.S. citizens via an ever-growing number of electronic communication systems."

Freinwald, who worked with Dane Ericksen on the project, was delighted the FCC adopted many of the society's recommendations, including Common Alerting Protocol. The report and order, he says, demonstrated "substantial changes in the FCC's mind about how EAS should function." However, he also feels it was long on conceptualizing and short on details.

"We don't have specificity. We're working with an executive order that came out after Katrina; Part 11 of the rules; the further notice that was just released; and the General Accounting Office report on EAS, which was not exactly complimentary.

"The 'how to get it done, son' is going to come out of FEMA," he continued, but SBE leaders "are gonna do all we can to help that process." Thus he was asked to bring together SBE, NAB and the National Alliance of State Broadcasters

See FREINWALD, page 14 ▶

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GUEST COMMENTARY

# AM Nighttime IBOC: Apocalypse or No?

by Cris Alexander

The next few months will be interesting as we see what the real effect of nighttime digital is.

The new terrestrial digital radio rules, which went into effect on Sept. 14, contain quite a number of provisions, most of them operational in nature, but one of the provisions — AM nighttime digital authorization — is the one that seems to have the attention of a great many in our industry. Most of you have no doubt followed the arguments for and against in the trade press and online message boards.

Two distinct camps have emerged in the months since the rules were first enacted. The “pro” group ... maintains that the platform is effective and causes little or no additional interference.

The other group, the one that opposes AM nighttime digital operation, insists that AM nighttime digital transmission will be the undoing of the AM band. They seem to believe that massive amounts of interference will be caused, wiping out the nighttime coverage areas of many stations, especially smaller stations.

It has been interesting following some of the rhetoric. I saw one prediction that the night limit of WJR(AM), Detroit would be raised to something like 14 mV/m from the interference caused by WABC(AM), New York.

## WYSL, WBZ

Some time ago, I had an e-mail dialogue with the manager of WYSL(AM), Avon, N.Y. who was concerned that his nighttime coverage would be wiped out by adjacent-channel WBZ(AM), Boston, when the nighttime digital prohibition was lifted. This station, WYSL, was used as an example in one of the recent argument rounds.

As with most issues, the truth lies somewhere in between the two extremes, but I believe it is much closer to what the pro camp believes.

I've done some study on the issue and

made some calculations and found that in most cases, the night limit is not raised at all by the addition of adjacent-channel digital carriers.

Take the WYSL example. The station operates with 500 watts night on 1040 kHz, a U.S. clear channel. Its four-tower directional pattern puts a main lobe north toward Rochester. The station has a 50 percent RSS night limit of 13.87 mV/m with that limit entirely set by co-channel Class A station WHO(AM), Des Moines, Iowa.

WBZ operates with 50 kW on 1030 kHz, first adjacent to the WYSL frequency. That means that the WBZ's digital carriers will be right in the audio passband of WYSL. I ran the numbers and found that WBZ currently produces a night limit of 6.25 mV/m at the WYSL site. RSS in the -28 dBc upper digital carriers as a co-channel signal and WBZ's contribution at the WYSL site becomes 6.727 mV/m, a 7.6 percent increase.

But because 6.727 is still less than 50 percent of the WHO limit of 13.87, it does not raise the limit. It does, however, increase the interference level slightly. But is it enough to make a real difference? I don't think so. The WYSL example is typical of what you'll find on the AM band. In most cases, the added interference from the -28 dBc digital signals of adjacent-channel stations is a drop in the bucket compared to the existing interference from co-channel stations.

There will certainly be exceptions. It seems to me that the skywave service areas of the Class A stations will be considerably eroded. Those contours are not protected from adjacent-channel interference, and there are typically many first-adjacent channels within and around the

contour.



Cris Alexander

When those stations fire up their digital carriers, the interference they produce will appear as co-channel interference to the already weak skywave signals, making them impossible to listen to in many locations.

Some might argue that this has been the case for a long time now anyway. I would tend to agree.

Now some in the naysayer camp maintain that you must consider *all* the digital carriers individually to determine the total interference produced.

While there is some merit to this argument, using that same logic we really should consider all the sideband energy in the analog signal to determine the interference to adjacent-channel stations. We don't do that and never have, however, because it isn't necessary.

## Getting to the truth

I mentioned WJR above. I ran the numbers and came up with something like 1.1 mV/m. That's nowhere near 14 mV/m, but it is more than twice the current 0.5 mV/m “limit” for WJR and it does represent real interference.

But the truth is that the WJR 0.5 mV/m skywave contour is not listenable in most urban locations anyway because of atmospheric and manmade electrical noise, plus interference from adjacent channel stations. So again, the truth is somewhere in between the two extremes.

In addition to the simple mathematics of the situation as illustrated above, the reality is that there are very few stations ready to go on the air with nighttime digital signals.

There are less than 250 AM stations currently transmitting digital signals. Some of those are daytimers. Those stations won't be firing up digital signals at night.

Of the rest, many have different day and night antenna systems. A good number of those night antennas are not ready for digital operation. My guess is that less than half will be on the air with digital signals as you read this.

If the percentage of the AM stations within our own company that are ready for nighttime digital operation holds true across the board, about 90 stations will be transmitting digital signals — a small enough number that we can evaluate the effect of the added interference.

As nighttime digital proceeds and when we have more data, if we have to alter the game plan a bit we will.

*The author, an RW contributor, writes here in his role of director of engineering for Crawford Broadcasting. This is excerpted from the September issue of "The Local Oscillator," its corporate engineering newsletter.*

*RW welcomes other points of view.*

# NOTAM

Continued from page 3

“As soon as I found out I sent an e-mail to every station in the state notifying them of the change,” Estlack said.

Estlack said he and other broadcast engineers want to make sure that pilots “have the information they need to fly safely.”

Clear Channel Radio issued an advisory to its engineering staff of the NOTAM filing changes, said Michael Golchert, AM field engineer for Clear Channel.

“The information we passed along was based on generally less-than-stellar experiences with outsourced call centers in the past whose employees do not grasp the seriousness of the information that they are receiving,” Golchert said.

“Part of our frustration may well be because many of our engineers had a personal connection with the local Flight Service Station that closed.”

The FAA did not reply to questions regarding the lack of communication with broadcasters in regards to the telephone number change for reporting NOTAMs.

“The FAA nationally did not, to my knowledge, provide any information to broadcasters that the change was happening,” Golchert said. “My understanding is that the FAA in Washington left the dissemination of the new procedure to the local FSS, and that is where the information stopped.”

Clear Channel's memo reminds its broadcast engineers to note the date, time and initials of the person taking the information for the NOTAM.

The FAA's nationwide phone number to log all tower light and obstruction system malfunctions and outages is (877) 487-6867.

According to a report in CGC Communicator, testing showed the phone tree was unreliable on Sept. 17 and 18.

The FAA issued a press release in August that establishes a “Flight Service Station Feedback Line” with a toll-free telephone line number for pilots and others to post comment on services they receive from Lockheed Martin flight service facilities. It said customer feedback will be gathered to “ensure that the flight service stations operated by Lockheed Martin meet agency standards.”

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# NewsWatch

► Continued from page 2

local station Web sites. Combining NPB with NPR's corporate sponsorship division, NPR and WGBH will form a non-profit to represent sponsorship across all media for public broadcasting.

**DISASTER SYSTEM:** The FCC's Public Safety and Homeland Security Bureau launched a re-designed version of a voluntary, Web-based disaster reporting system. Communications companies including broadcasting, wireline, wireless and cable can use the system to report infrastructure status and other information during a crisis. The FCC said this would help streamline reporting and enable providers to

share network status information with the FCC. Information will be treated as confidential for security reasons and protected from public release.

**IBIQUITY** President/CEO Robert Struble predicts HD Radio products will retail in the \$149 to \$179 range this holiday season compared to around \$299 at the same time last year. Also, the technology developer is working to reduce its receiver chip size and bring power consumption down in order to get HD-R into other, portable, devices. It hopes to have that chip ready early next year.

**MICHAEL COONEY** came on board as vice president/chief technology officer for the 44-station Beasley Broadcast Group. He replaces Bob DuMuth, who had been with the broadcaster for a

decade. He comes from Entercom's Kansas City cluster, where he served as DOE/IT for eight years.

**CHAIRMAN MARTIN** said the FCC is targeting Q4 for a decision on the merger of the satellite companies. In September, Bloomberg reported, the chairman said the agency was trying to meet its target of reviewing mergers within 180 days. If that timeframe holds, the commission would finish its review in December. The Justice Department is also reviewing it.

**MERGER?:** Bank of America Securities analyst Jonathan Jacoby downplayed the prospects of the XM/Sirius merger, saying in a September note to clients that its Washington contacts believe its approval chances are 30 percent or less because the arguments were "weak." He noted

that NAB argues an existing rule just can't be waived "if the result would be to destroy the rule." NAB also has added an argument that a broader audio definition should allow for elimination of local radio ownership caps.

**SAY NO:** The Black Leadership Forum opposed the satellite merger. Executive Director/CEO Gary Flowers said opportunity for African American contractors and consumers "has long been negatively impacted by large corporate mergers of American business." The merger "is no less onerous, as it [tramples] on the American ideal that Black people should have affordable options in the marketplace and be protected from the menace of marginalization, regardless of their race or resources."

**MARK FOWLER**, who was FCC chairman when Ronald Reagan was president, supports the proposed satellite radio merger. In an opinion piece in the New York Sun, Fowler wrote that in 1981, regulators were only beginning to envision the possibilities of satellite-delivered entertainment media services.

**SUPER BOWL:** A court ruling is expected within a few months in the Janet Jackson 2004 Super Bowl show indecency case. In arguments before the Third Circuit Court of Appeals in Philadelphia, attorney Robert Corn-Revere argued on behalf of CBS that the \$550,000 penalty will chill free speech. FCC attorney Eric Miller argued that the NFL had expressed concern to CBS before the incident and that the network had been warned by Jackson's choreographer that the show would contain "some shocking incidents."

**BMI:** Broadcast Music Inc. will distribute more than \$732 million in royalties collected from airplay on radio, TV and the Web for its 2006-07 fiscal year to songwriters, composers and copyright owners it represents. The figure is an 8 percent increase over the prior year.

**RADIO ONLINE:** Nearly 75 percent of all adults log onto the Internet and nearly 1 in 5 (18 percent) of online users visit a radio Web site in a month, according to The Media Audit. A profile of radio Web visitors shows that well-educated, upper-income, white-collar workers, as well as younger people, tend to be more likely to visit radio Web sites. Factors that show a high correlation for visiting radio sites are heavy radio listeners, heavy Internet users and people at work.

**NO SECRET:** A listener tried to block the license renewal for noncom KUOW(FM), Seattle, claiming the station was using its call-in talk shows "to conduct 'clandestine' focus group research" and then selling that research for profit, according to the FCC. The agency said in its decision that Howard didn't have substantial evidence to back up his claims; it denied his petition and renewed KUOW's license.

**AWARDS:** The SBE named John Lyons its Broadcast Engineer of the Year. Lyons is assistant VP and director of broadcast communications for The Durst Organization, owners and operators of the Master TV and FM site at 4 Times Square in mid-town Manhattan. He earned Radio World's Excellence in Engineering Award a year ago.



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# Tagging

► Continued from page 1

Allen Hartle, founder and chief technology officer of Jump2Go, which makes software that synchronizes HD-R programming with iTunes tagging, predicts similar deals with other music providers and device makers.

## Preview, buy, download

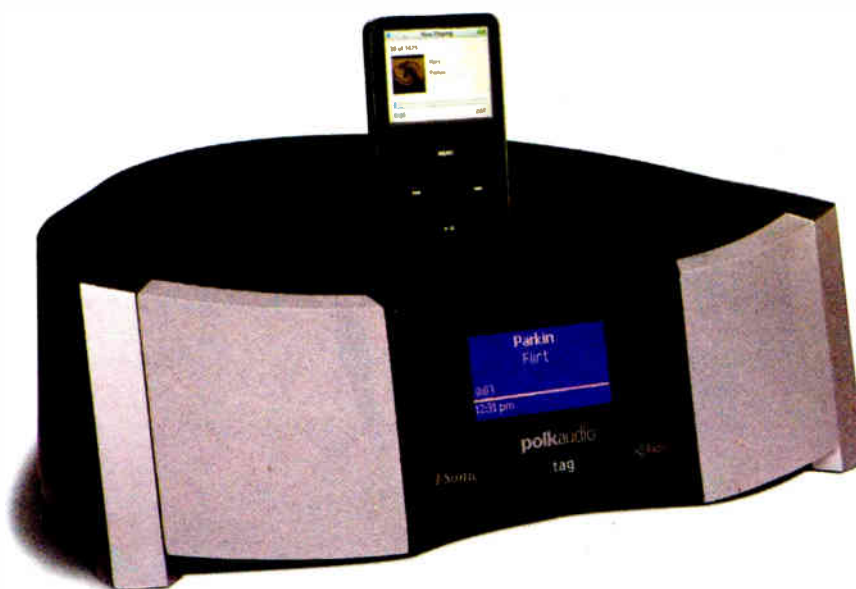
How does tagging for Apple iTunes work?

A “tag” is a label identifying a song using a proprietary code; in this case the code is for Apple iTunes, but IBOC proponents say stations can use other codes for music purchases from other companies in the future.

The identifying code or label is carried in the data bit stream of an HD-R station signal. A tagging-enabled HD Radio receiver stores information about tagged songs to its memory and transfers the tags to an iPod when the device is docked in the radio. When the consumer connects the iPod to his or her computer, iTunes automatically presents the songs in a new tagged play list for the consumer to preview, buy and download.

Tagging requires a licensing agreement with Apple. No Apple hardware is needed since the tagging occurs using the station’s automation system or data management software. In either case, the information is captured and fed to the station’s HD-R importer.

Some critics say the tagging procedure is too hard and confusing for consumers, and that it will not lead to increased sales



The new Polk iSonic with the HD Radio-enabled iPod tagging feature should be in stores this month.

of HD Radio receivers nor result in a higher OEM profile for HD-R with automakers. They view the iPod as radio’s competitor, siphoning off traditional radio listening.

The one opponent who answered a query for comment, Bob Young, a self-described ham enthusiast, stated: “I do not think anyone with an iPod will give a hoot about downloading songs from an ‘iBlock’ station, then running to their computer, etc. ... Proponents of iBlock are happy to get anything at all they can, get given the fact that no one is buying the receivers, nor are they likely to.”

Ibiquity Digital President/CEO Robert Struble counters that the process is no

different from what current iPod listeners go through to purchase a song through iTunes.

“We’ve seen those arguments ... and couldn’t disagree more.”

While some radio observers consider the iPod as a symbol of new media competition, enticing younger listeners away from traditional radio, Clear Channel Radio President/CEO John Hogan stated the opposite in the announcement, “The iPod is not a competitor to radio — it is a collaborator in connecting with consumers on a continual basis.”

Clear Channel will be among the first to encode its IBOC stations for the iTunes tagging and urged others to support the

capability.

The tagging-related announcements received big play in September. Groups that are members of the HD Digital Radio Alliance and agree to tag see the ability as an e-commerce ticket for IBOC, a way to obtain some degree of return on investment for funds expended on HD-R equipment.

Some eight broadcast groups were said to be working out iTunes licensing agreements with Apple in September; the alliance planned to announce their names at the NAB Radio Show.

Struble said many stations already have relationships with Apple and the new tagging license agreements “would be an extension” of those.

Broadcasters will receive a percentage of the money from the Apple iTunes songs purchased through the station. Involved companies declined to provide financial details of the arrangements between stations and Apple.

**The iPod is not a competitor to radio — it is a collaborator in connecting with consumers on a continual basis.**

— John Hogan,  
Clear Channel

## iTunes HD-R Tagging Tested

In order for iTunes tagging to work, a station transmitting an HD-R signal must have an automation system that packages the encoding data so that it’s compatible with a receiver featuring the tagging capability.

Stations must license the Apple iTunes technology, as do automation system providers, said Jeff Detweiler, Ibiquity director of broadcast business development, who said Ibiquity would be talking to all automation vendors about providing the tagging feature.

“With HD Radio, we send out title and artist information” for the receiver display, said Jeff Littlejohn, executive vice president of distribution development for Clear Channel Radio. “There’s more information that you can send as data. One of the fields is called a Unique Field Identifier.”

It’s in this field that Clear Channel and other stations will transmit the special labels or identifiers that can be read by Apple, and eventually, other music players. A station places the identifier on every song in its automation system, which then feeds the data to the HD-R importer and continues the stream out to the transmitter.

Tagging allows a consumer — who’s listening to an HD Radio receiver equipped with an iPod docking feature — to mark a song. The user later takes his or her iPod and connects it to a computer, where iTunes opens up a list of tagged songs. At that point, the user can find more information about the song, hear it again, or buy it and then download it.

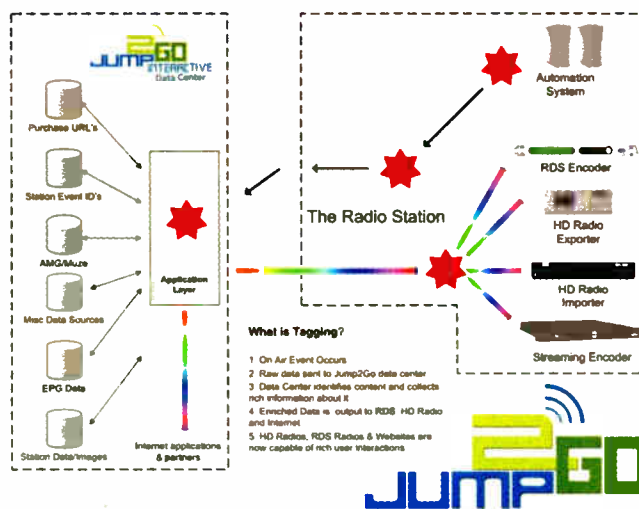
Detweiler said tagging isn’t just for FM stations; AMs can do it as well.

Clear Channel is using its own automation software to accomplish the tagging.

Jump2Go is offering its “Go Commerce” service to other radio groups. Go Commerce is a service that synchronizes the station’s programming with the iTunes song identifiers that make RDS and HD Radio tagging possible. The company is also offering iTunes-based e-commerce fulfillment on station Web sites.

The Go Commerce tagging system was tested in August in Seattle on Entercom’s KNDD(FM) and in San Francisco at Entercom’s KBWF(FM), and Cumulus-owned KFOG(FM).

Go Commerce involves station’s automation system using



BE’s The Radio Experience software relaying on-air events to a Jump2Go data center for tagging.

The Jump2Go service assigns the iTunes identifier to each song and then the tag data is inserted into the IBOC bit stream.

(For RDS tagging, songs receive two identifying numbers, one for iTunes plus a Jump2Go number that the company could use in the future for other MP3 player song services such as the Microsoft Zune, said Jump2Go Founder/CTO Allen Hartle. He declined to discuss future RDS “tagging” products.)

Listeners are able to buy a song that is playing on the station by pressing a “buy” button in a station’s customized Go Commerce-enabled store, which resides within the station’s Web site.

Hal Kneller, Senior Manager of Business Development, Digital Radio for Harris broadcast, and Mathew Honey, managing director of Unique Interactive, confirmed that the Harris DataPlus Content Management System from Unique Interactive would shortly include an iTunes tagging module, putting Harris in competition with BE.

— Leslie Stimson

Consumers pay 99 cents per iTunes song purchase, according to information on the Apple Web site. One industry manufacturer reported speculation that a station would receive 4 cents per song or about 5 percent of the purchase price.

Though the music industry hadn’t said anything about the tagging announcement in September, presumably since it’s a legal transaction that makes it easier to purchase music, the labels wouldn’t have a problem with it.

## Polk Audio, JBL

The first HD Radio receiver with the tagging, the Polk Audio I-Sonic ES2, is due to be available to consumers this month for \$499 from specialty retail stores, Apple stores and direct from [PolkAudio.com](http://PolkAudio.com). JBL said its iHD system, due out sometime during the holiday season, would have the HD Radio/tagging capability. JBL did not announce a price for that unit.

Asked by Radio World what attracted Apple to using HD Radio for tagging, Chris Bell, director of worldwide product marketing for iTunes, stated, “As the third-largest music retailer in the world we wanted to make it even easier for music fans to discover something on the radio and then preview, buy and download it on iTunes. Customers tell us that radio is one of the primary places they find the music they want on iTunes.”

Apple “is working with the NAB and HD Radio station owners to make the feature available to as many stations and hardware manufacturers as possible. The

See TAGGING, page 10 ►



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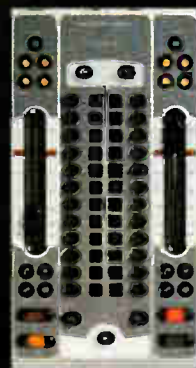
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World Radio History



# Tagging

► Continued from page 8

hardware devices are in the 'Made for iPod' program that extends the iPod + iTunes ecosystem to thousands of accessories."

The alliance said tagging builds on Apple's FM tuner add-on for iPod. The group planned a "multimillion-dollar," 13-week ad campaign to support the Polk and JBL products at participating retailers from the alliance's inventory of \$250 million worth of air time set aside for 2008.

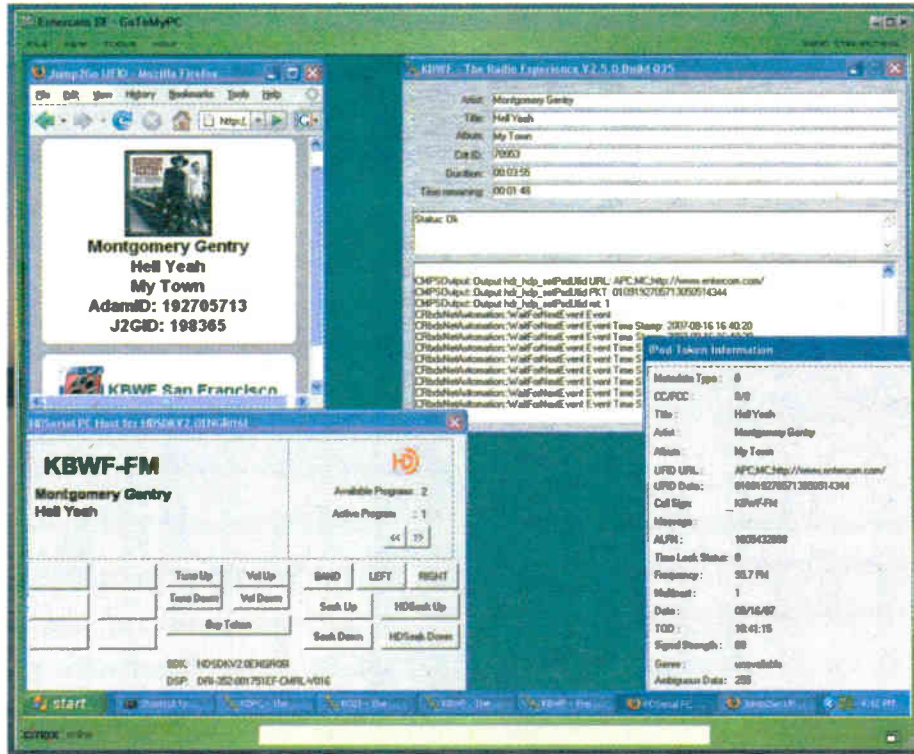
Ibiquity believe these are the first of several models for car use and says the tagging function is now in its reference design so any receiver maker can license it. The company predicts the tagging feature will be in future portable HD-R radio receivers, as well.

## Clear Channel

Clear Channel Radio will encode its 400 main HD Radio stations and 300 HD2 signals.

Unlike encoding for the Arbitron Portable People Meter, iTunes encoding doesn't affect the audio; it resides in what is now an unused Program Service Data field of the IBOC bit stream, according to several engineers interviewed by RW.

Clear Channel tested tagging on an FM station in San Jose, Calif. in August. Jeff Littlejohn, executive vice president of distribution development for Clear Channel, said that station was chosen for its convenience to the Apple headquarters



Entercom data are captured in this screen image in August during tagging testing.

in nearby Cupertino. Cumulus and Entercom also have tested (see story, page 8).

Littlejohn said that for 30 to 40 years, FM radio has been the place where people discover music, and the tagging technology will encourage them to buy it.

"If people don't know the name or title, they can tag it and learn more about it. There's no cost to the tag button." Though it's been called a 'buy' button,

there's no cost to tag a song and listen to it later, he and others said.

Ibiquity Director of Broadcast Business Development Jeff Detweiler emphasized, "You're not committed when you hit the tag button."

## Radios in Q4

In an announcement coinciding with the product introduction at the high-end audio show CEDIA in Denver, Polk and

JBL said they would be the first receiver makers to combine the Apple iPod iTunes tagging and HD-R features.

Up to 50 songs can be tagged using the tag button on the I-Sonic's front panel or the remote control.

Polk Senior Vice President of Marketing Daniel Hodgson told Radio World its consumer research shows consumers are "highly interested" in having direct iPod connectivity. The original I-Sonic is disc-based, playing DVDs and CDs, along with HD Radio and is XM Satellite capable. The new I-Sonic provides for iPod-sourced content, in addition to HD Radio.

The tagging feature, he said, complements the built-in iPod docking capability and second-generation HD Radio tuner with multicasting capability of the I-Sonic ES2.

The unit accepts iPod models with dock connectors in its top-mounted dock hidden beneath a sliding door. S-Video and composite video outputs allow the user to connect a television or video monitor to the IES2 for viewing video content stored on a video iPod. The unit also includes an alarm clock that can use the radio or iPod as the alarm.

JBL's iHD is a compact desktop system featuring HD Radio and an iPod dock with iTunes tagging technology. By pressing the "tag" button on the JBL iHD or its included remote control, the tagged info is saved and songs can be purchased the next time the user syncs on iTunes. JBL's iHD also comes with multiple alarm settings, iPod navigation, clock, IR remote and other radio and alarm features.

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## Lights Out: NOTAM Info You Can Use

by John Bisset

Greg Muir of Cherry Creek Radio offers additional links regarding the new FAA Automated Flight Service System (AFSS). This service recently was taken over by Lockheed Martin with respect to tower light outage reports.

A useful link is the Lockheed Martin AFSS home page. You'll find that at [www.afss.com](http://www.afss.com). To check the status of your local FSS office transfer into the new system, go to [www.afss.com/transition](http://www.afss.com/transition).

It's also possible to check your NOTAM status at the FAA PilotWeb site. This is the civilian version of the military DINs site Chris Tracy submitted earlier. The same procedure applies for entering the ICAO identifier for your area. Go to <https://pilotweb.nas.faa.gov> and click on Safety NOTAMs.

Of interest to our readers is an experience Greg had in May, shortly after Lockheed Martin began transferring the FSS system including the local FSS office over to their new hubs.

Greg had a tower light outage and tried to report it by dialing the local FSS number. The phone rang with no answer.

Lockheed Martin and the FAA apparently forgot to forward the lines and there still hadn't been any formal notification of the new AFSS reporting number. After four hours of making phone calls in the middle of the night, Greg found an overnight emergency aircraft mechanic at a local FBO who had a number to call. The number connected Greg to the Atlanta hub who eventually directed him to the Fort Worth hub (still the wrong location) who took the information.

The report apparently made its way to the (proper) Prescott, Ariz., hub because the NOTAM was finally posted about an hour later — uncustomary given the normal minute or so when reports were filed locally.

Greg's main worry was that this involved a top beacon outage on a 500-foot tower directly in line with, and

a few miles ahead of, a commonly used runway approach at the local international airport.

During the time he was trying to contact the FAA, Greg had several scenarios running through his mind on how he could explain

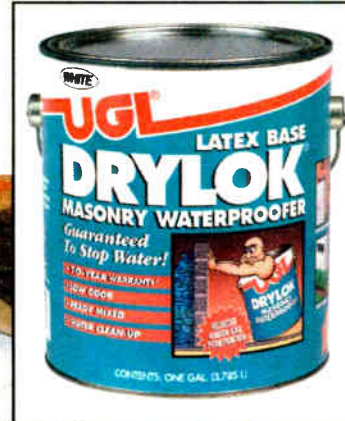


Fig. 1: Use an industrial-size bucket of UGL Drylok to keep block buildings dry

things to the feds if an incident were to happen.

But this was only a small part of the story. You can read about how "smoothly" the initial transition was at the Aircraft Owners and Pilots Association Web site, [www.aopa.org](http://www.aopa.org), and type "FSS problems" into the Search field. The organization's ongoing problem blog can be found there too, under the AFSS link.

After completing his report to the FAA, Greg writes that his fur was standing up. He contacted Phil Boyer, president of the AOPA, and found him to be receptive. Boyer planned a meeting with Marion Blakey, adminis-



trator of the FAA, and said he would present this issue to her.

Not knowing how much of an impact it had, Greg still feels his interaction helped bridge the missing communications link regarding calls to the new AFSS system.

Obviously not all engineers have yet experienced tower light outages, and hopefully they will be forwarded to the proper hubs when they do need to call. However, it is worth the effort to continue to spread

the new contact information by e-mail, in conversations, and through local organizations like SBE. We agree and thank Greg for sharing this information with *Workbench* readers.

Greg Muir can be reached at [gmuir@cherrycreekradio.com](mailto:gmuir@cherrycreekradio.com).

★ ★ ★

Fig. 1 isn't pretty, but the bucket of UGL Drylok brand masonry waterproofer is worth its weight in gold when used to protect block transmitter buildings from moisture.

The compound is oil- or latex-based and applies easily; it effectively blocks the absorption of moisture. Entercom

Scranton's Lamar Smith used the compound both inside and outside a newly constructed block transmitter building to keep things dry.

The outside of the building is shown in Fig. 2, along with a vandal-resistant security light with motion detector. The motion detector triggers when the engineer drives his vehicle up to the building, eliminating fumbling for keys in the dark.

Another benefit of using DryLok on interior walls: the inside of the building is not only dry but clean.

See TAR, page 14 ▶

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World Radio History



# Tar

► Continued from page 12

Lamar Smith can be reached at [lasmith@entercom.com](mailto:lasmith@entercom.com).

★★★

Gary Saber, a projects engineer based in Raleigh, N.C., comments about the spring suspension technique for hanging speakers in a studio.

Gary offers another alternative: aircraft cable. It's almost invisible and has very low mass; low frequencies cannot travel through it into the studio structure. Over the past 10 years, Gary has used aircraft cable for all of his studio buildouts. The 1/16-inch-diameter cable is rated at 94

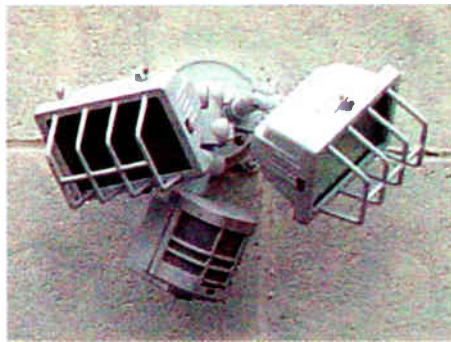


Fig. 2: Adding a security light with a motion sensor not only deters vandalism, but lights the way for late night entry

pounds, so two pieces would support 188 pounds. Most modern monitor speakers weigh in at 40 to 50 pounds each.

The cable can be painted to match sur-

roundings, and if done properly, the speakers seem to float because it's hard to see the cable. He is using this speaker hanging technique on the Good Karma studio buildout on which he is working. Pictures to follow!

Gary Saber can be reached at [gbs1043@earthlink.net](mailto:gbs1043@earthlink.net).

★★★

Gary Kline of Cumulus always finds great tips from among his cadre of engineers.

In this day of transmitter site theft, a suggestion from Greg Davis, chief for the Cumulus Beaumont/Houston cluster, is unique. Greg relates that the foreman of the tower crew said the only successful way to prevent copper ground theft is to cover it in roofing tar. The suggestion is

to cover every bit of copper you can access, all the way to the tower.

Yes, the idea sounds strange; but consider that roofing tar is cheap and easy to apply. It also partially masks the copper. Perhaps the best benefit is that the tar makes the copper almost useless to the thief. It would take more time to get the tar off than the copper would be worth.

Of course nothing is foolproof, but this is the best idea yet.

Greg writes that he'll try the "tar trick" the next ground system he installs. Meantime, Greg ponders how the tar could be used to cover air conditioners, another big theft problem.

*John Bisset, SBE's Educator of the Year, has worked as a chief engineer and contract engineer for 38 years. He is the northeast regional sales manager for Broadcast Electronics. Reach him at (571) 217-9386, or [jbisset@bdcast.com](mailto:jbisset@bdcast.com). Faxed submissions can be sent to (603) 472-4944.*

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# Moseley

## Freinwald

► Continued from page 4

Associations to meet with officials of the FCC, National Weather Service and, he hoped, FEMA to learn what those entities are thinking.

### Checkerboard

Freinwald calls the existing state of EAS "a checkerboard of functional and dysfunctional systems" and says it's unfair to criticize it broadly given that the system is one with multiple federal, state and local components.

"But broadcasters are no longer the kingpin of the public warning thing; we're relegated to being another tool in the toolbox. Which is good." Users of Apple appliances, for example, "are not going to be happy with a scratchy-sounding audio signal. CAP is a way of getting text, voice and pictures from the sources to the public; nothing in EAS allowed that."

How large an impact the pending changes will have depends on what state you're in; many decisions have yet to be made. (For instance, he noted that some manufacturers are calling products "CAP-compliant" yet authorities have not yet described how CAP will function to meet the requirement that a state governor may issue warnings that *must* be carried.)

Freinwald has been an SBE member since 1968; he's been honored as the society's engineer of the year not once but twice, and the Washington State Association of Broadcasters has honored him as a past broadcaster of the year for his work on EAS.

Clay Freinwald, CPBE, age 65, has no plans to retire — "I'm having too much fun." But he worries about where the next generation of RF experts will come from. "In the Seattle market, there are two radio engineers and two or three TV transmitter engineers who are all in their mid-60s. When they retire and/or leave, who's gonna replace them?"

Radio managers, he said, often hear about new media and are "scared to death they'll be left in the dustbin of history along with the daily newspaper if they don't somehow get themselves involved in the technology revolution." But in so doing, he said, companies may fail to realize the importance of nourishing their RF staffs and will soon realize "the IT guy doesn't want to deal with something that has an 8,000-volt meter on it."





Tell us about your job change or new hire. News and photos via e-mail to radioworld@imaspub.com.

Steve Tuzeneu accepted the position of station manager for KJRL(FM), Salinas, Kan. He held the same title for WVNE(AM)-WNEB(AM)/Worcester, Mass., where he has been for 16 years.



Steve Tuzeneu

Jeff Smith joined Clear Channel Radio New York as



Jeff Smith

chief engineer of WWPR(FM) and supervisor of broadcast/studio systems for the cluster. He had been manager of maintenance engineering for Sirius. WWPR signed on in 1953; Smith is only the third CE.

American Media Services-Internet named Bill Atkins director of information technology. He worked with an emergency response organization and managed his own consulting firm, where he offered software application development and technical support for businesses. ... Scott Johnson was named director of programming, overseeing the company's Internet and HD Radio content. He is a former regional vice president of programming for Clear Channel Radio.



Sean East

Harris Corp. named David Cunningham vice president of human resources for its Broadcast Communications division. He had been director of human resources. ... Harris expanded its Canadian Radio Broadcast sales team and named Sean

East regional sales manager for the region.

Shaun Bullock was named manager of software quality assurance at RCS in Ogallala, Neb., while Tony Williams has taken over the Quality Assurance Lab in the White Plains, N.Y., headquarters. Bullock has been with Prophet/RCS since 2001. Williams has been working with RCS automation since 1997. He recently served as product manager for RCS' Selector XV line. Eric Vanryckeghem is now in charge of product management for Master Control. He joined RCS in 1999. Most recently he was the lead program developer for RCS Traffic.

Klotz Digital appointed Jim Bakker sales director for Europe, Middle East



Jim Bakker

national championships, and posted the fourth-best winning percentage (.837) in college football history. In the NFL, he coached the Dallas Cowboys to victory in Super Bowl XXX, retiring in 1997 with a 45-26 career NFL coaching record.

Dr. D. James Kennedy, founder and senior pastor for 48 years of Coral Ridge

and Africa (EMEA). He had been with AKG Acoustics, where he was responsible for sales business in Europe.

Barry Switzer joined XM as a football analyst on the sports talk radio channel, XM Sports Nation. During his 16 years as football coach at the University of Oklahoma, Switzer led the Sooners to three



Ray De La Garza

Presbyterian Church in Fort Lauderdale, Fla., and founder of Christian station WAFG(FM), passed away following complications from a cardiac event last December. He was 76.

Ray De La Garza was named VP of programming, Radio Disney. He had been vice president/general manager of KLAA(AM), 830 AM. He also had served as chief operating officer for Radiovisa Corp., and senior vice president, programming for Premiere Radio Networks.

IABM appointed Rick Bolin CEO designate. He assumed the role held by CEO Roger Crumpton on Oct. 1. Bolin had been chief executive officer of Fighting Bull Broadcasting Technologies in Belfast, Ireland.



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# Substitute Teaching for the Digital Age

## *The Ratcheting Rhetoric of Royalties Has Created A New Buzzword, With Potentially Serious Impact*

The battle over performance royalties for U.S. broadcasts of music recordings continues to rage, with no end in sight.

The music industry, buoyed by its success in substantially increased royalties via compulsory license for Internet radio, is now trying hard to garner a similar outcome for satellite radio. But their eyes are on the big prize down the road — terrestrial broadcast radio, where the imposition of even a very small royalty could produce greatly increased revenues for the music industry.

To review, Internet and satellite radio have been paying royalties to both songwriters and performers essentially since their services were inaugurated, and recent changes are aimed at increasing the rates paid to performers under the standard, statutory license set by U.S. copyright law.

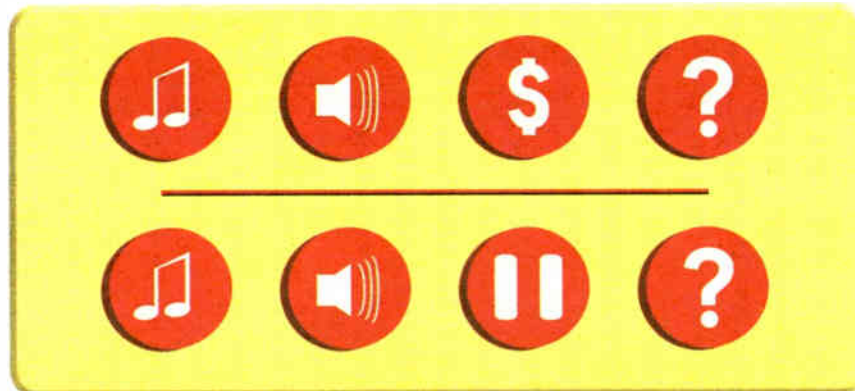
Meanwhile, U.S. terrestrial radio has only paid royalties to songwriters (at about the same, relatively low rate as the other radio forms have) but it has never paid performers, due to its historical exemption from royalties for airplay of music recordings.

The generally understood reason for this exemption — originally accepted by the record companies themselves — has been the “quid pro quo” premise that airplay of a given artist’s music increases sales of the record, and the artist benefits

at the back end through the royalties generated by such sales.

It is this fundamental assumption that is now being challenged by the music industry, in that radio airplay does not necessarily stimulate sales, but may in fact serve as a substitute for them.

So the word for today is this particular



connotation of “substitution,” the argument for which we will now explore.

### Value-add or subtract?

Music formats on radio traditionally have served as a sort of proxy for audiences’ tastes.

A listener chooses a station (based on its format), and the station’s programmers do the rest. The music is selected by

those agents of the listener using the criterion that the songs played currently represent the best of a given musical genre.

This “leave-the-driving-to-us” approach is radio’s value-add for listeners, and if done well, it will keep listeners tuned in, even when the station is playing other content (i.e., commercials).

At the same time, this form of music presentation generally benefited music companies as well, because it provided obvious promotion for the artist, but — at

## The Big Picture



Photo: Garry Hayes, BBC

### by Skip Pizzi

The second point applies specifically to radio, and is at the heart of the “substitution” argument. Note that the concern is not so much that listeners will “steal” music by recording it off the air, but that convenience will drive them to just listen to “good enough” radio services most of the time, and not be motivated to purchase much music.

In other words, when all you need are the barker channels, why watch the whole movie? Or, when the trailers are that good, who needs the full-length?

Given such fundamental change in basic assumptions, the old model appears broken, and substitution happens.

Under this argument, radio has become so appealing to listeners that it is no longer a boon to the music business but a drain upon it.

As an obvious next step, the record industry is now looking to radio for compensation in the form of increased royalties, to counteract the lost sales that they believe such airplay generates (not to mention getting a piece of the action that they feel radio enjoys as a result of playing their music).

This is truly a hard argument to swallow among many traditional broadcasters, who believe just the opposite occurs, and that airplay still sells records (not to mention their sense that the value of radio comes from its original, curatorial work in selectively programming a format and interspersing it with other useful content — not simply benefiting from playing the work of others). And so a religious debate is born.

In a related development, some forward thinkers in the record industry are considering the future value of offering their own subscription services in lieu of à la carte sales — perhaps the ultimate attempt at “rebundling” their wares. But competitive music radio services would stand in the way of this move, as well.

### Is all radio created equal?

Importantly, most of the substitutional argument seems to be leveled at the narrowly defined (and often commercial-free) formats found on satellite and Internet radio — including the customizable and adaptive streams available on the latter. The more constrained, traditional world of terrestrial music radio isn’t as much of a factor here.

But as terrestrial broadcasters try to compete with these newer radio forms through experimentation with new formats and multicast channels (not to mention cross-promoted Internet radio services of their own), they too will come increasingly into the crosshairs of the music industry’s royalty crusade.

Both radio and the record industry should be careful what they wish for, however. Improving quality and quantity of radio service is a good thing for broad-

See ROYALTIES, page 18 ►

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least for most of the last couple of decades — with two critical caveats: 1) Songs were rarely recorded off the air by listeners; and 2) Radio airplay typically presents only a single song from an artist at any given time, while the music was available for purchase only in a bundled form (on LP or CD — a constraint that accounted for a significant percentage of record industry profits).

Thus radio served as an almost perfect promotional medium for profitable music sales, with music formats serving as nearly nonstop “barker channels” for record companies.

**Under this argument, radio has become so good that it is no longer a boon to the record industry music business but a drain upon it.**

The top 40 hit was to the CD as the trailer or TV commercial was to the movie, but there was no direct cost (at least via legal means) to the record company for its airplay.

Recently, however, two important things have changed: Music is widely available in unbundled form (via digital music downloads, legal and otherwise), and the number and variety of radio services have greatly expanded (including build-your-own formats on some Internet radio sites).

This has given rise to a new understanding among record companies regarding radio airplay, again in two parts: 1) The quid pro quo deal is really only profitable in a bundled world; and 2) Good radio can satisfy many consumers needs to the point that they will rarely have to buy any music — bundled or otherwise.

Such is the double whammy that the record industry contends it is facing at present.





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FIRST PERSON

# Hazmat — What's That?

*A Veteran Broadcast Engineer Reflects on One of the Occupational Hazards of the Job*

by Joe E. Lasmane

Looking at the staggering number of federal and state regulations governing broadcasting, those of us who've been in the business for more than a couple of decades often shake our collective heads and ponder how anything gets done anymore.

Don't get me wrong, the majority of these regulations are there to protect us from bodily harm. But "way back when," we somehow were able to do our jobs without creating too great a body count at the end of the week. And a good many of us are still left to reflect back on the good old (or maybe bad old) days.

## Solvents

In recalling work environments in the 1940s, 1950s and even well into the 1960s, a common (and highly recommended — see most equipment manuals from that period) solvent was carbon tetrachloride.

It worked swell for cleaning dirty switches and pots and provided an extra benefit if you got too close to your lunch — it was great for removing grease stains from clothing. In fact, you could buy small bottles sold for that purpose at gro-

cery, drug and variety stores.

It took quite a while and a lot of dead lab rats before someone figured out that carbon tet could play hob with your liver.

We scratched that one off and went to the preferred replacement, 1,1,1-trichloroethane. This didn't work quite as well as good old carbon tet, but it was all

we had and moved on with the times.

Interestingly, it was later discovered that trichloro had its faults too. Even though it was thought not to be cancer-causing and did not build up in your body, it had a way of getting into the environment and breaking down the ozone layer.

Researchers found that placing large amounts of it in an animal's stomach could produce effects on the nervous system, mild liver damage, unconsciousness

See HAZMAT, page 20 ▶



# Royalties

▶ Continued from page 16

casters, but it provides additional traction to the record industry's substitution argument. On the other hand, the inequity of different forms of radio paying different royalty rates has raised some concerns among regulators, and one proposed solution is to re-equalize them — at zero.

Remember also that these royalty negotiations involve the statutory license, but that broadcasters remain free to pursue individual licenses with music rights holders. As labor intensive as this might be, it could have some appeal if the statutory rates were set high enough.

But this, too, is a slippery slope. Consider that negotiating a free license with a record company in return for generous airplay of its music could be considered tantamount to legal payola, thereby potentially opening another legal can of worms. And the beat goes on.

It's now clear that a multi-front royalty war is engaged, and will continue for some time across all radio and regulatory theaters. The endgame will only be reached when the involved industries and policy makers get a grip on the evolving paradigm of music consumption, and they arrive at equitable methods of compensation for all parties involved.

Easier said than done, but we can dream, can't we?

Skip Pizzi is contributing editor of Radio World. Read past columns at radioworld.com. 

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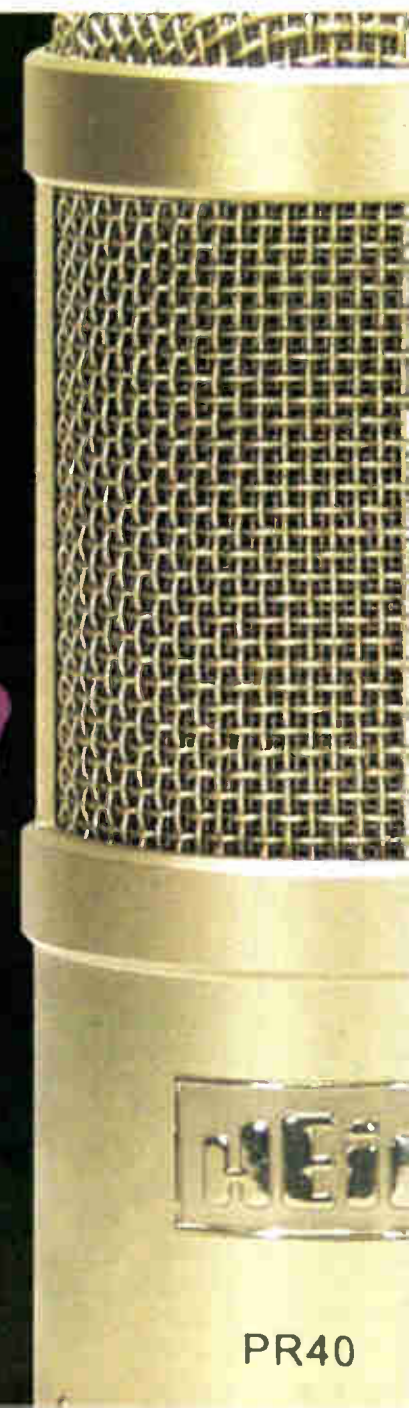
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World Radio History



# Hazmat

► Continued from page 18  
and even death. Sounds a lot like the stuff we bought after work on payday at the neighborhood bar.

But I digress. 1,1,1-trichloroethane got a bad rep and was banned somewhere in the mid-'90s.

Another useful chemical in early broadcasting was Freon TF. For a long, long time, this was the only solvent that tape machine manufacturers recommended for cleaning video heads. It was really that good.

Didn't smell bad. You could breathe it with no ill effects and it wasn't that harmful to even lab rats. And yes, it was as good or better than carbon tet for removing grease stains from neckties.

After a couple of decades, though, the truth came out of the closet about Freon. Seems it too harmed the environment by cracking up that ozone layer.

(I still haven't found anyone who can explain how a gas that is both extremely stable and is heavier than air could get way, way up there and blow up the ozone layer, but I'm sure that the experts know best.)

## Nicotine everywhere

Moving right along, it was only fairly recently in the scheme of things that cigarettes got banished from television advertising and that these little cancer sticks got banned from broadcasting environments.

Now, mind you, I don't condone smoking. That's one thing I've never done myself. However, I have to think back on my career to the pre-cig ban period. Nearly everyone smoked.

If you don't believe this, go take a look at "Good Night and Good Luck." Poor Edward R. died of lung cancer and I'm sure that his habit didn't do the people around him any good either. But this was the way it was. On the positive side, smoking created overtime pay for some of us. You could open up most any announce booth or production room audio console and see the gold-plating (nicotine, really) on all of the switches and pots. Someone had to clean it out. Secondary effects of smoking included fly ash and misplaced butts. Careless smokers had a way of melting switch caps, plastic covers and the like. Hey, it kept us working. Someone had to replace them.

I see that I'm getting away from broadcasting-specific health hazards.

People smoked on all sorts of jobs back in the bad old days.

## PCBs

By now everyone knows how really bad PCBs were/are. Didn't matter; at one time they were everywhere in broadcasting — big capacitors, transformers, cable pulling lubricants, you name it.

These polychlorinated biphenyls were really big in their time. I recall an episode involving PCBs at our transmitter site.

I was on watch and noticed puffs of smoke entering the building over at the power distribution panel. I looked the situation over and decided that it must be coming up through the conduit from the big klystron power supplies outside.

I was new to the business of high-voltage DC power supplies that looked like they belonged in power company substations, and was trying to decide what to do next, as the transmitter was working fine.

About this time the meter reader from the local electric co-op arrived. He

**It took quite a while and a lot of dead lab rats before someone figured out that carbon tet could play hob with your liver.**

observed the smoking phenomenon along with me and offered that even though he didn't know much about 27 kV DC power supplies, they seemed to be first cousins to the big AC transformers he did know something about.

His only words of advice didn't address PCB contamination. He merely said, "You don't want to be around when that sucker blows." He then drove away from the mountain-top building at what seemed an excessive rate of speed.

I called up the chief and got the okay to shut down and multiplex everything through the aural amplifier.

The power supply rep was summoned, arrived the next day and immediately went to work. He removed covers and drained some of the PCB oil. He then removed his shirt, thrust his arms down into the cavity and went to work replacing some high-resistance bushings down under the oil, which was just about up to his shoulder level.

The chief sent me down to the local electric utility to beg enough transformer oil to replace the amount drained off. I asked the guys there what made the oil so

special.

"It don't burn or nothing and it's non-toxic. It's so safe you can even use it for hair oil." (This was long before the "dry look.")

We got the power supply topped off and soon we were back on the air at full power. The rep had wiped the oil off and put his shirt back on.

The only real upset over this was when the chief presented the bill to the station owner.

## Mercury, not just for thermometers

Does anyone remember mercury vapor rectifiers?

In some applications they were an improvement over high vacuum rectifiers, as they had a low internal voltage drop, handled heavy currents and could stand a lot of abuse.

These came in several sizes — smaller ones for use in some studio equipment and big-to-jumbo for transmitters. The

big ones were heavy. Mercury's heavy. Some of them had so much mercury that you could slosh it around. (Not recommended action, as the tube would likely present a short to the power supply unless you "conditioned" it before use.)

Murphy and his law sometimes prevailed and more than one of these tubes were dropped on the floor with predictable results. Did anyone panic? No way. You cleaned up the mess and tried to explain to the chief the tube was no good anyway.

The floor that the tube hit? Asphalt tile-covered, most likely. And what was in those asphalt tiles? Asbestos. Same thing as they used for the Kent cigarette Micronite filters.

We didn't worry. All of the stations and most transmitter buildings had asphalt tile floors. Nobody passed out respirators when we had to drill or chip away at some of those tiles to accommodate cabling or another rack.

## Asbestos, our friend

Actually asbestos brings back a lot of broadcasting memories.

It was sort of like cigarettes; it was everywhere. It was our friend.

How else could you immediately change out a red-hot tube without asbestos gloves? Studio lighting — all the big fixtures has asbestos covered wiring. What else you gonna use around something that throws off a kW or so of heat? We cut and repaired cables on these babies all the time.

How about sound treatment of studios and announce booths? Asbestos containing materials were considered a good fit for sound absorption purposes. Early on it was used by the ton for large television studios.

At least one company offered sprayed-on asbestos for sound deadening purposes. Kind of like flocking Christmas trees. Sort of like cigarettes too, some good did come out of it. Nowadays a lot of people in moon suits are making real good money in abating all this stuff.

## Radium, thorium, X-rays

There were some nasty tubes in the voltage regulator category. These were gas-filled, and to give them a uniform "starting" (ionizing) characteristic, most manufacturers included some type of radioactive isotope another along with the neon or argon.

Heck, a buddy once showed me a big neon lamp used for a regulator. It had a little spot of radium paint on the *outside* of the envelope for the same reason. Some tube boxes were marked with the radiation triad, others weren't. No one worried too much.

We were more concerned with the strontium 90 in our milk from all of the above-ground nuclear testing going on, or maybe the potential for getting a real dose of radiation when the Russians decided to let loose with all those cold-war megatons they had.

Speaking of ionizing radiation, did you ever handle some of the big studio camera lenses?

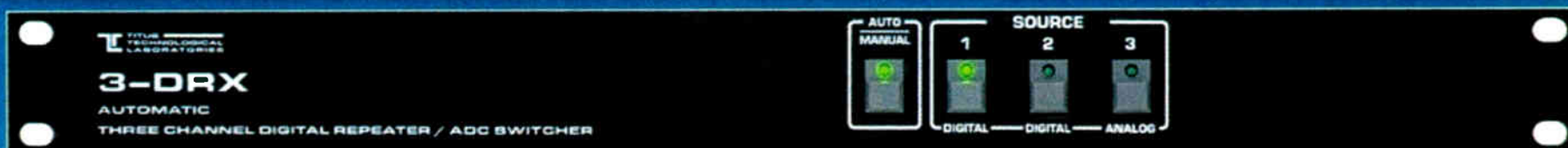
Someone brought in his uncle's Geiger counter for us to fix. After we'd cleaned up a little corrosion and replaced batteries it worked fine. Just happened to wave it near one of our studio cameras and it went waaaaay above background.

Turns out that some lensmakers liked to dope their glass with a lot of lanthanum and thorium. The latter is naturally and strongly radioactive and sort of comes along with lanthanum.

We removed the lens from one camera and hauled it out to a government lab for an assay. It rode in the car's trunk and I

See HAZMAT, page 22 ►

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# Hazmat

► Continued from page 20

was in the back seat. I could see it shining out at me with the Geiger counter.

At first the lab fellow didn't believe us, but did pull out one of his better instruments and put it to work. When he looked at the reading, he just sort of rolled his eyes back and whistled.

We had three cameras with this particular lens. Management didn't make a big fuss and we didn't get rid of 'em until years later.

Since childhood, I was always kind of interested in X-rays. Every time my mom trotted me or my sister down to the shoe store, we got to see our foot bones with their "shoe-fitting machine." Actually this was a euphemism for fluoroscope machine. You put your feet in a slot right on top of an X-ray tube and when the salesman switched it on, you could look down a viewing hood and see the shadow of your toe bones in a green phosphor screen as you moved them around inside the new shoes. Real neat and one heck of a sales device.

Now we didn't use shoe-fitting machines in television, but you could find their first cousins around if you looked around a little.

I mentioned the klystron transmitter and its 27,000-volt power supply. As I recall, to make power, we ran something like six amps. One of the books I read about klystrons warned of an X-ray hazard at this and higher potentials.

We didn't worry — no placards on the transmitter anywhere. After reading about some rather serious X-ray generation associated with lower voltages in shortwave radio transmitters, I can't help but wonder what kind of a dose we got in taking those meter readings every 30 minutes.

Come to think of it, we did have an infestation of some really large scorpions at the transmitter building one summer. Made it kind of difficult to nap when you were on transmitter watch. X-ray induced mutation? (I still remember the '50s sci-fi movie "Them.") Who knows?

**I recall one newcomer asking the chief where the climbing belt was. 'Climbing belt? That's for sissies.'**

We had something of the same thing down at our studio building with a tube-type flying-spot color film camera. This used three five-inch projection-type CRTs as projector light sources. The second anode potential of the tubes also ran around 27 kV, with a lot of beam current needed to make sufficient light. (The beam made the tube faceplates so hot that you could get a bad burn if you touched

one that had just been turned off.) These "light sources" were located at just about waist level. Go figure.

I also recall being assigned to work on an early solid-state color monitor that came to the shop with a really lousy picture. This was one made after the HEW people mandated that if the high voltage went out of control, the monitor either had to shut down or become unwatchable. Naturally this protective circuit failed along with the high-voltage regulation.

My HV meter only went to 30 kV and this monitor pegged it. I called the manufacturer's help desk and got to speak with a fairly knowledgeable tech. He knew about this particular problem. "Yeah, you kinda don't want to be in the same room when they do that," he said. "When that circuit fails, they can run up well over 40 kV." He suggested a long AC cord and some binoculars for taking diagnostic meter readings from a distance.

Of course that didn't help the people in the control room who put up with the poor picture until they could finish their show, or some other maintenance guy who didn't call the help desk before tackling the repair job.

## Big machines, neckties and chemicals

Getting back to day-to-day broadcast operations, I have to spend a little while on videotape and film operations.

The early videotape machines used 2-inch tape and had a fairly large head drum that spun around 14,400 rpm (that's 240 times a second). A lot of stations had a dress code for techs. Ours included neckties.

The machines all had head covers. However, they weren't always used. Woe to the poor guy who got a little careless with the tip of his tie while looking at the video level on the overhead monitor bridge.

I never had a problem, but one of my associates did. The machine shut down just as his face was some 3 inches from the transport. Management was not the least bit sympathetic. Do you know what it cost to rebuild a quad head?

Ditto this with projector operation. They had gears and some fairly powerful motors, especially the 35 mm variety. Before I'm off the subject, lifting a 90-minute reel of 2-inch videotape could physically challenge a small person. Heaven forbid if you dropped it on your foot.

In the days before ENG and EFP, everything done out of the house was recorded on 16 mm film. Of course, this had to be developed before it could be aired and the better-equipped stations had

an in-house processor and assigned a tech or two to running it.

Now I never drew this lot, but knew people that did. I don't know how really toxic those processing chemicals were, but I bet that EPA wouldn't let us flush them down the drain anymore.

Another chemical that used to be prevalent in broadcasting and is now on the EPA "most wanted" list is selenium.

Manufacturers in the 1950s, just as now, loved to push new technology. A hot item must have been selenium rectifiers, as they could replace tubes in some applications. They worked quite well until they shorted and blew up. The stink was terrible. Imagine a polecat that had OD'ed on garlic.

What care we. It was just a matter of holding one's nose, unbolting the old rectifier, cleaning up around the site of the accident (if we had time) and installing a new one.

Looking up element 34 on a couple of Web sites indicates that it is quite toxic; it concentrates in "loco weed," which is great for thinning a livestock herd.

Selenium compounds are also listed as being carcinogenic and teratogenic. Had to look that last one up — one of the definitions is "giving rise to monsters." I guess that of some of the chiefs I worked with must have changed out more selenium stacks than I did.

## Tower climbs: what RF hazard?

Most towers had lights that, in pre-strobe and LED days, had to be changed fairly often in order to keep the peace with airplanes and the FAA.

We were all fairly young and able-bodied and took turns making the climb to do the changes. I recall one newcomer asking the chief where the climbing belt was. "Climbing belt? That's for sissies, only the telephone people use those. You got handholds on the tower. You don't need no belt!" End of discussion.

Did I mention that our FM operation's antenna was located under one of the side-marker lamps? I hate to think of the answer the chief would have had if someone asked him to shut down the FM transmitter while we were climbing past the antenna bays. I'm sure that it wouldn't have been broadcast-worthy.

Looking back, it's a wonder than any of us lived into retirement, but a lot of us have. Would I choose broadcasting as a career if I were starting over now? No thank you. It just wouldn't be as fun anymore. (Hey, is it really true that they're thinking about banning lead solder?)

Comment on this or any article. Write to [radioworld@imaspub.com](mailto:radioworld@imaspub.com).



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## MARKET PLACE

### Neutrik Introduces XX-HE Series

Neutrik, which makes XX series XLR cable connectors, introduced its XX-HE Series, a version featuring velour chromium plating and insulator material that is said to be resistant to very high temperatures.

Available in male (NC3MXX-HE) and female (NC3FXX-HE) configurations, the three-pole connectors include velour chromium housing and machined gold contacts.

"Improved chuck type strain relief provides higher pull-out force and makes assembly easier and faster," the company stated. "Offering a sleek and ergonomic design, the boot features a polyurethane gland, which gives high protection to cable bending stresses."

Colored rings and boots are also available for easy coding and identification. Visit [www.neutrik.com](http://www.neutrik.com).







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## Millenium ANALOG

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Millenium Analog Consoles still offer thousands of broadcasters great sounding audio performance.

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Millenium Livewire consoles feature IP audio connectivity **AND** local studio mixing.

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# You're looking at a complete audio-over-IP routing system.

(Just add Cisco.™)

**Administer this** • The beauty of the Web is that you can get information anywhere. Same thing with Axia: you can set up and **administer an entire building full of Axia equipment** – audio nodes, consoles, virtual routers, whatever – from your own comfy office chair. All you need is a standard Web browser (PC or Mac, we like 'em both). Put an Internet gateway in your Axia network and you can even tweak stuff remotely, from home or anywhere there's a Net connection. Mochachino, anyone?

**Automation station** • Wouldn't it be cool to have a **self-monitoring air chain with silence-sense** that can fix problems, then e-mail a status report? To be able to switch your program feed from Studio "A" to Studio "B" with one button? Or build custom switching apps and scheduled scene changes based on Boolean logic and stacking events? PathfinderPC software does all these things and more. But unlike HAL 9000, it doesn't talk back to you.

**Ether Net** • Hardly a month goes by without a story concerning someone getting knocked off the air by STL frequency interference or bandwidth reductions. There's also the headache of trying to add HD Radio™ program streams to already maxed-out transmission links. Luckily, Axia clients have a way around this particular roadblock: they've been using Ethernet radios from well-known manufacturers like Orthogon, Dragonwave and BE to construct a link between the studios and the transmitter that operates *above* the crowded 950 MHz band. Put an Axia AES/EBU Audio Node on both ends of that link and before you can say "Look! Up in the sky!" you've got an Ethernet STL, with room for multiple channels of program audio plus backhaul. And that's **uncompressed 48 kHz, 24-bit audio** — without nasty compression artifacts that degrade your lovingly-tweaked audio chain. Add a couple of Axia GPIO nodes to the mix, and your new STL link can carry remote control commands for transmitter and processing gear, too.

**Brains in the box** • The typical radio jock cares for studio equipment about the same as a five-year-old cares for a puppy: haphazardly, if at all. That's why we **took the CPU out of our Element modular console** and put it in here, with the power supply and GPIO ports. That means a greatly reduced chance of being taken off the air by a Coke spilled into the board. C'mon, don't you have better things to do than trying to dehumidify circuit boards with a hair dryer?

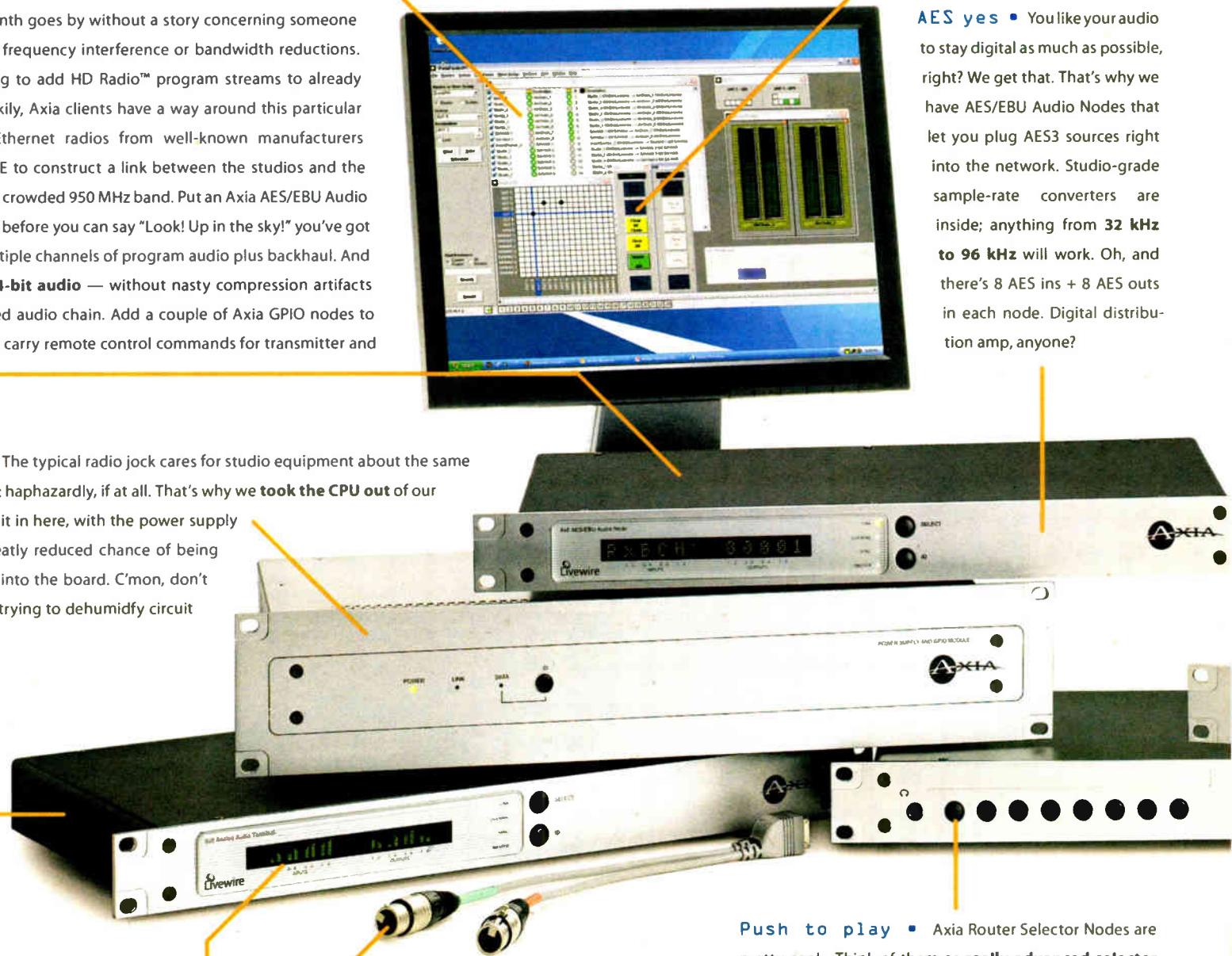
**That's cool** • Noisy fans in studio equipment? That's a major *faux pas*. You won't find a fan in any Axia Audio Nodes — they're designed to run **cool and silent** (unlike your morning show talent).

**Let it grow** • Growing your business computing network is easy: just add more PCs and hook them to the Ethernet switch. But with broadcast routers, adding more capacity usually means buying another frame, installing more I/O cards, pulling more discrete cable through conduit that's already full to the brim... Hope you've got stock in Grecian Formula! But since IP-Audio networks use standard Ethernet, **adding more capacity to an Axia system is as simple as plugging in an Audio Node** wherever you need inputs. And, should you need to move to new digs, you can just unplug your Axia system and take it with you. Try doing *that* with a big-iron router.

**A node for every need** • Someday, all broadcast gear will speak Livewire (so says our Magic 8-Ball). Until then, there are Axia Audio Nodes that turn analog and AES sources into routable 48 kHz / 24-bit audio streams.

**It's not rude to point** • Little kids tell mommy what they want by pointing — a pretty intuitive way of doing things. PathfinderPC software gives talent the same convenience. You can **build custom "button panels"** to execute complex operations with just one click. You can map these panels to controller modules on Element consoles or to turret-mounted controls, place mini-applications on studio computer screens, even run them on touchscreen monitors.

**AES yes** • You like your audio to stay digital as much as possible, right? We get that. That's why we have AES/EBU Audio Nodes that let you plug AES3 sources right into the network. Studio-grade sample-rate converters are inside; anything from **32 kHz to 96 kHz** will work. Oh, and there's 8 AES ins + 8 AES outs in each node. Digital distribution amp, anyone?



**Orc slayer** • Hooking up an Axia Audio Node may be the simplest thing you've ever done. All our I/O is presented on RJ-45 and adheres to the StudioHub+ standard, so connecting audio devices is as simple as plugging in an Ethernet patch cable. All of which gives you more time to play World of Warcraft with those guys from IT.

**Level headed** • These green, bouncing dots built into every Axia Audio Node are confidence meters. One glance and you know whether an audio source is really active — or just playing possum.

**Push to play** • Axia Router Selector Nodes are pretty cool. Think of them as **really advanced selector and monitor panels**; put one anyplace you need access to audio streams from the IP-Audio Network. Like newsrooms, where a reporter might need access to a satellite feed or a Zephyr connection. Or dubbing stations, where audio is captured and stored for later use. Or in the station's TOC, so you can monitor any of the hundreds – or thousands – of audio streams on your network at a moment's notice. Use the LCD screen to scroll through a list of available streams, or use the eight Fast Access keys on the front panel to store and recall the streams you use most. And Router Selector nodes have something standard X-Y panels don't: an input, for fast connection of an analog or AES device. Sweet.





<< Thinking about Axia but waiting 'til we're "more established?" You might not know that there are over 400 Axia studios on-air around the world — and counting.



<< An Axia system can expand or shrink as much as you want it to — the Ethernet backbone lets it scale easily, on-demand. Portable too: just take it with you if you move.



<< Axia systems install in as little as half the time of hardwired routers — and without expensive, bulky multi-pair cable. Whatever will you do with all the time you save?



<< Is IP reliable enough for 24/7 audio transport? Millions of VOIP business phone users with systems based on Cisco routers certainly think so. Coincidence?

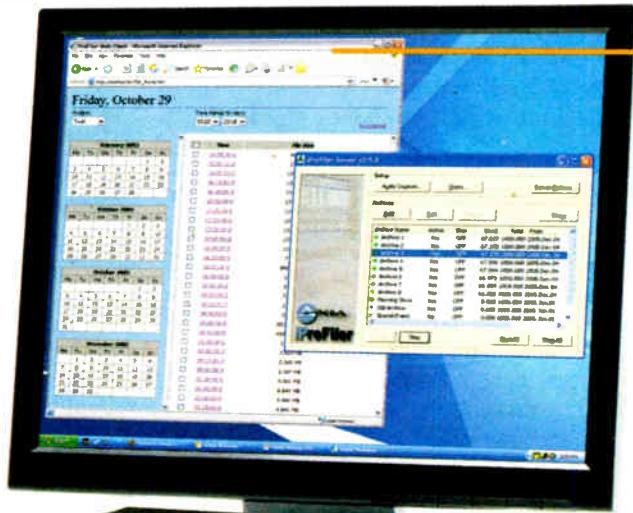
**Nothin' but Net** ■ Did you know you can plug a PC directly into an IP-Audio network and use it to send and receive audio? Can't do that with a mainframe router. Well, you *could* add more input cards to the mainframe, and then buy high-end audio cards for your PCs, and then run more wiring all over the place... but with Axia, you just install the **IP-Audio Driver** on any Windows • PC to send and receive pure digital audio right through the PC's Ethernet port — no sound card required or additional router inputs needed. You get better, cleaner PC audio that's sharable right to the network. The single-stream version is great for audio workstations; the multi-stream version lets you send and record **16 stereo channels simultaneously** — perfect for digital automation systems.

**CYA** ■ Sooner or later, someone's going to ask for a hard copy of a specific broadcast. Whether it's a client looking for proof of play, a Group PD that wants airchecks, or a listener claiming your morning show did something naughty, you're going to need a way to prove what was said. Axia makes it easy to keep archives of your programming with iProFiler networked audio logging software. Just install iProFiler on a Windows PC with a NIC and connect it to your Axia network; tell it what audio streams you want to record and it goes to work, sucking audio out of your network like pimientos from

Martini olives. iProFiler can record **up to 16 channels of stereo audio simultaneously**, storing them as time-stamped MP3 files you can save to a network drive or FTP server for listening or re-broadcast. And since logic always follows audio in an Axia network, you can tell iProFiler to record only when the jock's mic is open (or vice-versa). And of course, you can listen to saved audio from any PC connected to the Axia network.

**Put that in your pipe** ■ How many discrete wires can a CAT-6 cable replace? Well, a T-3 data link is pretty speedy with 44.7 Mbps of throughput. But Axia networks use Gigabit Ethernet links, with 1000 Mbps,

between studios. That's more than 22 times the capacity of a T-3; enough throughput for 250 stereo channels per link — the equivalent of a **500-pair bundle on one skinny piece of CAT-6**. You can even use media converters and optical fiber for higher signal density if you want. Think that might save a little coin in a multi-studio build-out?



**Heavyweight champion** ■ This is an Axia StudioEngine. It works with our Element Modular Consoles (the fastest-growing console brand in the world, by the way) to direct multiple simultaneous inputs and outputs, mix audio, apply EQ, process voice dynamics, and generate multiple mix-minuses and monitor feeds on-the-fly. To make sure it delivers the reliability and ultra-low latency broadcast audio demands, we powered the StudioEngine with a fast, robust version of Linux — so fast that **total input to output latency is just a few hundred microseconds**. How can one little box do so much? There's a blazingly-fast Intel processor inside, with enough CPU muscle to lift a small building. Strong *and* fast: Ali would approve.

**Hakuna matata** ■ Axia networks are self-monitoring and self-healing. Spanning Tree Protocol in the Cisco Ethernet switches we use combines nicely with PathfinderPC's automated program stream monitoring to help ensure that your studio network is **on the air 24/7**. And all Axia gear (like this StudioEngine, that mixes control room audio streams) runs real-time Linux for operation that's as bulletproof as Superman's boxers. Which means "no worries, mate."

**You got to have friends** ■ Sure, we think IP-Audio is cool. But it's even cooler that so many *other* folks think so too. Delivery system providers like ENCO, Prophet, BSI, BE, iMediaTouch, DAVID Systems and more all have products that **work directly with Axia networks**. So do hardware makers like AudioScience, International Datacasting, Radio Systems, Telos and Omnia. Check out the whole list at [AxiaAudio.com/partners/](http://AxiaAudio.com/partners/).

**Jammin' on the mic** ■ Radio studios and microphones go together like Homer Simpson and donuts. Unfortunately, so do preamps, mic compressors, EQ boxes, de-essers — let's face it: most studios house more flying saucers than Area 51. Axia helps clean up the clutter by including mic preamps with our Microphone Nodes; not bargain-basement units either, but **studio grade preamps** with headroom enough to handle Chaka Kahn. Phantom power, too. And if you choose to use Axia Element consoles in your studios, you'll find world-class mic processing built right in: vocal dynamics (compression and de-essing) from the audio processing gurus at Omnia, plus three-band parametric EQ with SmartQ, available on every mic input. Rap on, Grandmaster.

**Very logical, Captain** ■ Routing logic along with audio used to be almost as hard as performing the Vulcan Mind Meld. But Axia makes it simple, because machine logic can easily be converted to data and paired with Livewire audio streams. So **logic follows audio throughout the facility** on Axia's switched Ethernet backbone. Eight assignable GPI/GPO logic ports, each with five opto-isolated inputs and five opto-isolated outputs, are built into every Element power supply, so you can control on-air lights, monitor mutes, CD players, DAT decks, profanity delays, etc. If you've got more than eight audio devices (and who doesn't), just add a standalone GPIO node like this one wherever you've got gear.



[AxiaAudio.com](http://AxiaAudio.com)



## NEWS MAKER

# The Keepers of Radio's Soul

*The Library of American Broadcasting Undergoes Another 'Major Metamorphosis' at Age 35*

This article appeared in the newsletter of The Library of American Broadcasting Foundation and is reprinted with permission.

"It is very important for any industry or profession to have a place to keep the documentary evidence of what it has been. That's the prologue to everything it is now. And if you don't understand it then you'll lose your soul. And you'll lose your way."

Charles Lowry knows whereof he speaks. As dean of libraries for the University of Maryland he is also the chief architect of the Library of American Broadcasting — what he calls "one of the jewels in the crown" of the collections now under his charge at this reconfigured national research facility.

To Lowry, the LAB is far more than 9,000 books, 300 periodical titles, 7,000 pamphlets, 3,000 scripts, 1,000 oral histories (among 15,000 audiotapes, CDs and wire recordings), 10,000 audio discs, 4,000 films, videos and DVDs, 3,500 linear feet of manuscript materials and more than 225,000 photographs. It is not just the stuff of history but the seeds of tomorrow.

The Library of American Broadcasting

— now celebrating its 35th anniversary — is also undergoing a third major metamorphosis.

## Fundraising

Having officially opened for business in 1972 in space donated by the National Association of Broadcasters, it moved in 1994 to temporary quarters in the Hornbake Library (one of seven) at the University of Maryland. In the fall of 2003 it spread its wings into 25,000 square feet of prime real estate on the third floor of that building, and began anew.

"The university has spent about \$6.5 million in a five-year program to renovate its library system," Dean Lowry relates, positioning the Maryland system among some 110 national facilities that are considered to hold research library rank.

"The broadcasting libraries [the Library of American Broadcasting and the National Public Broadcasting Archives, which exist side-by-side in the new facility] are the beneficiaries of about \$1.5 million, as well as a university commitment of \$100,000 annually for staff and overhead."

Maryland's partner-in-parentage for



Charles Lowry

the LAB is the Library of American Broadcasting Foundation, which has embarked on a major fundraising campaign to match the library's new mission.

"The LABF functions as our alter ego," Lowry notes. "It exists to help strengthen and enhance the library's role."

## Endowment

The present investment is only the beginning.

For the LAB alone, Lowry says, "we have a long-term fundraising target of about \$3.5 million — I'm talking about endowment, not expendable income. Only a few years ago \$1 million would produce only about \$50,000 in expendable income. Happily, things are better now."

"Our goal is to increase the strength of the staff. They are devoted and highly skilled professionals in the management and preservation of that information. Right now there are about four on staff. Could we use more? Of course. But we want to make sure our reach doesn't

exceed our grasp. We want to be able to scale things gradually."

Lowry says that public universities have turned to philanthropy as a way to enhance the quality of what they do.

"It's clear that for libraries the best way for us to raise money to improve on what we do is through our special collections, such as the Library of American Broadcasting. They're attractive, they have intellectual appeal, the whole idea of cultural preservation and understanding our past is important. So people resonate to it."

"In some measure, I spend about 20 percent of my time in fundraising. A simple way of phrasing it is that I believe in it. I'm really pleased by the increasing emphasis of the LABF in helping with that mission."

The pace of change in the broadcasting industries is itself a challenge. Just when analog seemed under control digital came along, changing everything. It's not easy to be a research librarian in times like these. Take the challenge of knowing what to keep and what to throw away.

## What do you keep?

"It's getting worse," says Lowry.

"For example, do we save e-mail? It's a question no one has answered. What we call 'grey' literature is piling up all around us. None of the important yardsticks about what's important are there."

"It's this glut of information in the networked environment that we're really challenged to manage. If you think things are difficult in the radio and TV worlds because of digital storage, it's equally so for libraries. We're really being forced to think in new ways. It's part of what makes this job interesting."

Will the library of the future be fundamentally different from today's?

"We all have crystal balls on this," says Lowry. "Mine is that no new medium

See LOWRY, page 28 ►

**m!ka MICROPHONE AND MONITOR ARMS**

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## Bisset Is SBE Educator of the Year

The SBE named Radio World columnist John Bisset to receive its Educator of the Year Award.

The society cited Bisset's *Workbench* column and his work as a frequent presenter at Ennes Workshops presented by SBE around the country and at chapter meetings.

The national organization stated, "John has written the well-known *Workbench* column that has appeared in Radio World newspaper for 17 years. His columns, which appear 26 times each year, have provided hands-on, real-world engineering information to the U.S. radio industry. (They) are read by thousands of readers, helping to establish him as one of the most recognized radio engineering experts in the country."

RW U.S. Editor in Chief Paul McLane said, "I couldn't be prouder to learn that SBE chose to salute John. We've seen some years of great change in the radio industry in his time here. John has been a friend to our readers, and to me. He's a comforting presence

in print as well as a great resource.

"And he'd be the first to tell you that



he could not accomplish what he does without the great tips that come from readers every month. *Workbench* is built on them. It was like an industry listserv, before such a thing even existed."

Bisset is a regional RF sales manager at Broadcast Electronics. He's shown at the annual SBE Chapter 37 picnic on the grounds of WMAL(AM)'s site near Washington, where Bisset handled duties as the main DOG, or Director of the Grill. Bob Clinton of Cavell, Mertz & Associates keeps a wary eye on the culinary work.



# SCMS

## Service and Pricing you can Count On!



### orban erl

**1967**

First Orban product sold to customer: a stereo synthesizer sold to WOR-FM, New York.

**1972**

Bob Orban's first of 24 patents issues (U.S. #3,670,106, "Stereo Synthesizer").

**June 2007\***

SCMS acquires assets of Major Broadcast Equipment Supplier

**2005**

Orban Optimod 8500 Third Generation of Digital Processing is released and takes audio processing to a new level of industry setting standard.

**2003**

OPTIMOD-FM 8300 is introduced at NAB in Las Vegas. OPTIMOD-PC ships. World's first audio PCI Sound Card with Optimod-class DSP for broadcast signal processing.

**2000**

Orban Optimod 8400 Second Generation of Digital Processing is released to immediate great reviews and becomes the new industry standard. Orban Inc. is purchased by CRL from Harman International.

**1996**

First low-priced, all digital processor for FM introduced, OPTIMOD-FM 2200. The DSE 7000FX introduced with new DSP engine offering on-board effects like reverb, equalization and compression.

**1991**

Orban leads the transition to digital with the first successful DSP-based FM audio processor, OPTIMOD-FM 8200. Thousands on air around the world.

**1987**

Orban's first product using micro-processor technology is introduced. The 787A Programmable Mic Processor incorporates equalization, compression, and de-essing in a digitally-controlled analog signal path.

**1975**

OPTIMOD 8000 audio processor introduced for the new FM format. Bob Orban and partner, John Delantoni, set up Orban Associates as a privately held company.

**1976**

SCMS founded by Bob Cauthen

**1978**

OPTIMOD-AM 9000A offers AM stations a more "FM-like" sound quality and reduced interference. In modified form, the receiver equalizer and low-pass filter ideas form the basis for the NRSC-1 standard issued in 1987.

**1983**

OPTIMOD-TV Model 8182A introduced. Adds Hilbert-Transform clippers and a CBS Loudness Controller to the original 8180A.

**2007\***

Orban begins shipping the new Optimod 6300 high-quality, multipurpose stereo audio processor for digital radio, digital television, netcasts, STL protection, satellite uplink protection, and digital mastering. Orban also introduces the all-digital 9300 Optimod-AM audio processor for monophonic AM shortwave, medium wave and long wave broadcasts.



**Orban Optimod 6300**

Three Processors In One:

1. A no-compromise processing chain for digital transmission and media
2. A studio AGC (with peak limiting for STL protection)
3. A talent headphone processor

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\* Go to <http://www.orban.com/about/timeline/> for a full look at Orban's timeline

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South-Atlantic: 1-770-632-1295 Art White  
North-East: 1-315-623-7655 Jim Peck  
South-West: 1-210-775-2725 John Lackness  
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Go to <http://www.scmsinc.com/07022007.htm>



# Lowry

► Continued from page 26

replaces old media. It's layered on top. I think libraries are going to be forced to adapt to all kinds of new mediation, and we're doing so as rapidly as we can.

"If we want to manage what we call information — not just books and journals — I think it won't be long before we see the historic journal disappear. I think that journals will become electronic, by and large, simply because the methods of retrieval are becoming enhanced. Most historians, when they look at a journal article, are going to photocopy it anyway, so they might as well look at it on their desktop.

"Books, on the other hand, are going to stay. I'm as convinced of this as I am

of anything because I think the ergonomics of books make them a superior information storage device.

"All of the efforts at putting books on

in a computer.

"So as librarians we're being forced to become not only mediators of the print stuff but also the electronic stuff. We get more and more expertise that relates to the computer world.

"People are more likely to go to the electronic version than to the printed version. The question is whether it still makes sense to keep the printed version on the shelves. We don't sign a contract with a journal unless we have guaranteed electronic access. These are the kinds of dynamics that are operating in the world of research libraries."

## Books and wires

Is there too much information? Not really, in Lowry's view.

"Nobody overdoses on information. Students and faculty get what they think

is enough. It's a judgment call.

"The first place you look is on your own bookshelf — it is easily accessible. The experienced researcher knows where to look and what may be there. The undergraduate is likely to be overwhelmed. We spend a lot of time teaching how to get at good information."

Lowry's overall university mandate is populated by a lot of books — approximately 3 million volumes — to which the Library of American Broadcasting contributes a relatively modest 9,000. The LAB's major asset is in the documentation, scripts and actual recordings (for example, all of Arthur Godfrey's radio shows, preserved on wire) that detail the history of broadcasting over its first century.

(Lowry notes the LAB has both the facilities to play wire recordings and the challenge of keeping them in working order. He has in mind a digital preservation project under which all materials will be reformatted, complete with voice recognition capability.)

Who is the library's primary customer?

"The primary customers of a research library are faculty and students. Each of these collections has a strong tie-in to the curriculum — at the LAB it's with journalism, with history, with American studies and with women's studies. At the next highest level you have graduate students who are doing research for their dissertations."

"And then we have what I would call a national and international profile. This is a collection that has received visitors from Japan, Germany, Eastern Europe, Britain, who come here because the materials are here. They may get initial access through the Web site and want to come and do in-depth study. So the customer is not only from all over the United States but all over the world. The audience is very broad."

The other customer, still untapped, is the leadership of the industry.

"In my view we have not done the job of raising the profile, and the industry people don't know enough about it," says Lowry. "Each year we mount an exhibit at the National Association of Broadcasters convention. But we aren't there yet. It's a vital part of strengthening this program that the industry knows about it.


"The strongest position we have is in radio, not television, although we do have a substantial foothold in TV as well. And that's growing. We don't have a strong representation of the engineering component. It's important for the industry to know there's a place where its technology, its people, its business practices — and its successes and failures — are kept. It's not fully recognized."

Can the LAB become a center for industry leadership as well as scholarship?

"That is not a role that's foreign to us," Lowry says. "The university already performs that function in the area of music, for example. The LAB could play that kind of role in broadcasting — it only takes money. We have the facilities now for a venue. We have capabilities for supporting conferences.

"That's a role that we can easily begin playing that we don't now play."

Lowry puts the library's strategic mission succinctly. "To use an old saw, the railroad industry never understood that it was in the transportation business. We're not in the business of books. If we think we're in the business of books we will become an artifact. We're in the business of information."

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

## We're not in the business of books.

— Charles Lowry

line have been unsuccessful, economically. And until there's a peripheral device that mimics the book exactly, then storing bits in a book is as good as storing them

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# How to Mix Monitors and Garments

Occupational/Controlled exposure — this monitor has a full-scale range of 1,000 percent of the same MPE limit and is designed to be worn outside the RF protective garment.

Although some of the RF garments on the market claim to have an attenuation factor of far greater than 10 dB, I always recommend that climbers limit their



The Nardalert XT, also made in a high-power version with a distinguishing logo on the front.

exposure to a maximum of 1,000 percent of the MPE because other things can go wrong, and higher levels are extremely dangerous.

Thus, when the monitor indicates that 1,000 percent of the MPE limit has been reached, it is time to lower power levels even though you are wearing an RF protective garment.

One caution: One

of my training clients had bought a number of high-power monitors for use on rooftops by personnel not using RF garments. I must caution everyone that these monitors are set to alarm at a level that is far too high for anyone not wearing an RF protective garment. When I pointed this out I could sense a significant level of "concern" on the phone.

Richard Strickland has presented more than 150 public and private seminars on RF radiation safety and has written numerous articles on this topic. Spotlight on RF Safety will appear regularly in Radio World. E-mail questions or suggestions to the author at rfsafety@optonline.net.

This is the second in a new series of Q&As with Richard Strickland about RF safety. The first appeared in the NAB preview section of the Sept. 12 issue.

**Question:** There are RF personal monitors, and there are RF protective garments. Can both be used at the same time?

**Answer:** Standard RF personal monitors cannot be used with RF protective garments.

There is one special high-power monitor that is designed specifically for use with RF protective garments. The far too common practice among tower climbers of using a standard monitor under a protective garment is dangerous and should never be allowed!

Tower climbers sometimes wear a standard RF personal monitor under their RF garment or suit in the belief that the monitor will "see" what gets through the suit. Some consultants have even recommended this approach.

Unfortunately, the laws of physics prevent this combination from working properly.

The RF currents flowing through the stainless steel wire in the garments create small electric fields in close proximity to the fabric. When a monitor is worn under the garment, the fabric is often touching the monitor. Tests run on the monitors proved that the monitors do not work reliably when used this way.

One of two things will happen: the monitors will often alarm continuously due to the electromagnetic interference or, as is often the case, the electric fields will interfere with the control circuits and prevent the monitor from sounding its alarm when it should.

To solve this problem, the Nardalert XT high-power version was developed. (While at the company I headed the team that developed the Nardalert XT and decided on its features and many of its design details.) Rather than having a full-scale indication of 200 percent of standard — the FCC's Maximum Permissible Exposure (MPE) limit for

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SINCE 1963



## PPM: Rules to Survive and Thrive

*Advice for the Portable People Meter Era  
From Consulting Firm Paragon Media Strategies*

Paragon Media Strategies, a research and consulting firm, recently published "Ten Rules for PPM" to help programmers use the new technology, and subsequently added several more to its list based in part on input from others in the industry.

### Rule #1: Don't panic.

It is very early in the Portable People Meter process. Programmers and consultants everywhere are worked into an understandable frenzy because there are more top 10 radio markets scheduled to be measured by PPM in 2008. Arbitron is the yardstick by which radio stations measure success, so it's understandable that we all want to know about this new yardstick.

However, the frenzy to lean on early PPM results is disconcerting, and potentially problematic. Over-reacting to early data is potentially worse than not reacting at all. Don't panic, stay calm and only make measured responses that do not paint your station into a corner if and when conflicting PPM information arises. In all likelihood, that will occur as further data unfolds.

### Rule #2: Get "married" to your core audience, but stay "engaged" to your cume audience.

With PPM, the value of core listeners seems to be greater to a station's final ratings. However, a balance of core and cume audiences is still required. Don't over-focus on either core or cume, but create a compelling mix of content for your entire listening audience.

### Rule #3: Retain listeners for longer periods.

Because PPM data show lower TSL than with the diary, bolstering TSL is a critical objective for any station.

Structure your programming to keep the average listener listening longer for each visit. Successfully doing so will provide a significant increase in ratings.

Very simply, here's how: 1. What are you doing that you would not be doing if you didn't have the diary method? STOP doing those things. 2. What would you be

ever, converting the proverbial "dial-puncher" to at least a P3 or P4 to your station becomes essential.

Devise programming strategies that give listeners reasons to tune in more frequently.

### Rule #5: Understand the value of different listeners.

Shape your programming strategies to reflect the value of different listeners.

If 60 percent of your AQH comes from

### Rule #6: Delineate between your "Loyal PIs" and your "Fickle PIs."

If half of all PIs change their most-listened to station in less than six weeks, then it is critical to differentiate your "Loyal PIs" from your "Fickle PIs." This has ramifications to your station's research, contesting, loyalty programs, etc.

Ultimately increasing your "Loyal PIs" and decreasing your "Fickle PIs" may be the most impactful ratings driver available.

### Rule #7: Integrate programming.

Review your programming transitions to ensure that they are as seamless and forward-moving as possible. Don't force the listener to notice changes in programming.

Instead, glide them through your programming adjustments in a less obtrusive way and with more continuity.

### Rule #8: Location, location, location.

More than ever, dial position should be key to your marketing and positioning efforts. Remember, with PPM the game has shifted from "make listeners remember they listen" to "make them listen."

Central to "making them listen" is a clear marketing and positioning path to your station. Selling your dial position is more important than ever, but should not be done at the expense of selling your brand, too.

### Rule #9: Avoid "punch out lines."

Don't give your audience a reason to tune out, even for commercials. Avoid "punch out lines" such as "We'll be right back" or "Back in two minutes."

### Rule #10: Don't play "rubber clock" games.

The meter captures real-time listening, and knows it is 12:03 and not 12:10. Throw away anything and everything you did previously that tried to "trick" the listener into recording more listening to your station in the diary.



A PPM meter, hub and recharger. These innocent-looking devices are changing how radio programmers think about Arbitron data.

doing had the diary measurement not been in place? START doing those things.

### Rule #4: Set more listening appointments.

Many more of the shorter-duration listening occasions are being counted by PPM, which may be the reason that rock and oldies stations are doing better in the early returns from the PPM. More than

PIs, 20 percent from P2s and 10 percent each from P3s and P4s, then your programming strategy should place a higher value on P1s.

Also, consider that it takes three P2s to equal the value of one P1, and it takes six P3s or P4s to equal the value of one P1. The value of courting and maintaining P1s is very high, but the incremental value of P2s, P3s and P4s adds up, and in many cases, they are your future P1s.

See RULES, page 32 ►

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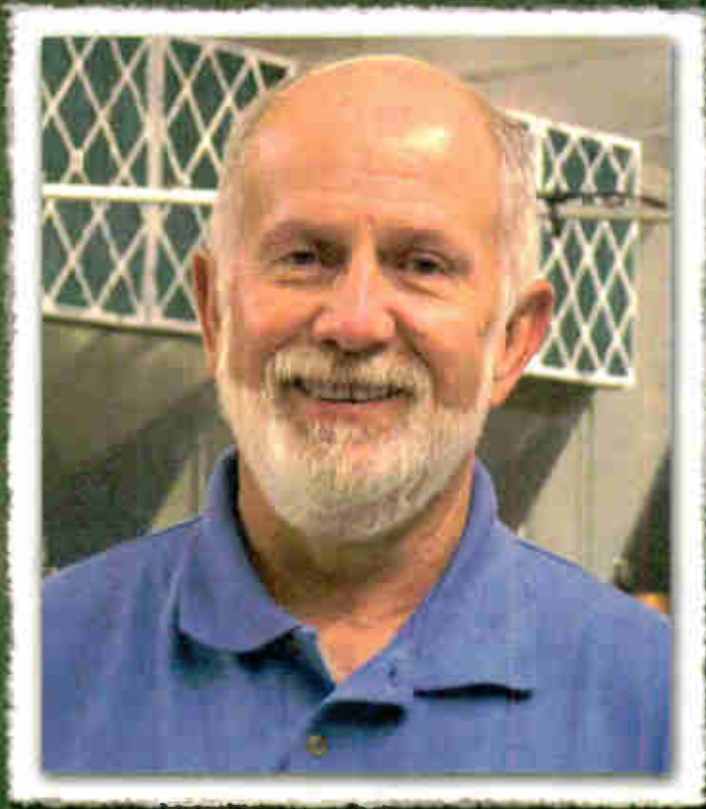
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**Radio World**

*Clay, thanks for the leadership  
in EAS, at SBE and beyond. You're  
a credit to the profession.*



# Rules

► Continued from page 30

## Rule #11: View the data with skepticism.

This rule isn't a slam at Arbitron, the meter or the methodology. This rule is a reality of all research you receive and digest.

Who is in the sample? What are the sample sizes? To what degree, if any, are the data weighted? How should I internalize and interpret these data? Interep CEO Dave Kennedy, who holds a doctorate degree in research, has always preached, "View all research with skepticism."

It's imperative that you know and then communicate through your station's selling habits that you understand the sample. In light of the new panel methodology Arbitron is using, you must also know how panels work and how the panel in your market is working. You simply can't afford to not know.

## Rule #12: Promotions should be hyper-focused to the working person and working communities.

Working people are driving the early ratings. Early PPM data shows that employed persons spend 16 hours a week listening to radio compared to 9-1/2 hours among their TV-infused counterparts who don't work.

Working people have more opportunities to tune to radio during their commutes and while working. With PPM, working persons provide the largest quarter hour payoff.

## Rule #13: Don't be shy about targeting men.

The Males are back.

Men are now the majority of AQH ratings because PPM is apparently doing a better job of capturing the true listening occasions of men. Men tune in on more occasions than women. Having a true measurement of male listening that buffers those who over-reported radio listening is a boon to male-oriented formats like rock. Oldies and adult hits have also enjoyed more success in the early going for PPM in Philadelphia and Houston.

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## Arbitron PPM Rollout Schedule

Rank†	Market	Panel Size	PPM Demo Data	PPM Currency	Last Diary Report
7	Philadelphia	2,040	Jan/Feb 2007	March 2007	Fall 2006
6	Houston-Galveston**	2,000#	Apr/May 2007	June 2007	Winter 2007
1	New York	3,720	Oct/Nov 2007	December 2007	Summer 2007
18	Nassau-Suffolk (Long Island)*	1,440	Oct/Nov 2007	December 2007	Summer 2007
39	Middlesex-Somerset-Union*	925	Oct/Nov 2007	December 2007	Summer 2007
2	Los Angeles	3,275	Jan/Feb 2008	March 2008	Fall 2007
25	Riverside-San Bernardino	1,065	Jan/Feb 2008	March 2008	Fall 2007
3	Chicago	2,595	Jan/Feb 2008	March 2008	Fall 2007
4	San Francisco	2,245	Apr/May 2008	June 2008	Winter 2008
35	San Jose*	1,155	Apr/May 2008	June 2008	Winter 2008
5	Dallas-Ft. Worth	1,815	July/Aug 2008	September 2008	Spring 2008
8	Washington	1,775	Oct/Nov 2008	December 2008	Summer 2008
10	Detroit	1,920	Oct/Nov 2008	December 2008	Summer 2008
9	Atlanta	1,645	Oct/Nov 2008	December 2008	Summer 2008
11	Boston	2,025	Jan/Feb 2009	March 2009	Fall 2008
12	Miami-Ft. Lauderdale-Hollywood	2,070	Apr/May 2009	June 2009	Winter 2009
14	Seattle-Tacoma	1,625	Apr/May 2009	June 2009	Winter 2009
15	Phoenix	1,335	Apr/May 2009	June 2009	Winter 2009
16	Minneapolis-St. Paul	1,515	Apr/May 2009	June 2009	Winter 2009
17	San Diego	1,440	Apr/May 2009	June 2009	Winter 2009

Chart is as of Feb. 2007.

† Rank as of Fall 2006. Rollout schedule was based on Fall 2005 Market Rank and is subject to change.

# DMA \* Embedded Market \*\* PPM Radio Ratings Data Accredited by MRC

## Rule #14: Demand better internal sample management from Arbitron.

Arbitron has raised the bar for radio ratings by providing a better methodology. However, a better methodology with inadequate sampling is still poor research.

Radio must now raise the bar for Arbitron by holding Arbitron accountable to better sampling. Hitting total sample targets is important, but hitting internal demo targets is critical (ex. MI8-24, ethnic quotas, etc.).

Cox Radio CEO Bob Neil took an early stand on this issue, which we support, stating that the industry needs every demo to come in "as promised — it's what we are paying for." Radio will know if Arbitron is providing reliable internal sample sizes based on the stability (or instability) of Average Quarter Hour shares within demos and dayparts as PPM data rolls out.

## Rule #15: Don't sweat the rankers.

Until Rule #14 is enforced, early

reports suggest that AQH shares are fluctuating significantly with PPM (compared to the diary). This fluctuation allegedly is pronounced when observing age/gender/ethnic within dayparts.

However, Arbitron President/Sales & Marketing Pierre Bouvard correctly points out a new reality:

"In a PPM world, rank position is a lot less meaningful," according to Arbitron. "With station audiences so tightly compressed, there is little difference between number one and number 15. Among 25-54s in the Houston July book, there was only a .2 AQH rating difference between number 1 and number 15! There was a five-way tie for first, a six-way tie for second, and a four-way tie for third."

Bouvard continues, "So if your rank bounces around in a PPM world? Relax. Don't panic. You're better off trending your AQH Persons or AQH Rating which will be very consistent and stable. We are 'rank obsessed' in radio. We tout our audience ranks to each other like crazy. 'The World Is Flat' in a PPM world."

Paragon's PPM Rulebook is available at [www.ppmrulebook.com](http://www.ppmrulebook.com) or visit [www.paragonmediastrategies.com](http://www.paragonmediastrategies.com).

## Concert Benefits Ft. Drum Veterans

Community Broadcasters, owner of seven stations in New York state, held a benefit concert for members of the Fort Drum 10th Mountain Division returning from Iraq and Afghanistan.

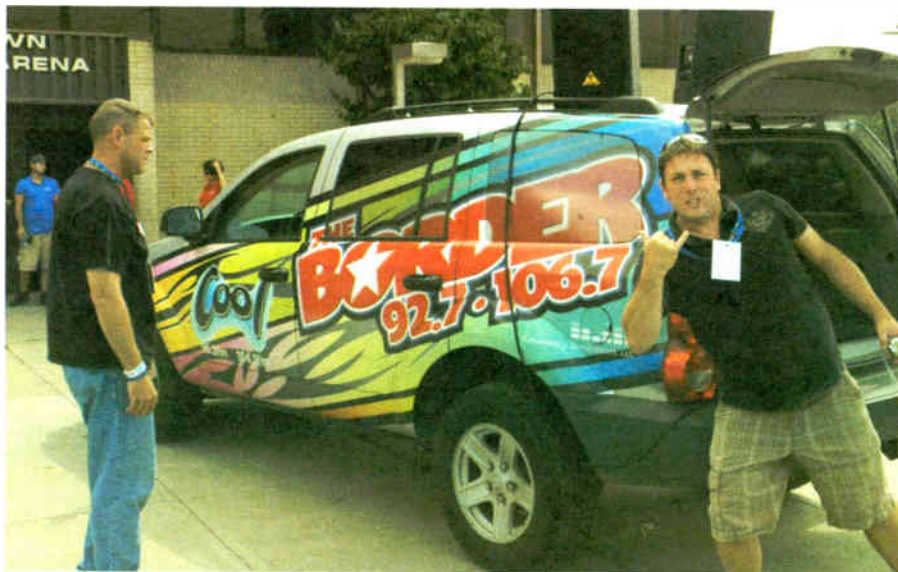
"Operation Rock" featured national bands Drowning Pool and Candlebox along with local bands. It was sponsored by Rock 100.7 WOTT(FM) and The Border, which includes 106.7 WBDI(FM) and 92.7 WBDB(FM).

Part of the proceeds was donated to the "Climb to Glory" fund, which supports local soldiers and their families. Drowning Pool donated a dollar per ticket to The United Service Organization and the Iraq and Afghanistan Veterans of America to raise awareness for a health care bill for veterans pending in the U.S. House.

Community Broadcasters is owned by Jim Leven and Bruce Mittman.



Candlebox performs at Operation Rock. Several Community Broadcasters stations co-sponsored Operation Rock. FM talent John Spizanno is at right, below.





# How Old Are You Now?



Everybody sing: "You say it's your birthday. It's my birthday too, yeah. You say it's your birthday — Happy Birthday TO YOU!"

Everybody has one, and there isn't a person on the planet who doesn't want to be remembered on it, so do you have a plan to strike an emotional chord with your listeners on their birthday?

Feel free to steal the following evergreens — or think up a few of your own — and get ready to be thanked 365 days a year by listeners who are happy to hear from you on their special day.

*Say "Happy Birthday" via e-mail.* It seems almost old hat nowadays to send people a birthday e-mail greeting, but don't be fooled into thinking that people don't like it or don't remember it.

Watching responses from databases over many years, I can tell you that this one is still a home run. It's amazing how listeners send back nice messages to radio stations just because they got an e-mail on their birthday.

Have people register on your Web site. If you're a small station with no database capabilities, do this manually. It only takes a few minutes a day to see who has a birthday.

Even if you can't send out listener e-mails from your own database system, there are tons of free services you can use to do this for you.

Always send out birthday greetings from your personalities. They are the people your listeners know and love. If they receive an e-mail from your Webmaster or promotion director, it may be perceived as impersonal and even a bit odd.

When asking for listener's birthdays on-air and telling them to register online, you will maximize your success if you're able to tell them they'll get something free. This could be free dessert from a restaurant (yes, you'll find plenty of places that will do this, as almost nobody just orders dessert or comes alone!) Free ice cream cones work well.

If you can't score something free for everyone, try to swing it so that everyone who registers this month is eligible to win one of 30 cakes you'll be giving away from a bakery.

*Have a "Turning 21 Party" every month at a bar.* This one can be sold to a bar and only works well with youth stations, obviously, but it can work in urban, country and rock.

Anyone coming in who turned 21 that month gets something free — perhaps just free admission, or free dinner; or in some markets, it could be free drinks (just remember your liability).

At the party, make sure you're serving a big cake and that you do something to recognize each set of people that shows up with a birthday guy or gal.

*The Birthday Day Contest!* There are a lot of variations on this game, but the best one is licensed by Filmhouse in Nashville.

"Everyone's got a birthday and your date of birth just might win you one million dollars!" It's a contest that is insured

and then promoted heavily on television.

Stations have been playing this game for years; there's a good reason it keeps coming back. It works.

For some odd reason, everyone wants to believe that their own birthday is unique and that this makes it more likely that they'll be rich. You will have winners and if you promote it properly by running enough television, your ratings will go up.

*Birthday Dating.* The morning show spends a week matching up people with the same birthday. These birthday twins win dinner and a movie or show. Find out how much people with the same birthday

have in common — or not!

Lots of sponsor opportunities with this one, too. If you send them both out on their shared birthday a week or two from the on-air bit, it's even more interesting because strangers don't often share their birthdays together.

*On-Air Recognition.* People have been wishing others happy birthday on-air since 1922, so when you do so, come up with a new spin. How about "Birthday Greetings for Charity," where anyone can say happy birthday to a friend for a \$20 donation to the March of Dimes or whatever charity you've decided to emphasize?

See BIRTHDAY, page 35 ▶

## Promo Power



by Mark Lapidus

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## SMALL-MARKET BROADCASTER

# Beal: Standing Tall in Texas Radio

*The Broadcaster of the Year in the Lone Star State  
Advocates Localism With a Global Perspective*

by Ken R. Deutsch

Welcome to Hamilton, Texas, population: 3,000. It is the home of the Cowboy Calf Roping Association, rodeos, antique tractor shows and the traditional chili cook-off. It is also home to KCLW(AM), a traditional country station owned by Lasting Value Broadcasting Group.

militarily sensitive, but they give us human interest stories, their feelings and some perspectives you don't hear anywhere else."

KCLW is about 35 minutes from Fort Hood, the largest military base in the U.S.

The station also features "The Trading Post," an on-air swap meet, heard weekdays at 11 a.m. and online. On a recent day,

available in four different counties," he said. "My 'news woman on the street' is an 88-year-old who listeners have dubbed 'Ms. Sunshine.'"

But Phillips couldn't run the station without support from the boss.

"There is not another Meredith Beal on this planet," he said. "I simply call him and tell him what I want to do, and nine times out of 10 he tells me to go ahead. To have that kind of trust from an owner is very special."

Phillips understands that the station

broadcaster and Hamilton's Citizen of the Year.

"When Meredith first came into town, one of the first things he did was meet with community leaders and express his vision for the station and get everyone's input. He formed an advisory committee and several of us serve on that. He wants to do everything he can for this community." The local school district also has saluted him for exemplary reporting on the community's public schools.

Riney said that people who have spent their entire lives in radio have a narrow view of the profession, and that is why Beal's unusual "outsider" background is helpful.

"He has fresh ideas and those of us who are veterans can learn from him," Jordan said.

## Shotgun blast

A former colleague of Beal's from Motown Records related an amazing story.

"Meredith survived a shotgun blast to the head and chest in his mid-20s," said Bradie Speller. "He was helping out a family member in a store when some people came in to rob it. These people pulled out a sawed-off shotgun and blasted him, and he was left for dead."

**If you have a tire shop, why would you care who is bringing customers to your door?**

— Meredith Beal



The storefront of 'America's No. 1 Western Station'



Kyle Phillips and Meredith Beal

But this operation is more than just Buck Owens and Johnny Cash records, according to CEO/President Meredith Beal, whose background includes stints as global Web master for Dell Computers and director of marketing for Motown Records in Los Angeles. Beal grew up there but he knows Texas; his father is a native of Marshall and Beal attended college in Houston.

"We have a show I find deeply significant, called 'Shout Out from Iraq,'" he said. "Every Friday soldiers deployed over there call in to the station and give a 'shout-out' to their friends and relatives and talk about what's going on. Obviously they don't discuss anything

the live stream at [www.kclw.com](http://www.kclw.com) featured the following items up for sale: a Binelli pump shotgun with camouflage finish, one mule (slightly used), a mattress/box spring set for \$50 and a roping saddle in like-new condition, "just ask for Butch."

This station sounds like Texas.

KCLW has other features not found on many small-market stations including 90 minutes of locally produced news and community events each weekday morning, as well as an evening newscast.

## All about the community

Kyle Phillips, general manager of the station, said, "We have a program on which I tell the audience what jobs are

has an important mission.

"If a local organization is holding a fundraiser, we don't just announce it," he said. "We will have them come to the station and we'll interview them for 10 to 15 minutes. Recently a teacher here in Hamilton needed help with her medical bills. The community held a bake sale and we auctioned off cakes on the air to raise over \$1,000 in about an hour and a half.

"This is Meredith's vision. He believes in the power of good deeds, as do I."

The community of Hamilton also praises Beal.

"We are fortunate in a town this size to have a station like KCLW," said Riney Jordan, a motivational speaker, former

## Change the way you think about the clock...

**AUDIO TIME MANAGER** doesn't just shift time, it shifts the clock paradigm. Imagine inserting an extra traffic report in a network show, with no loss of content. Imagine backtiming into the network perfectly every time, even when breaking local news means you're running long. Imagine eliminating make goods. Now shift your thinking about time, because your old clock just got a new face.



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—Gabe Hobbs

Senior Vice-President of Programming, News/Talk/Sports  
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World Radio History

"But Meredith got up, called his parents and 911. He walked out of the hospital on his own two feet one week later because of the power of prayer, and the power of the human spirit, both of which he has."

Meredith Beal still has five shotgun pellets in his heart and four in his lungs from this incident.

Beal was named Broadcaster of the Year in July by the Texas Association of Broadcasters. Patti C. Smith is general manager of KVUE(TV) in the Texas state capital of Austin; she is also a former president of TAB and encouraged Beal to run for the seat on the board of directors that he now holds.

"Meredith has a quiet strength that has allowed him to persevere in some very challenging situations," she said. "He has proven his commitment to his listeners by utilizing the airwaves to inform as well as entertain. Sit down with him and you will find that he is a man of principle who is interested in a wide array of creative work."

## It's black and white

While KCLW is successful, Beal has not been as lucky with two stations his company owns in Jasper, Texas.

Contemporary Christian combo KTXJ(FM)/KCOX(AM) had problems that began about two years after he purchased them in 2000. A certain faction in that town discovered that Beal was

See BEAL, page 35 ►



## 'Giving a Voice'

In selecting Meredith Beal, one of its board members, as its Broadcaster of the Year, the Texas Association of Broadcasters described him an advocate for localism who believes that radio stations can and should be forces for good in their communities.



Meredith Beal

Beal purchased KCLW(AM) Hamilton, KTXJ (now KCOX) Jasper and KWYX (now KTXJ-FM) Jasper in 2000 and has since increased local programming, added local news and created public affairs programs.

He attended college at the University of Houston, majored in journalism and took a job as a reporter for the Los Angeles Times. Later he was editor of the Rhythm and Blues Report and other publications.

When Barry Gordy sold Motown Records, Beal consulted on the transition and later joined the company as director of marketing. Later, back in Texas, he was global Webmaster for Dell Computer until 2001. He used proceeds from the sale of Dell stock to form his radio company.

"As a Buddhist, Beal strives to be optimistic and calm, despite the fact that he usually has 68 irons in the fire," the TAB stated. "On a daily basis, he is likely to be attending a TAB Board Meeting in Austin, producing a CD of harmonica instrumentals, teaching a Web development class at Huston-Tillotson University and heading to Hamilton to meet with community leaders."

As a broadcaster his goals have been to build businesses and serve the community. TAB said he saw a need for "more service, less sensation and more localization in news." Last year the "KCLW Fire Fest" raised \$30,000 for area fire departments that were drained by winter wildfires. The station's new public affairs program, "What Do You Think," is one of the most popular and features in-depth interviews with candidates for local and statewide political office.

"He truly believes in giving a voice to local citizens, allowing them to use the airwaves to talk about issues pertinent to the community. Beal continues to travel the world, spreading his message of global citizenship and dialog as the best means to create a peaceful society," the association wrote.

## Beal

► Continued from page 34

African American. He was mortified when one of his sales executives, a white woman, told him that one advertiser said he would buy no more ads on the stations until someone white owned them.

This is the town where in 1998 a black man, James Byrd, was tied up, dragged behind a truck and decapitated. The three white defendants were found guilty. Two were sentenced to death, the third was sentenced life in prison.

"It's a small element of the community and they are vocal," Beal said. "Someone sabotaged the transmitter and other people went around and talked to a lot of the advertisers."

"There are pockets of racism everywhere and I'm not past these problems yet. I have had to stay away from Jasper so the stations wouldn't tank."

Beal loves the town and enjoys the scenery and world-class fishing there but says he is frustrated that he can't run his radio stations without interference from a handful of people.

"Our job is to drive customers to the businesses we serve," he said. "If you have a tire shop, why would you care who is bringing customers to your door? I am still losing money in Jasper."

A documentary about racial problems in that town aired recently. Details are available at [www.twotownsofjasper.com](http://www.twotownsofjasper.com).

Ken Deutsch is a former broadcaster who has written for Radio World for more than 22 years.

## Birthday

► Continued from page 33

### Finally, a word about DJ birthdays.

It's okay for an air personality to share his or her own good news about a birthday, but don't overdo it because it comes off as self-centered. Instead, do something nice for your birthday DJ — give them the day off, with pay.

Come to think of it, there's another contest angle for birthday listeners: On the DJ's birthday, what'll you say? Win a spot on the air and find out!

The author is president of Lapidus Media. Reach him at [mlapidus@cox.net](mailto:mlapidus@cox.net).



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# Public Radio Today: Looking Good

Arbitron Report Documents a Growing, Affluent Audience

by Donna L. Halper

These appear to be very good times for public radio.

While many commercial stations worry about audience erosion in the face of iPods and the Internet, public radio listenership continues to grow. According to the recent Arbitron report "Public Radio Today: How America Listens to Public Radio," between fall 2005 and fall 2006 weekly listenership increased 7 percent, from 10.5 to 11.2 percent of the U.S. population, with gains in nearly every demographic group.

Cume ratings for public radio listening increased across every time of day in every demographic, male and female, with the exception of teen boys, and they were unchanged.

While cume ratings for teen girls gained "a surprising" 15 percent, generally the older the age group, the bigger the growth, Arbitron found. Cume ratings advanced 4 to 5 percent with 35-44s, while cume ratings for adults 55+ escalated 9 to 11 percent overall.

The report also showed that public radio's time spent listening is holding remarkably steady.

## News/talk rules

In its 59 pages, "Public Radio Today" offers up an analysis of who listens to the eight formats that comprise the programming at the majority of public stations.

The news/talk format continues to rule

## Public Radio's Reach by Daypart

Mon-Sun, 6AM-Mid  
Cume Ratings

		Mon-Fri 6AM-10AM	Mon-Fri 10AM-3PM	Mon-Fri 3PM-7PM	Mon-Fri 7PM-Mid	Sat-Sun 6AM-Mid	Mon-Sun 6AM-Mid
P12-17	M	1.8	0.6	1.5	0.8	1.9	3.7
	W	1.6	0.6	1.5	0.8	1.8	3.8
P18-24	M	2.1	2.0	2.2	1.5	2.3	4.7
	W	1.9	1.8	1.9	1.2	2.2	4.4
P25-34	M	5.8	3.8	5.5	2.9	4.8	9.6
	W	5.3	3.9	4.9	2.4	4.4	8.7
P35-44	M	8.1	4.8	7.6	3.3	6.4	12.3
	W	6.5	4.7	5.9	2.5	5.5	10.1
P45-54	M	9.5	6.4	9.3	4.5	9.0	15.0
	W	8.1	6.1	7.8	3.6	7.9	12.9
P55-64	M	10.9	8.6	10.8	5.2	11.8	17.7
	W	9.5	8.6	9.8	4.8	10.6	15.8
P65+	M	9.5	10.7	9.5	4.9	12.1	17.1
	W	7.8	9.7	8.0	4.0	10.2	14.6

Different age groups listen to public radio at different times, Arbitron found. Listening times peak for most men and women weekday mornings between 6 and 10 and in the afternoons from 3 to 7. Older demos tend to listen most during the midday. Public listening is higher on weekends among 12-24 and 55+. A higher percentage of men than women listen to public radio, particularly in 55+.

as public radio's biggest.

The research report found that despite a slight ratings decline, news/talk still commands nearly half of public radio listening. This format "comes close to generating more listening than all the other formats put together" and has a weekly cume of nearly 14 million listeners 12+.

Among other interesting facts in the report, seven out of 10 news/talk fans have college degrees. This is also the only format where more than half of the audience is in the upper income bracket.

And as might be expected, the baby boom generation makes up a large part of the news/talk audience; nearly 68 percent of listeners are at least 45 years old.

The common wisdom has long been that news is a format best suited to AM, yet the majority of public stations are on the FM band. Public radio's reputation for delivering in-depth news coverage is probably the reason over 45 percent of listeners in the 45-64 demographics say this format is their first choice.

The "news-classical" format strengthened its grip as the number two public radio format and registered growth in every daypart, "not to mention a 14 percent cume increase." And it has the highest proportion of listening from its primary listeners among all public radio formats.

Among other findings, the smaller adult album alternative/eclectic format showed a 17 percent improvement in its weekly reach. The format's audience composition also showed substantial gains in the 25-44 demographic, which rose from 38 percent to 44 percent; however, in other demographics, including 12-24 and 45-54s, there were noticeable declines for the format.

As for formats that attract the female audience, classical was number one; 53.8 percent of its audience is women. And surprisingly, classical was the only format to show gains in TSL among 12- to 24-year-olds, not an audience usually expected to prefer classical music.

The report gives detailed insights into who is listening within each format.

See PUBLIC, page 39 ▶

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# Take a peep

## at our new website

The screenshot shows the Broadcast Warehouse website interface. At the top, there's a navigation bar with 'TRANSMISSION', 'STUDIO', 'MODULES', and 'SOFTWARE'. The main content area features a large banner for a 'Digital Microphone Processor' by ORSIS, with a 'In Stock Now!' badge. Below the banner, there's a list of products and a 'More transmitters for Sport' section. The website also includes a sidebar with various product categories and a footer with manufacturer logos like Coel, Yamaha, and Digigram.

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# Public

► Continued from page 36

For example, about 80 percent of those who prefer the jazz format on public radio have attended at least some college; and 38 percent of the format's audience makes more than \$75,000 a year, up from 32 percent the previous year, which Arbitron called a huge increase over a one-year period.

"Jazz's share of all public radio listening is at its lowest in mornings, rising more than 50 percent in middays and doubling in evenings," the study found. While most public radio format shares are not as high on weekends, the reverse is true for jazz.

## The right questions

Organizations that helped Arbitron prepare the report include the Radio Research Consortium, American Public Media, National Public Radio and Public Radio International.

Jackie Nixon is NPR's director of strategic planning, audience and corporate research. She isn't surprised by recent successes by public radio and by stations that are NPR affiliates.

"We do surveys of our own," she says, "and the



Renee Montagne and Steve Inskeep of 'Morning Edition'

Arbitron report is consistent with what we've been seeing." She believes NPR's news programming provides a good reason for people to listen. "We're known for factual, in-depth information. People use us the way they use a magazine."

Nixon says NPR's reporters know how to provide analysis of the news, but it's how they deliver it that matters to the audience.

"We are known for our storytelling. We have the ability to take complex issues and make them understandable. And we cover the stories that nobody else is covering." She also says that individual reporters have expertise in subjects the audience wants to know more about, citing Ira Flatow, host of "Science Friday" as an example.

"He has a lot of fun with it, and he knows how to ask the right questions."

## 'I vote'

Another interesting statistic in the report is that while public radio in general, and NPR in particular, are often perceived as left-leaning in their political coverage, the difference is not overwhelming; 26 percent of public radio's audience identifies as Republicans; 32 percent identify as Democrats and the rest say they are independents.

However, among those who identify themselves as independent, 50 percent are more likely to favor the Democrats' side than independents in general, which the authors call "a big difference in allegiance."

So are right-wing talk hosts correct when they accuse NPR's shows of having a liberal bias? Jackie Nixon says it's a myth that doesn't hold up once people sample public radio.

"We did a focus group with Rush Limbaugh listeners about two years ago. We asked them to listen to an hour of one of our talk shows on our San Diego affiliate KPBS. When they reported back to us, they said they were delighted that nobody was shouting at each other. And they appreciated the

## Public Radio Formats Ranked by Audience Share

Format	Share
News-Talk	43.6%
News-Classical	21.1%
Classical	12.9%
Jazz	6.2%
News-Music	6.0%
AAA/Eclectic	5.1%
News-Jazz	2.8%
Variety	2.0%

Figures are Mon-Sun, 6AM-Mid. AQH Persons 12+, Fall 2006. From Arbitron's "Public Radio Today 2007 Edition." Source: MaximiSer Plus National Regional Database, Fall 2006

depth of the conversation.

"They found the shows very balanced, and after they tried us, they said they viewed us as informative." Although she doubts that the Limbaugh fans abandoned conservative talk radio, she says that a few did in fact become NPR fans.

But whether they are Democrats, Republicans or independents, public radio listeners tend to share one thing, according to the Arbitron study: They are politically active.

Public radio listeners are 15 percent more likely to vote in presidential elections than the average American; in fact 81 percent say they always vote in those elections. And 60 percent of the public radio audience say they always vote in elections in their state.

Although the Arbitron report shows that it is mainly niche formats like jazz that get strong weekend numbers, several shows that are syndicated by NPR do very well too. Nixon notes that shows such as "Wait Wait Don't Tell Me" have a faithful weekend audience, and the Arbitron report singled out "Car Talk" and Garrison Keillor's "A Prairie Home Companion" as being popular with public radio listeners.



WBUR(FM) Boston morning show anchor Bob Oakes

## Station level

NPR is a big part of the story, but so are success

stories at the station level.

For instance, in Boston, where several stations broadcast NPR's programs, one of them, WBUR, gets ratings that put it in competition with established AM news/talkers.

WBUR takes a high-profile commitment to covering the news; it has a staff of 135, of whom 108 are involved with news programming. The station has a history of winning awards for its news coverage, too, more than 100 of them at last count, including several Peabody Awards.

"Boston is a great place to do news/talk," said Station Manager Corey Lewis. "It's an academic and cultural center, so there's a lot of interest."

With so many colleges in the area, students are among WBUR's fan base. Lewis notes that "18- to 34-year-olds make up 23 percent of our total audience."

In addition to providing the local cut-ins that enhance NPR's national news shows, Lewis says that at WBUR, "we make content, rather than just broadcasting somebody else." It produces popular shows including "On Point," "Here and Now" and the weekend favorite "Car Talk."

Among the station's staff are people who know the market and have extensive experience in news, including GM Paul LaCamera; Bob Oakes, the local anchor for NPR's highly rated "Morning Edition"; and Delores Handy, who provides the local news during NPR's afternoon "All Things Considered."

Lewis, who came to WBUR five years ago, believes the strong commitment to local news is one reason WBUR has been successful. In fact, he says, "we have some of the highest ratings of any NPR station."

Other findings of the report: The news-music for-

mat gained across all dayparts; also, variety music, the smallest of the eight formats studied, saw a big increase in cume.

Public radio listeners also are financially committed; "though only 6 percent of U.S. households give money to public radio, 17 percent of public radio listeners donate each year," Arbitron found.

"Thirty-eight percent of those who contribute give \$35-\$100, while 37% of public radio donors — nearly an equal amount — give at least \$100 per year."

Meanwhile, public radio listeners' interest in most consumer electronics is actually falling.

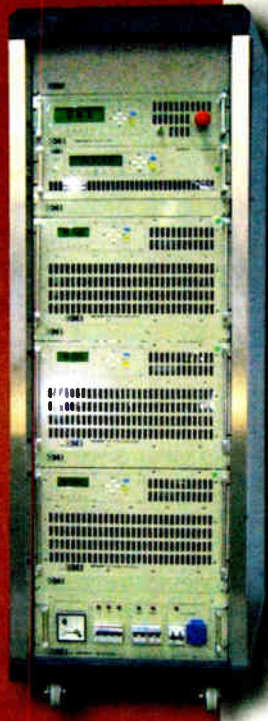
"Public radio listeners are now less motivated to buy consumer electronics that are alternatives to radio, with the exception of satellite radio, in which public radio listener interest has grown slightly. In general, the purchase intentions of these listeners have dropped sharply for MP3 players, HDTVs, computers and digital cameras."

Jazz has taken over as the public radio format with the highest percentage of men listeners.

Read the study of public radio listening at [www.arbitron.com/downloads/PublicRadioToday07.pdf](http://www.arbitron.com/downloads/PublicRadioToday07.pdf).

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# Saving the Planet, One Studio at a Time

by Kelly M. Brooks

If you think of chartreuse and lime color swatches when you hear the phrase, "going green," talk to Peter Bloomfield and Mark Motl of Bloomfield & Associates Architects.

As part of a session at the fall NAB Radio Show, they recently discussed ways that broadcast studios can "go green" — namely reducing energy consumption, while helping the planet and cutting costs in the process. They are also co-authors of the book "A Face for Radio: Radio Station Planning and Design."

Bloomfield said it is difficult to say what the average small- or large-market station spends on energy, as each facility operates differently and energy costs can vary based on whether the station rents or owns the facility, whether it cools the facility, etc.

But, he said, with thoughtful, strategic construction interventions and a change in attitude from station employees committed to lessening energy consumption costs

from daily operational matters, energy consumption can be cut by 15–20 percent.

## Little things

Motl said the first step in "going green" is adjusting the attitude of the employees in the workplace — that is, getting their mindset in gear towards reducing their individual carbon footprint.

Once procedures like recycling and shutting off electronics become priorities and then common practices, the station as a whole will seek out additional ways in which to function in a "greener" manner.

Bloomfield said attitude builds a "foundation of willingness" to make larger changes down the road. For instance, when it needs new furniture, the station may evaluate "green" options; examine its heat and cooling changes; or make changes to the building's façade and landscape. Every little change adds up, he said. If the "willingness" is well defined, it can become part of everyday decision making.

But does it cost money to save money?



Peter Bloomfield

"Un-green" station practices also include poor personal daily waste management, i.e., copious amounts of office waste not recycled; or disposing of electronic equipment inappropriately, as this equipment may contain toxic materials.

Bloomfield & Associates Architects said many clients have voiced an interest in this trend, although few have insisted upon a "green" facility at the building/design level.



Mark Motl

Bloomfield said some "green" options are initially more expensive, but last longer or eliminate the need for other changes down the road, and that one needs to consider the life cycle of a building and how overall savings are evaluated.

Also, some green technologies are continually developing. Motl points to energy-efficient light bulbs, for example, which were initially more costly than their energy-inefficient counterparts, making some people reluctant to purchase them. But, he noted, the price on "green" light bulbs is decreasing, and he expects other products and procedures to follow similar trends.

So, what can your station do to minimize traditionally "un-green" facility practices? For starters, one immediate and simple thing is to chill on the AC.

Motl said broadcast facilities frequently "super cool" their stations — that is, over-air-condition year-round, which is not necessary, as stations can take advantage of simple technologies to vacate air, thus more efficiently maintaining optimal studio temperatures.

More often, clients seek ways in which to tweak operational procedures to increase energy efficiency and reduce the carbon footprint of the station.

Bloomfield and Motl suggest changes on the operational level such as office recycling, proper disposal of trash and heating/cooling efficiently. Hey, if they are not already on motion sensors, get the janitorial service to turn out the lights at night.

And with the current social trend toward energy and environmental conservation, going "green" has the potential to be integral to a station's "brand identity," though Motl and Bloomfield agree that the worth of this may depend upon the listening audience.

*This story was prepared for the NAB Daily News and is ©NAB.*

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Westwood One's partnership with NBC Entertainment, News and Sports also includes "Last Night on Tonight with Jay Leno," "Last Night on Late Night with Conan O'Brien," "NBC News Radio" and other offerings.

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15	Broadcast Electronics	www.bdcast.com
37	Broadcast Warehouse	www.broadcastwarehouse.com
3	BSW	www.bswusa.com
40	Circuit Werkes	www.circuitwerkes.com
38	Coaxial Dynamics	www.coaxial.com
7	Comrex Corporation	www.comrex.com
38	Davicom, a Div. of Comlab	www.davicom.com
38	Deva Broadcast Ltd	www.devabroadcast.com
17	Digigram Inc.	www.digigram.com
4	Electronics Research, Inc.	www.eriinc.com
10	Full Compass	www.fullcompass.com
28	Google Inc.	www.google.com/ads/asaudio
38	Gorman Redlich Mfg	www.gorman-redlich.com
36	Grace Broadcast Sales	www.gracebroadcast.com
19	Harris Corporation	www.broadcast.harris.com
18	Heil Sound, Ltd.	www.heilsound.com
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GUEST COMMENTARY

## Retired CE Tackles Toughest Job Yet

*The Author, Battling Prostate Cancer, Urges Fellow 50+ Broadcasters to Get Tested*

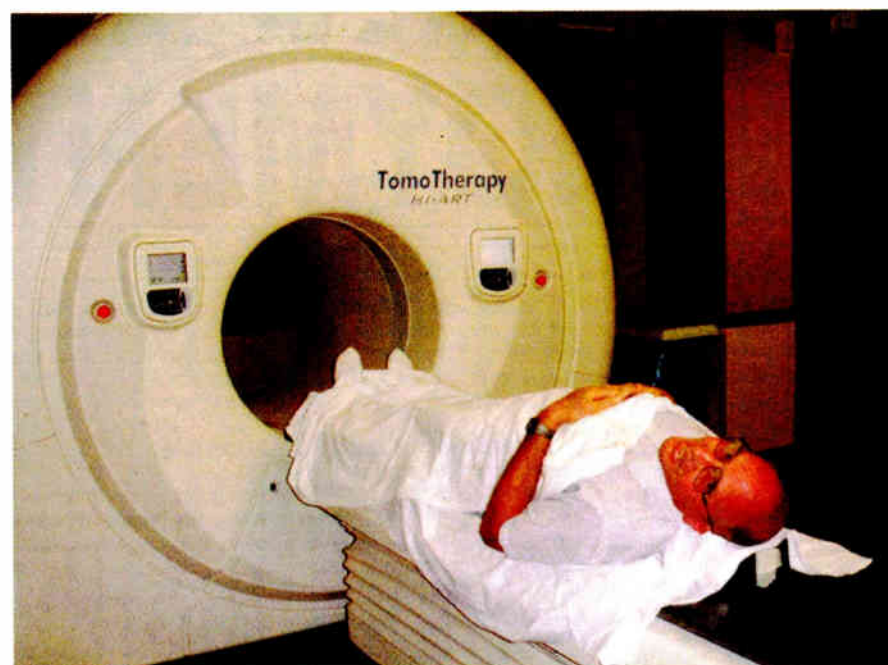
by Marvin Collins

After I retired from my position as chief engineer for KFI(AM) and KOST(FM) in Los Angeles, my wife Herta and I were fortunate to be able to take cruises in various parts of the world, and ski trips to Utah from 2003 to 2006, all while I continued my part-time job — taking care of KBLA(AM) — and did occasional remote broadcasts for various stations. Retirement continued to be good.

urologist about the treatment options, I could see I had a lot of research to do in order to decide which treatment option to pursue.

The first option mentioned was surgical removal of the prostate gland. I did not care for this. I then studied various forms of radiation therapy. One interesting option is brachytherapy, the placement of radioactive seeds into the prostate gland to kill the cancer.

Another form of brachytherapy is the



Collins prepares for his final treatment session, 38 of 38.

Boredom has not been a problem. I think I was bored once for about 10 minutes until I remembered the next household or ham radio (W6OQI) project I wanted to do. Usually I find the days come to an end and I have not done all that I wanted to do that day.

But life is not always a bowl of cherries.

### A different kind of PSA

On Jan. 24, 2007 we made the final payment on a cruise to Australia, Tasmania, New Zealand, Fiji, American Samoa and Tahiti. On Jan. 26, I had my annual blood test, which includes a PSA test (Prostate Specific Antigen), which I assumed would be normal as in previous years.

On Jan. 30 I received a call from our family doctor saying I might have a problem because my PSA was 4.55, up from 3.29 the year before. Generally you do not want to see a PSA above 4.0. This was too much of an increase for one year. The doctor did not say I had prostate cancer but it was time to see the urologist for a prostate biopsy.

I have to say it was a time of anxiety waiting for the results of the biopsy. Two days later the bad news was that the biopsy showed early-stage prostate cancer. This certainly was not the information I wanted, though I was not too surprised because my father had died of what started as prostate cancer and was not diagnosed early enough.

During a lengthy discussion with the


**Seventy-six units of radiation — known as Grays — are needed to kill prostate cancer. One Gray dose is equivalent to one joule radiation energy absorbed per kilogram of organ or tissue weight.**

insertion of hollow tubes into the prostate gland through which radioactive material is placed for a limited time as controlled by a computer. Brachytherapy is often accompanied by a period of a few weeks of external radiation.

### Gray area

While researching all of this, I came across [www.tomothersy.com](http://www.tomothersy.com) and was impressed with this new system for

See PSA, page 45 ▶




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**Dale A. Ganske, President**  
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Shown: Heil Deco Series Fin Large-Diaphragm Dynamic Mic  
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## GUEST COMMENTARY

# The State of HD Radio: Not Good

*If Consumers Don't Want It, Retailers Can't Sell It And Radio Won't Invest In It, Is HD Radio the Cure?*

by Greg Smith

HD Radio/IBOC is a thinly veiled attempt to jam smaller broadcasters and rim shots off the dial. HD is a "fix" for something that was never broken. How many listeners complain to stations about the quality of analog AM/FM? HD represents the interests of only larger broadcasters and is not a technology that consumers have demanded.

Broadcast radio is in trouble, due to competition from satellite, iPods and cell phones. HD is an attempt to please Wall Street by building the HD infrastructure, but in reality, the lack of investment in the HD2 channels has resulted in repetitive, automated, bland programming. Most metro areas have more than enough radio stations to satisfy listeners, without the need for HD multicasting.

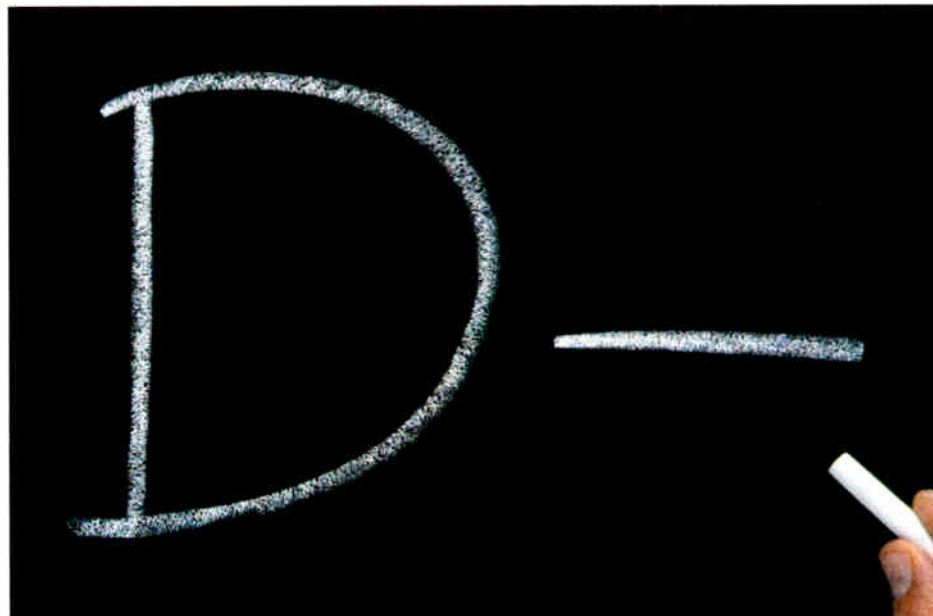
## Hash rounds

AM-HD ignores listeners by making AM sound horrific on existing radios. Newer AM radio designs are wideband because of their cheap IF design, and sound like a waterfall mixed with a million angry crickets when one tunes an AM-HD station.

HD jams adjacents and has extremely poor building penetration, even in those cherished city-grade metro 10 mV/m signal areas, and less than 50 percent intermittent HD-AM coverage in the 5 mV/m area, as indicated in the NPR study "HD Radio Coverage Measurement and Prediction." Arrogant IBOC advocates proclaim the nonsensical statement, "You were never supposed to listen to first-adjacents, or out of protected contours."

Some of us "outmoded-DXers" are

working overtime trying to help a next-generation of DXers, some only 12 to 15



miles from HD towers, get enough HD signals into radios to get reliable decode. We see the folly of a system that forces consumers to do something it has been proved they will *not* do — become antenna tinkerers. A percentage might tinker with antennas for a specific format, but the system is defective when it doesn't work with internal antennas, which for decades have been adequate for analog stations.

HD2 is going to become pay-per-listen. The technology is out there, it was demonstrated and the chance to rake in money from niche audiences is too tempting to pass up, especially when ad revenue is falling. However, this strategy may backfire and drive even more defections to satellite radio. So, why the pre-

tense that HD will always be "free," when the technology to make it subscription-based has already been announced?

Few HD radios have been sold, as consumers have moved onto other entertainment media. I've seen various estimates

of the number of HD Radios sold; they range between 60,000 and "several hundred thousand." But it's not much regardless. For all HD Radios on Amazon.com, 3,500 is the highest average in the electronic sales rankings. On Circuit City's Web site, the Receptor HD, which is being discontinued, has received only 600 consumer votes in 10 months. Some visits to Wal-Mart, Best Buy and

service into its cell phones, and CBS bought Last.fm.

If there is any doubt as to the popularity of personalized music services and other competitors to HD, go to the *statsaholic.com* Web site traffic statistics engine and compare "hdradio.com" and "clearchannelmusic.com" to "pandora.com," "last.fm," "sirius.com" and "xmradio.com." If still not convinced, go to *google.com/trends* and compare "hd radio" to "sirius," "xm," "internet radio" and "podcast."

Internet traffic to *hdradio.com*, the go-to site for further information about HD Radio and heavily promoted in 2006, and *clearchannelmusic.com*, the go-to site for HD streaming, is almost nonexistent. Interest in HD (i.e., Google searches for "HD Radio") has been almost flat since the first HD radio was sold in January 2004 and HD stations started broadcasting in 2002.

While the AM band may be struggling, news/talk/sports on the 50 kWers remains very popular. AM-HD should not be allowed to destroy this valuable resource that reaches many thousands of fringe listeners across many states; WLW(AM) boasts 38 states.

AM-HD is essentially turning AM stations into localized FM stations, and we have yet to see the effects of nighttime AM-HD. Through this travesty, the FCC literally gave away our free airways to the HD Alliance/Ibiquity, but it is still up to the marketplace/consumers to determine the fate of HD.

Internet message boards and blogs are filled with negative comments, as HD is being viewed as a solution in search of a problem. To quote Jerry Del Colliano,

**Why the pretense that HD will always be 'free,' when the technology to make it subscription-based has already been announced?**

## PSA

► Continued from page 44  
non-invasive treatment of many forms of cancer, including prostate cancer.

TomoTherapy offers accurate precision-aimed radiation of the tumor with minimal radiation of the surrounding tissue. After revisiting the site and reading more about the treatment, I felt this was the treatment for me.

The TomoTherapy Web site contains a list of hospitals offering the treatment. I found the City of Hope National Medical Center in Duarte, Calif., to be the closest to my residence. I called and made arrangements for a consultation with one of its doctors, Dr. Jeffrey Wong. After consulting with Dr. Wong for about an hour we agreed that TomoTherapy would be an appropriate treatment for my prostate cancer.

Dr. Wong explained that, empirically, it has been determined that 76 units of radiation — known as Grays — are needed to kill prostate cancer. One Gray dose is equivalent to one joule radiation energy absorbed per kilogram of organ or tissue weight. In my case, the radiation via TomoTherapy is delivered at the rate of 2 Grays per day for 38 days to make the required 76 Grays.

So far, side effects have been minimal

and I am delighted with TomoTherapy. Of course it will take some time after treatment to determine if the TomoTherapy was successful. Dr. Wong believes the 38 days of treatments will be all I require. Time will tell.

You may wonder why I have been telling you about all of this. There is a moral to this story. *If you are 50 years of age or older, be certain to have your annual PSA blood test.* Prostate cancer is very common in men over 50 and it is important to catch it early, as I did.

I would like to give a thank you to the staff at City of Hope for their kind and courteous treatment; and a special thank you to Carmen Grau, the radiation therapist who greets me every day at TomoTherapy machine Number One. As I write, today is treatment number 38 of 38. This is the end of my daily trips to City of Hope for the past eight weeks.

A follow-up visit will take place in a month. After that I will return to City of Hope every four months for PSA testing to be certain the prostate cancer has been eliminated.

For more detailed information, visit [www.tomotherapy.com](http://www.tomotherapy.com).

*Marvin Collins is still active in the broadcasting business on a part-time basis after working in broadcasting since 1954. He lives with his wife outside Los Angeles.*

RadioShack show no signs of HD Radio.

Internet HD message boards indicate that radio geeks are buying multiple HD radios, having to upgrade from bug-ridden units, so the actual number of HD listeners may be much smaller than previously indicated.

Bridge Ratings reported that "HD is the most disappointing media of 2007" and that "consumer interest in HD is decreasing, as stations work hard to increase awareness." Also in "HD Radio: The Battle for Your Mind," Bridge stated, "Thus far it is still the audiophiles and early adopters who show interest and that is where the several hundred thousand units sold comes in to play."

A 2007 In-Stat survey, "Digital Radio Set to Take Off," indicated that 75 percent of consumers are aware of HD, at some level, so lack of consumer awareness can no longer be used as an excuse. Currently, there may be a slowdown in HD sales as the radio geeks are completing the initial round of purchases.

## Getting personal

The Big Three have rejected HD in favor of satellite radio, and aside from a few luxury models that include HD as a \$500 option (Hyundai and Jaguar sales have stalled), HD has recently been relegated to used car dealerships. Sprint has integrated Pandora personalized music

professor of music industry at USC and founder of Inside Radio, who has daily contact with Generation Y, "So, the old consumers don't want HD. Young consumers think the concept is laughable. Big retailers can't sell it. And radio companies won't invest in it. Sounds like a winner to me."

In one of Jerry's recent posts, "Finally, A Good Use for HD Radio," he indicated that "the folks at Ibiquity are looking at other options. They have to."

*Greg Smith is a software engineer and avid AM DXer. He can be reached at [pocketradio@gmail.com](mailto:pocketradio@gmail.com).*

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## Recalibrate Expectations

A recent Bridge Ratings survey reported that although consumer awareness of HD Radio has greatly increased, consumer interest in purchasing HD Radio receivers has actually declined. This seems to be a pretty clear message from consumers saying, "Now that we know, no," to HD.

This is discouraging to broadcasters and indicative that a more compelling statement of HD Radio's value is still required; yet this trajectory is not entirely unexpected.

Yes, every new product introduction wants to be the next CD or iPod, but few are. This is particularly true among broadcast formats, where the need for backward compatibility usually means advances are strictly incremental. As a result, mass acceptance of such improvements generally takes a long time.

Witness FM itself, or FM stereo, or even DTV, which may now seem like an overnight success but took its own long and winding road.

Probably the most apt and recent comparison is RBDS, which nearly 15 years after its U.S. introduction is just now enjoying its first widespread acceptance. And this is still not because listeners are now demanding it, but simply because it is there — in most new receivers and on most radio stations.

It also doesn't hurt that the additional cost burden to add the service and reception capacity is now very low.

We believe a similar future lies ahead for HD Radio. The likely arc of its ultimate acceptance will not be via a headlong consumer rush to the electronics store, but through slow and steady progress toward default status among stations and receivers.

Meanwhile, as broadcasters pursue their seemingly unrewarded HD conversion efforts, they can heed the words of Bill Gates, who admonishes us that, "There's a tendency to overestimate how much things will change in two years and underestimate how much change will occur over 10 years." We often place too much emphasis on the *speed* of acceptance, and too little on its eventual *breadth*.

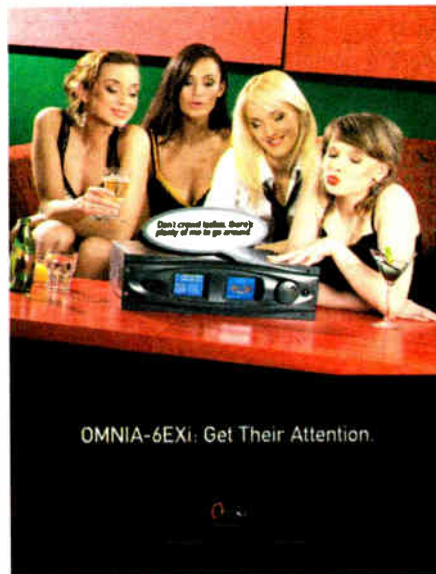
Perhaps even more pertinent is Woody Allen's well-known advice that "95 percent of success is just showing up." Having HD services show up on the screen when HD receivers finally show up in consumers' homes, cars and pockets may be the only real path to success for HD Radio. Expecting anything else may only lead to further disappointment.

— RW

## ◆ READER'S FORUM ◆

### Ad Racks Up Support

The ad for Omnia with the girl was just fine (*Reader's Forum*, Sept. 1). It got our attention, didn't it? Expect complaints on your Sept. 1 issue for [the] Omnia-6EXi [ad].



Nothing wrong with it, either.

Good lord, folks, lighten up. Would women complain if a guy had been pictured?

Good lord, folks, lighten up. Would women complain if a guy had been pictured?

Nothing wrong with it, either.

Good lord, folks, lighten up. Would women complain if a guy had been pictured?

So, now we're not going to buy processing equipment based on the models in its advertising? And it begs the question, whatever do these people do about the displays at the NAB? Particularly the TV equipment? You'd have to do without cameras.

It brings to mind a quote from an old James Thurber essay: "You might as well fall flat on your face as to bend over too far backwards!"

*Johnny Bridges  
Braselton, Ga.*

I'm a female radio operator in the industry and I have to say I've found the Omnia ads hilarious! They do what ads are supposed to do: grab your attention and make you remember the product.

I know some of your other respondents were offended by the first ad, and I can understand why on some level, but I feel like they're taking this way too seriously. It's just a parody of mainstream marketing. A hunky guy picks up a hot chick in a bar. It's been done for alcohol, clothing, perfume, etc., etc., etc.! I'd hate to see all the products that must get boycotted in this world because people are hyper-sensitive to comedy.

I can't wait for the ad where the box is on a pool floaty with spring-break bikini-clad girls lounging nearby whilst sipping a piña colada. You go Omnia!

*Diana Cox  
Membership and Operations Assistant  
WBJC(FM)  
Baltimore*

### Radio History

I just read Adrian Peterson's article "WCAU Used Shortwave in Philadelphia" (Aug. 15). Excellent! It was a terrific read and a great piece of radio history. I enjoyed it very much.

Someday Dr. Peterson needs to gather up all he has written on radio history and have someone like McFarland publish it in book form.

*Richard D'Angelo  
Executive Director  
North American Shortwave Association  
Wyomissing, Pa.*

### Book Reports

Congratulations on a wonderful review of Peter Bloomfield's "A Face for Radio" (*From the Editor*, July 18).

I share the same editor and publisher as Peter Bloomfield and know how long and hard they worked on this project — truly a labor of love.

Paul McLane totally "got it" about this book and communicated it beautifully. If Bloomfield's book can motivate or encourage owners or managers considering a build-out to take the extra steps to design and plan a pleasing and creative work environment for broadcasters, it can inspire them to work more effectively to create powerful radio.

Artists (really *all* creative people, including broadcasters) tend to thrive and work more productively when they are in a creative setting. Peter's book shows stations, by example, how to achieve this.

*Valerie Geller  
President, Geller Media  
International Broadcast Consultants  
New York*

*Geller is author of the Focal Press book "Creating Powerful Radio: Getting, Keeping & Growing Audiences."*

Paul, thanks for the book reviews. Matter of fact, since I've been reading the past reviews I've picked up a few of the historical-type books and loved every one of them. Keep up the great work.

I also enjoy the historical articles you publish. Now I just wish you could compile them in a book for purchase, as I don't save the mags but pass them on.

I currently work in non-broadcasting electronics and as a button-pusher part-time at a local station. Also will be starting school in the fall for mortuary science. Radio and trons don't pay well; might as well work with a dead guy or two.

*Al Ogrizovich  
Jacksonville, Fla.*



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