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$2.50 The Newspaper for Radio Managers and Engineers January 4, 2006

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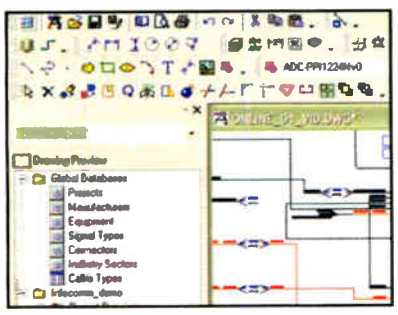

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Groups Will Divvy Up HD2 Pie

by Leslie Stimson

NEW YORK The announcement that several ownership groups are coordinating their multicast planning (see story at right) is historic for the radio community. It means the industry essentially is marketing multicast as a single new radio service, something consumers and retail salespeople can understand and describe in a few words.

So American radio listeners soon will be hearing about a new channel called HD2. And a notable twist to the story is that programming is being coordinated among owners who essentially have set aside their competitive instincts, at least in this area, and agreed about who will get to air which format in which city.

Members have created a system for choosing among program formats to avoid what several alliance members called a "Wild, Wild West" chaotic scenario. Several said it would be unproductive, for example, to program a fourth country format in a given market on a multicast channel. The goal is to provide the widest variety of programming possible, they said.

Cooperation actually began before the announcement. Alliance members tried

See HD2, page 7 ▶

NEWS ANALYSIS

Alliance's Work Is Just Beginning

Challenges Ahead as Groups Coordinate Digital Promotion and Programming of Multicast Channels

by Leslie Stimson

NEW YORK "Finally."

This was the nearly unanimous reply among station managers and suppliers asked by Radio World for reaction to news that major radio groups will promote HD Radio and multicasting in an organized way.

Yet the work of telling consumers and automakers about HD Radio is just

See ALLIANCE, page 6 ▶

Competitors and allies: Rear, from left: Drew Horowitz, Bonneville; Farid Suleman, Citadel; John Hogan, Clear Channel Radio and Rick Cummings, Emmis. Front: Peter Smyth, Greater Media; Mark Mays, Clear Channel Communications and Joel Hollander, Infinity Broadcasting. Not shown: David Field, Entercom and Lew Dickey, Cumulus.

HD Radio Tabletops Arrive at Retailers

PEABODY, Mass. Santa came just in time for some retailers and broadcasters awaiting deliveries of tabletop HD Radios.

Boston Acoustics began shipping the back-ordered Recepter Radio HD model to retailers and stations just before Thanksgiving, becoming the first receiver manufacturer to deliver tabletop HD Radios.

Deliveries were expected to continue for several weeks, according to Director of Product Development David Kroll. The company expected radio stations to apply marketing resources to drive consumer demand for HD Radio before the holidays.

Boston Acoustics Recepter HD

Another tabletop model, Radiosophy's MultiStream HD, has technical issues with AM sensitivity; the supplier said it expected to resolve them soon and begin mass production in China once the multi-week Chinese New Year break is over, according to President/CEO Richard Skeie. Jan. 29 is the first day of the year on that calendar.

"We'll ship in Q1 and as soon as we set a firm date, we'll announce it," said Skeie.

Polk Audio, the third company planning to incorporate IBOC into a tabletop radio, also plans to ship its I-Sonic Entertainment System to retailers in the first quarter.

Promotion

Kroll of Boston Acoustics said some broadcast groups have ordered a small number of the new tabletop to use as samples while others have placed orders for "significant quantities" for promotional use.

Retailers receiving shipments from Boston Acoustics include The Great Indoors, part of Sears; Listen Up in Denver; Bjorns in Texas; Tweeter Etc. in Chicago; Flanners in Milwaukee; Magnolia Audio in the Pacific Northwest and Harvey Electronics in New York.

Online retailers receiving product include C. Crane, Crutchfield, J&R Music, One Call, The Audio Advisor and Boston Acoustics Direct.

The unit can decode multicast signals. A stereo input accepts iPods, MP3 players and other external audio sources. The radio's stereo headphone output doubles as a line output, allowing it to serve any component audio system as an HD Radio source.

How to display multicast tuning was a test for the company.

"We're proud of the human user interface," said Kroll. On the display, an HD-R indicator tells the user the radio is tuned to a digital station; glowing arrows appear to the right and left of whatever station the unit is tuned to indicate the presence of multicast stations, Kroll told Radio World.

The radio lists for $499. A broadcaster discount is being offered for bulk orders; a spokesman said terms of the discount were confidential.

Tabletop models for HD Radio have suffered numerous production delays. Earlier, manufacturers had projected availability in the late spring or early summer of 2005.

Why the delay? It's new technology, Kroll said. "It's not refreshing a product and making subtle changes."

— *Leslie Stimson*

Index

Indecency Debate Encompasses Pay Media

Stevens to Industry: Develop Ratings System for Indecency

by Leslie Stimson

WASHINGTON Senate Commerce Committee Chairman Ted Stevens, R-Alaska, and ranking minority member Daniel Inouye, D-Hawaii, want the media industries to agree to a voluntary common ratings system to protect children from indecent programming. If that doesn't happen, the senators vow, they'll develop legislation early this year to accomplish that goal.

Stevens would include over-the-air broadcasters, cable, satellite and Internet media. Only terrestrial broadcasters are regulated now by the FCC for indecent content, a situation broadcasters say is unfair given that children don't normally make a distinction between subscription and over the air content.

> The industry's lack of action is notable.
>
> — FCC Chairman Kevin Martin

> I can assure you, for Clear Channel, a **10-fold fine increase is not business as usual.**
>
> — Jessica Marventano, Clear Channel

Stevens held a hearing on indecency in November to bring various factions together and planned another in December.

Level the playing field

Any indecency legislation should level the playing field among terrestrial, satellite and cable broadcasters. That's what Bruce Reese, joint board chairman for the NAB and Bonneville's president/CEO, testified in November.

Satellite radio, he said, has become a haven for content that can't be aired on free, over-the-air radio, noting that Howard Stern attributes his move to Sirius Satellite Radio to the indecency crackdown.

Reese said both Stern and Opie & Anthony on XM Satellite Radio are available to any subscriber.

"And now, with XM partnering with DirecTV and Sirius with EchoStar, this programming will be piped into 25 million satellite television homes." The committee also should balance any changes to the indecency regime with First Amendment concerns, Reese said.

Most broadcasters have never been fined for broadcast indecency and the majority of complaints to the commission have originated from "one or two well-organized groups" such as the Parents Television Council, he reminded committee members.

FCC Chairman Kevin Martin told senators parents need better and more tools to help them navigate visual entertainment, particularly on cable and satellite TV.

Those testifying debated whether parents understand how to use the V-Chip blocking technology in their televisions.

"Congressional statutes already prohibit indecency and profanity on broadcast radio and television, and by enforcing these provisions we can help deter media companies from putting indecent programming on broadcast," Martin said. "But this will not help address the growing problem of the increasing amount of coarse programming on cable and satellite, and the lack of tools parents have to avoid supporting the programming they do not want to let into their homes."

He didn't let industry off the hook, though, saying, "The industry's lack of action is notable."

Not 'business as usual'

Jessica Marventano, senior vice president of Clear Channel Communications, urged senators not to adopt certain provisions in the House indecency measure, one of four such bills introduced in 2005.

© NAB

Bruce Reese on Capitol Hill

She called them "disproportionate punishment" for violating indecency rules. Measures include blocking new license applications, transfers or possible license revocation. The company urged lawmakers to consider the provisions raising the fines for broadcast indecency.

"I can assure you, for Clear Channel, a 10-fold fine increase is not business as usual," Marventano said.

Alan Wurtzel of Research and Media Development at NBC said congressional attempts to enable the FCC to affect station licenses for indecency violations "would have an enormous chilling effect, but also a depressing effect on the entire broadcast industry."

Representatives from citizen advocacy groups argued that current punishments are ineffective, as is self-regulation, which some broadcasters, cable and satellite companies advocate.

XM

Bill Bailey, senior vice president/government and regulatory affairs for XM Satellite Radio, responded to lawmakers who complained about children unexpectedly being exposed to indecent programming on TV.

Bailey acknowledged the satcaster does air "blue" material but said its ratings system and blocking measures are easy to implement and well-publicized on channel guides, in print ads and in on-air PSAs.

"We try to provide as much notice as possible about when programs with extreme language would air ... so no one would stumble upon our extreme language.

"As a business matter, we don't want parents to be afraid to have satellite radio."

Those subscribers who want certain material blocked can call an 800 number and the change happens within two hours, Bailey said.

Also, XM receivers display "XL" — for extreme language — for certain channels.

In December, XM began including parental control blocking instructions on its Web site.

How to Submit Letters

Radio World welcomes your point of view on any topic related to the U.S. radio broadcast industry.

Letters should be 100 to 300 words long; the shorter the letter, the better chance it will be published in full. We reserve the right to edit material for space. Longer commentaries are welcome but may not reach print as quickly.

Include your name, address and contact information, as well as your job title and company if appropriate.

Send letters via e-mail to *radioworld@imaspub.com*, with "Letter to the Editor" in the subject field; fax to (703) 820-3245; or mail to Reader's Forum, Radio World, P.O. Box 1214, Falls Church, VA 22041.

FROM THE EDITOR

A Time for Hope, Not Cynicism

by Paul McLane

Happy New Year and welcome to the 30th year of Radio World newspaper. Thank you for being with us on the journey.

★ ★ ★

Radio enjoyed good national media exposure when a group of leading radio companies went to New York in December and announced plans to promote digital radio and coordinate their use of digital multicast channels. NAB and Ibiquity execs looked on approvingly.

Some people reading this column are thinking right about now that corporate radio types will never offer real programming diversity and localism on these new channels, that even if they use multicast to establish "diverse" formats, it'll be "more of the same." After all, commercial radio has thousands of stations already and, if anything, the big companies have used those channels to move away from truly local and diverse radio.

Multicast is unlikely to be used differently, that school of thought argues, if decision-making is dominated by the same programming consultants who espouse those familiar mindsets and the same tendencies to automate, impersonalize and delocalize.

NAB and corporate radio executives would dispute that, as they have repeatedly over the years (another reason critics think they can't possibly "get it").

I argue that, while we have reason to be skeptical based on big radio's programming record over the past decade, satellite has kicked the industry hard enough to make it realize there *is* a market for specialized programming beyond what NAB and Clear Channel consider diverse.

In fact XM and Sirius have been quite the role models in the past couple of years. They have shown traditional radio the value of attention-grabbing program alliances, significant technology announcements and investments in talent and major marketing.

Radio does plenty of things well — and I include big commercial radio as well as public and small-town radio. Yet it needs to do better at telling its story to Wall Street and business and other media. The December press conference was a good indication that folks at the level of Mark Mays, Joel Hollander, David Field and Lew Dickey understand this.

Managed well, multicasting could be very, very good to traditional terrestrial radio. It provides our industry leaders a real chance to bring to consumers something new. I note that specialized music and content services have been the driving force behind the adoption not only of satellite but of Eureka-147 digital radio in the United Kingdom. I'm pleased to see the coordinated effort on the part of the companies. I choose to be hopeful, rather than cynical, about the outcome. Let's keep our minds and options open.

Meantime I'll be fascinated to see what strategies these competitive corporations will use to program multicast channels — how they can do it without prompting anticompetitive concerns, how the mechanics of coordination will work, how non-alliance commercial multicasters and the public stations will respond — and, more broadly, whether the multicast concept can ever provide new program diversity if companies operating it must answer to the same bottom-line concerns as they do now.

I do feel that the coordination of programming aspect is historic. In fact it's so unusual that it seems to invite anticompetitive review by regulators. In a way, these groups seem to be acting like one big superowner. If multicasting succeeds, I suspect such coordination either will constitute an explosive change in how programming is done, or it will immediately run afoul of significant problems.

★ ★ ★

Elsewhere, the LPFM service turns six this month. Six years in which the radio world hasn't fallen apart.

The topic has fallen off most front pages. But as we noted in our last issue, the underlying stress lines that prompted the initial debate remain.

Do you remember how contentious this all was? From the start, commercial broadcasters opposed low-power FM:

- They said the entire premise was flawed;
- They said there was no need for LPFM service because radio was a diverse and accessible marketplace already;
- They said LPFM would create vast amounts of new interference;
- They said it would risk the radio industry's transition to digital;
- They said LPFM stations would benefit unfairly from not being subject to the same regulations as other stations;
- And they said it would result in a net loss of service to the public, arguing that it actually undercuts full service. The NAB even put out a study finding that "local stations will not be able to continue to offer quality local programming if LPFM is established."

Each of these objections has degrees of merit and problems, but most if not all have been answered and the arguments in favor of LPFM continue to be compelling:

- There was, and is, a need for more program diversity. Radio ignored the elephant in the room on this one (until satellite and then multicasting came along).
- There was, and is, a need for wider access to the airwaves.
- LPFM did not cause interference havoc, and will not if interference protections are eased responsibly.
- LPFM does not cause full-service stations to cut their quality. That's nonsense.
- The industry's transition to digital is not threatened by LPFM; and any transition plan should not automatically take priority over creation of other new services;
- The rules set up for LPFM stations are fair and reasonable.

Let's face it, LPFM has always been a turf fight. A broadcast licensee enjoys special access to the electromagnetic spectrum, an extremely valuable commodity. Radio remains a $20 billion a year business. Station owners have invested a lot of money and naturally want to preserve it.

A cynic would say licensees will fight to keep any newcomers out. A charitable view is that some opponents were honestly concerned about interference.

Ironically there is a popular view among broadcasters that spectrum should be as unregulated as possible and that the FCC should just be a "traffic cop." The commission exists to move traffic along, they say, to let innovators make the most efficient use of the spectrum without putting undue burdens on the broadcasters.

Unfortunately, when more innovation comes along and the traffic cop says, "Hey, wait, we can get more traffic into this lane and still keep traffic moving," the people driving the cars on the road suddenly want the traffic cop to keep other cars off.

Yes it's scary to watch market share dwindle thanks to the Internet, iPods and satellite. But it's not the FCC's job to protect those stations' businesses. The stations are not the resource, they are the users of the resource; to survive they must change to keep up and compete.

Anti-LPFMers were not the only ones guilty of hype. There was plenty of blather by pro-LPFMers, envisioning a glistening new era of broadcast vitality and positioning LPFM as the medicine to cure all ills of consolidated corporate radio.

Both sides also were guilty of demonizing, with NAB painting LPFMers as pirates gone wild and some low-power advocates lumping all of radio into one big Evil Empire category, failing to recognize the good intentions and substantial public service offered by licensed broadcasters.

But as I have said before, LPFM seems a lot closer to the ideals of radio as first conceived than many broadcasters care to admit. The Communications Act of 1934 established radio's philosophy of serving "the public interest, convenience and necessity." Small, localized services are not a threat to that, but a part of it.

Rep. Cliff Stearns, an opponent of LPFM, once asked, "Why the rush to fully implement this service when many questions still remain unanswered? I am curious as to why the FCC did not select a handful of low-power FM stations to experiment with this service."

OK, six years have passed, a number of stations are on the air, the FCC has done what Congress said and investigated the potential harm. The experience of six years shows chaos did not ensue.

Consider the experiment complete.

Can They Say That on the Air?

by John Greenya

Contrary to what many people think, the indecency flap didn't all start with Super Bowl XXXVIII. Almost two years later, the dust raised by Janet Jackson's "wardrobe malfunction" has yet to settle. When it does, the media landscape could look very different.

In the meantime, however, in addition to watchdog groups, people responsible for the content of what goes out over the nation's airwaves, from broadcasters to their attorneys to the so-called network suits, are keeping one eye on Congress and the other on the FCC as they try to figure out the rules of the game. Until the outcome of two questions — the fate of bills now before the Congress and the attitude of the new chairman, Kevin Martin — is known, communications lawyers, their clients, and the public remain up in the air. (See story, page 3.)

Things weren't always so complicated. "Ten years ago, I could have explained indecency to you in seven words," said First Amendment lawyer John Crigler, "and now it would take volumes." Crigler's reference is to the well-known "Seven Dirty Words" routine of comic George Carlin, which gave rise to the landmark case "FCC v. Pacifica Foundation," of 1978, which for years provided broadcasters and performers alike with clear guidelines as to what they could *not* say on free, over-the-air television and radio.

Ten years ago, I could have explained indecency to you in seven words, and now it would take volumes.

— John Crigler, Garvey Schubert Barer

"It is," said the Garvey Schubert Barer partner, "the only constitutional standard invented by a comedian."

Slippery definition

"Another problem," according to Crigler, "is how, if you're a broadcaster, you implement it. It's one thing if you're a national broadcaster and you can tape-delay everything and everything is prerecorded and you can build in some cautions. It's another if you're sort of an old-fashioned broadcast station and a good deal of what you do is live or call-in. How do you control that caller who has, literally, a smart-assed remark to make? You're going to be liable for that."

Gloria Tristani, who served as an FCC commissioner from 1997 to 2001, frequently criticized her fellow commissioners for handling indecency complaints too slowly — a position that, she said, had as much to do with simple respect for the rules as it did for the "truly sleazy" nature of some of the violations (in particular, those of radio shock jocks).

Tristani, now the managing director of the United Church of Christ's Office of Communication, said, "My point always was that it was the duty of the commission, at the very least, to investigate and to ask the broadcaster to respond."

Communications lawyer Jeneba Ghatt, the former assistant general counsel of the District of Columbia's Office of Cable Television and Tele-communications who recently opened her own firm with two other minority lawyers, is a newer but no less concerned participant in the debate. "We represent small and medium-sized companies mainly owned by minorities and women, new market entrants who are trying to break into the media."

This group, she said, has been particularly hard hit by what's happening.

"The FCC has been holding up license renewals of clients because they are affiliated, by virtue of using some of the programming, with networks that have been fined or against whom complaints have been filed by groups like TV Watch.

"This has a chilling effect not only on speech but also on their ability to 'get in on the deal' of broadcasting. These clients would be, typically, a small TV or radio station, a small AM station, or even a small LPFM. Many of our clients are small for-profit stations, but because of this situation at the FCC they're finding it very hard to *be* for-profit because they can't, for example, sell ads without knowing if their license is going to be renewed."

"Yes," says James Winston, executive director and general counsel of the National Association of Black Owned Broadcasters, "there have been license renewals held up, but I don't believe there's any likelihood that those licenses will not be renewed. Obviously, the FCC has the power to deny a renewal, but my expectations based on past experience is that if they find stations have engaged in indecent programming, they will fine them."

Another lawyer who sees the problem from a similar perspective as Ghatt is David Honig, the executive director of the Minority Media and Telecommunications Council, a nonprofit organization founded in 1986.

Echoing Ghatt, Honig said, "If you're a new entrant, as most minorities are, the investment climate ought not to contain attributes that discourage you. When you have, as you have now, this additional overlay of content regulation, it imposes costs in ways that are certainly unintended by the commission. I take the chairman to be very well intentioned, and a person who would not suggest that it is not appropriate to address this subject. It *is* appropriate to address this subject."

Given that indecency regulation seems to rise and fall in relation to public opinion, and that public opinion is often fired by the latest "incident," what is the prediction of an observer able to take a long view of the matter?

There is a very good chance that within the next three to five years there will be a major push by Congress and the FCC to broaden the scope of our indecency laws.

— Adam Thierer

Newton Minow, senior counsel in the Chicago office of Sidley Austin Brown & Wood, who, while chair of the FCC under President Kennedy, coined the phrase "vast wasteland" to describe the majority of television fare at the time, said, "I have always been troubled by the government deciding issues involving speech, because of the First Amendment concerns, and because of the difficulty of protecting words like *indecent*, which are tough to define. So I take a different approach to the problem, which is that the Code of Standards that the broadcasters had for many years should be reinstated. The code no longer exists, but I think it would be much better if the broadcasters were policing things like indecency (rather) than the government."

"I don't really expect to see restrictive legislation passed in the near future," said Adam Thierer, director of the Center for Digital Media Freedom at the Progress & Freedom Foundation. But he differs with Minow in that he believes, "There is a very good chance that within the next three to five years there will be a major push by Congress and the FCC to broaden the scope of our indecency laws.

"Of all the measures currently under consideration in Congress, S. 616, the Rockefeller-Hutchison bill — which is what I call the 'everything-plus-the-kitchen-sink approach' — is the most comprehensive, pro-regulatory measure ever introduced by any member of Congress on this issue, and for that reason it most certainly will not pass in its current format.

"But what's important about S. 616 is that elements of that bill could make it into law at some later point as part of some other measure. So many things on this front oftentimes get bundled into some broader measure at two minutes to midnight in some darkened committee room hearing. That's how we've seen a lot of content regulation get on the books in the past, and it could be the way we see indecency regulated sometime in the near future."

A version of this article appeared in the November issue of "The Washington Lawyer Magazine." It is reprinted with permission.

Alliance

▶ Continued from page 1

beginning. The alliance wants to encourage lower prices for receivers, persuade automakers to install units in vehicles and convince the public to demand that retailers carry the radios. Infinity Broadcasting Chairman/CEO Joel Hollander thinks it could take two to seven years to reach these goals.

A year ago this week, major radio groups announced their intention during the Consumer Electronics Show to coordinate efforts to promote HD Radio. In December, eight of those groups formed an alliance to promote terrestrial digital radio. They are Bonneville, Citadel, Cumulus, Clear Channel, Emmis, Entercom, Greater Media and Infinity.

Ibiquity President/CEO Robert Struble termed the news "huge."

The development of HD Radio has been a technical story to this point, he said; now radio groups "are saying they will use their collective muscle and ability to speak to our listeners in ways that make sense to them and we're going to sell some HD Radios."

About 600 stations are now broadcasting digital/analog signals; 70 of those are multicasting, he said.

Now radio has something to promote, Struble said. If 2005 was when HD-R infrastructure was set into place in many markets, 2006 "is going to be the first year we reach out to the consumer."

Monetary contributions

For roughly the first 18 to 24 months, said Peter Ferrara, president and chief executive of the alliance, multicast channels will carry no commercials. The owners in the alliance have agreed that each of their digital stations will broadcast only one multicast channel, though more are technically possible.

The alliance plans to announce programming and promotional efforts for the top 25 markets early this year.

Many questions remained after the December announcement. For instance, will consumers be encouraged to buy an "HD Radio" or an "HD2 Radio" or something else? According to sources in the receiver community, the broadcast alliance made its announcement earlier than planned because it was becoming harder to keep details under wraps.

Ferrara, formerly vice president of special projects for Clear Channel and partner and COO of Granum Communications, said the alliance hoped to give the broadcast community more specifics in the New Year.

Ferrara said charter members made commitments worth more than $200 million, in 2006 advertising inventory on their stations as well as cash, to launch digital radio and to foster relationships with consumer electronics retailers and automakers.

Alliance members declined to specify their dollar contributions or the ratio of ad inventory vs. dollars, but they expect ads to make up the bulk of the commitment.

Shortly after the announcement, Struble said broadcasters must catch up to satellite radio in promoting HD Radio. He said XM and Sirius have spent a combined $750 million on promotion.

Alliance members believe consumers will want digital local radio. Entercom CEO David Field told Radio World, "If you're a consumer you have two value propositions. One is a bucket of channels that you have to pay for; and the other is a bucket of channels that you don't have to pay for. Which is the better option?"

NAB President David Rehr attended the event. So did his predecessor, Eddie Fritts. Rehr called the HD Radio alliance an "historic" announcement. In a statement, he said it "sends an unmistakable signal that local radio's best days are still ahead."

Consumers, he said, will benefit from "scores of additional program formats and improved signal clarity, coupled with community-based news, weather and traffic reports that remain hallmarks of free radio."

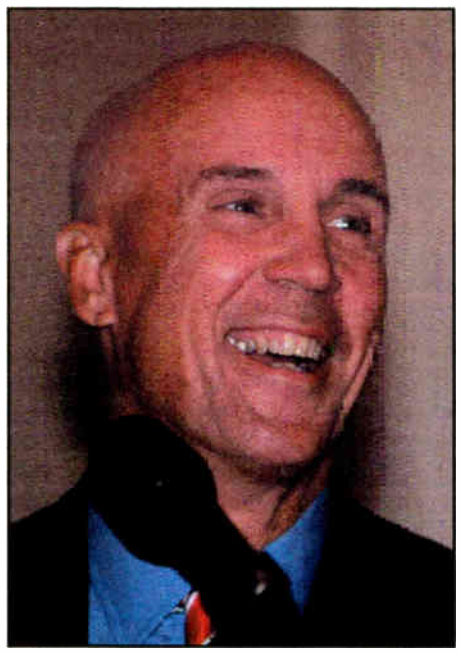
Building awareness

Clear Channel Communications President/CEO Mark Mays said, "We want to continue to evolve radio. What we need to do is take it to the next level. We've made this technical investment. We need to get better at marketing it and spend the resources to drive the volume and bring price points down so people buy the radios."

Any U.S.-based radio company, whether a standalone station or a group, can join the alliance.

Hollander, Mays and Greater Media President/CEO Peter Smyth form the oversight management committee for the alliance, which has incorporated.

Ferrara receives a salary to head the alliance and makes his headquarters in Orlando. No additional alliance-specific staff has been appointed at the moment, although Ferrara has hired a PR firm.



Peter Ferrara is president/CEO of the HD Digital Radio Alliance.

Hollander said he hoped more groups would join after the ABC Radio station sale is completed. Wall Street was watching as Walt Disney Co. reportedly hoped for a sale of its radio assets by the end of 2005.

A few days after the alliance announcement, Ferrara said other broadcasters were expressing interest in membership. He urged any interested broadcaster to sign up by Dec. 30. The group then plans to proceed with its first round of format selection for multicast channels in the top 25 markets.

Ferrara could not speculate on when the first format selections would be completed.

In order to join the alliance, each company commits to a certain amount of on-air promotion of digital radio and contributes a set dollar amount toward running the alliance. Mays said each member makes a "substantial commitment" scaled to the size of the company. The broadcaster must agree to coordinate the programming of its multicast channels with the group at large.

At least one radio group that was part of the original announcement last year, Radio One, had not joined the alliance as of mid-December, nor had any of the largest Hispanic radio groups.

Commenting on how the alliance might grow, Struble suggested there might eventually be different categories of membership, much as NAB has an "associate" membership level as an option for those who do not choose full membership.

Although not a member of the alliance, Ibiquity was instrumental in its formation and is working closely with the group.

Asked whether the availability of some HD Radio tabletop receivers for shipping had spurred the announcement, Struble said it was more a matter "of getting everybody in the same room and getting them to agree to something. We have some experience in that; it's difficult. We've done the investment by broadcasters, the station deal last year. Those are time-consuming efforts because everybody's got a slightly different view on it and there's a lot of smart people that want to make sure that their views are considered."

Indeed, Cumulus had agreed to join the alliance only the night before the announcement in New York, executives said, and the initial press release announcing the alliance still referred to seven rather than eight charter members.

Dave Wilson, director of technology and standards with the Consumer Electronics Association, said he was pleased to see joint promotion efforts for HD-R. "The more voices, the better."

Public radio organizations are welcome to join the alliance, executives later told Radio World, though one public radio program consultant didn't expect many to join. "It depends on the financial requirements."

John Hogan, chief executive officer of Clear Channel Radio, said no one involved in the alliance had yet contacted public radio organizations about taking part, although he and Field acknowledged the multicasting efforts made in the pubcaster community.

"I think at the end of the day, they also bring a strong shoulder to the wheel in driving consumer adoption of the technology," Field said.

Push to consumers

Among broadcast RF suppliers who made HD Radio products to seed the original 13 Ibiquity rollout markets, several greeted the news heartily.

Hal Kneller, manager of public radio initiatives with Harris Broadcast, said of the alliance, "We think it's a great idea." The supplier planned to meet with Ferrara in the New Year.

See ALLIANCE, page 8 ▶

HD2

▶ Continued from page 1

out the system in a couple of markets before going public, members said.

'Fair and equitable'

Alliance President/CEO Peter Ferrara said members believe the format selection system is fair and equitable. He declined to discuss specifics publicly, other than saying a hierarchy exists governing which station in a market selects first, second and so on. The hierarchy is by station, not by company, he said. The system would also be used to settle disputes, he said.

Asked how companies that normally compete — and continue to do so on analog and main digital channels — can agree not to do so on multicast channels, Ferarra and other alliance officials said the group had discussed the issue with antitrust attorneys.

"We have covered that with appropriate counsel and we are well within those parameters," Ferrara said.

Several skeptics predicted all bets would be off after the incubator period for the multicast channels and that the cooperation would dissolve. One programmer, speaking off the cuff, said he could conceive of lawsuits filed by non-alliance members over the multicast format coordination.

Ferrara and other alliance officials said the group had discussed the issue with antitrust attorneys. 'We are well within those parameters,' he said.

Formats being discussed for the multicast channels include female-oriented talk, Hispanic love songs, tropical, urban ballads, as well as mainstream formats that may be new to a market.

Program consultant Holland Cooke of McVay Media was underwhelmed by the format choices he had heard about, saying several exist on satellite radio.

"HD Radio should be more local. This is a new spectrum opportunity; is our most innovative use of HD Radio 'XM and Sirius Lite'?"

He suggested that groups consider traffic/weather-on-demand and local sports to distinguish multicast channels.

The alliance announcement gave at least one station consulting engineer pause. Electrical engineer John Pavlica wrote in an e-mail to Radio World, "Multicasts can finally offer pre-1996 radio programming — not the same thing duplicated on 1,200 stations. ... Multicasts are an avenue to offer locally produced radio like we haven't seen the past 10 years. Promoting HD is fine, but please, not more of the same model of the limited musical playlist on all of your stations."

The announcement also seems to imply that owners think the FCC will authorize multicasting permanently.

The FCC's decision on whether and how to authorize IBOC may play out along party lines, based on comments from commissioners at last fall's NAB Radio Show. Democrats indicated they wanted to look into appropriate public service obligations for multicast channels while Republicans were more in favor of treating them like subcarrier channels.

Ferrara said Chairman Kevin Martin "has expressed a desire to process the order" as soon as the commission is back to its full complement of five members.

"We believe there is no higher public interest served than to authorize these digital stations permanently and protect the delivery of high-quality, diverse and free radio to consumers in the future," he said.

Ferrara, second from left, meets with industry leaders Drew Horowitz of Bonneville, Peter Smyth of Greater Media, John Hogan and Mark Mays of Clear Channel and new NAB President/CEO David Rehr.

NEWS MAKER

SBE's 24th President Steps In

Scherer Replaces Benedict; Emphasizes Communication, Certification

by Randy J. Stine

Chriss Scherer's goal as president of the Society of Broadcast Engineers is to improve overall communication within the national organization across all levels — among members and chapters as well as the board of directors and national office.

Scherer assumed the presidency at the nonprofit organization's annual meeting in Dallas in October; he served as vice president on the 2004-05 board. He replaces Ray Benedict of Viacom, who served the maximum of two consecutive one-year terms.

The new president says there are significant challenges facing broadcast engineers working in the ever-changing radio and television industries, including HD Radio and digital TV.

Even though SBE was not part of the IBOC standards-setting process and has not established an opinion on the Ibiquity HD Radio system, the group is watching the transition and any training opportunities it may present. The SBE Education and Certification Committees are monitoring the developments closely, Scherer said.

"The broadcast industry is changing through mergers, consolidations and new technologies. All impact our membership and call for development of a new skill set," Scherer said.

Education a priority

SBE introduced several certification specialties this past year covering AM directional antennas and 8-VSB, which involves DTV standards and transmission systems. The certification specialties give SBE more educational flexibility, Scherer said.

"For example, there was a time when just about any radio engineer would have enough general knowledge of AM that he or she could easily step up to a phasor and tweak it to keep it working fine. But with the new generation of engineers, there are fewer that have those skills," Scherer said.

Education remains a top priority at SBE, Scherer said, with new opportunities being explored, including development of a curriculum for use by post-secondary schools.

> The broadcast industry is changing through **mergers, consolidations and new technologies. All impact our membership and call for development of a new skill set.'**

"Some even refer to it as SBE University. Not in a literal sense of course, but as more of an educational clearinghouse for members, a point of contact. The Education Committee and Chair Tom Ray are looking at establishing courses through a variety of means, publications and maybe even online," Scherer said. Ray is corporate director of engineering for Buckley Broadcasting.

For example, Scherer said, recent discussions with Excelsior College in Albany, N.Y., could eventually result in college credit for those who hold SBE certifications.

"We see lots of opportunities to work with post-secondary institutions for the recognition for the training and certifications we offer. There is some merit in that," he said.

The SBE has established a program with a handful of technical and community colleges, under which members who pass computer courses can be certified as Certified Broadcast Technologists without having to take the society's CBT exam.

A new accreditation program for volunteer frequency coordinators is aimed at maintaining quality and professionalism, Scherer said.

"This simply establishes that a frequency coordinator has read policies of the SBE as they relate to frequency coordination and that they understand the process and practicalities."

SBE is watching several developments that will affect TV broadcasters and engineers, including the 2 GHZ TV Broadcast Auxiliary Service move and channel assignments for DTV.

Current BAS operations at 1,990-2,025 MHz are being moved to the re-farmed 2 GHz TV BAS band at 2,025-2,110 MHz consisting of seven 12-MHz wide channels. As part of the FCC Report and Order from 2004 stipulating the changes, Nextel Corp. is reportedly spending $850 million to de-interleave the 800 MHz band to solve interference problems between 800 MHz public safety and Nextel's special mobile radio operations.

"The SBE worked hard to protect spectrum around 2 GHz for TV broadcasters," Scherer said. "While losing a portion of the spectrum was not our desire, the plan provides the best solution for the circumstance. Nextel has made an outstanding

See SBE, page 10 ▶

Alliance

▶ Continued from page 6

He compared the formation of the alliance to that of USA Digital Radio, Ibiquity's predecessor, by CBS, Westinghouse and Gannett, which pooled money and technical expertise to advance development of terrestrial digital radio.

"Harris is excited about this because we know there is a huge gap in consumer knowledge about HD Radio and we look forward to the drive to digital radio that this alliance can bring about," said Kneller. "This is the push we have all been waiting for, to drive receivers into cars and homes and to create consumer awareness and demand."

Broadcast Electronics Marketing Director Neil Glassman said of the alliance, "We plan to support them and do what we can to amplify their message."

The advent of multicasting is big, he said. "We have started to see owners in markets unranked by Arbitron come to us and say, 'Because of multicasting, we're going to go HD Radio.'"

Competition in the car

Yet much work needs to be done, said Hollander.

"We want to work with automotive manufacturers and OEMs to make HD Radio seem of value to them and help them sell new cars." The incentives detailed after the announcement was radio's promotional platform of stations, Web sites and, in Clear Channel's case, billboards.

Hogan said, "The collective power of the radio stations represented ... is pretty potent and we feel compelling for the automotive industry and consumers."

Broadcasters in the alliance believe the new content on multicast channels will make HD Radio compelling enough that consumers will demand retailers and automakers carry the units.

Ibiquity has commitments from European and Asian automakers to install HD Radios, but none from domestic auto manufacturers.

Said one automotive receiver consultant, "Anything in the automobile is there for only two reasons: the government says you have to have it or it's perceived the public wants it. If not, they take it out of the car.

"If it costs five cents more for an HD-R tuner, for example, that five cents is not just going up against electronics in the car, it's up against the carpeting, day night mirror, etc. Every penny that goes into that vehicle is in competition" with every part of the car, as automakers juggle numbers to make their price targets, he said.

Executives of the new digital radio alliance called its formation historic. Clear Channel Radio President CEO John Hogan said two or three years ago it would have been "unusual" for him to align behind the same effort with, for example, Entercom CEO David Field — "much less David and I and four other broadcasters. We expect a significant number of other broadcasters to follow suit. It's getting all of the potential power behind HD Radio that we can get."

Upcoming coverage will delve further into questions raised by the digital alliance. What are your thoughts? E-mail to radioworld@imaspub.com.

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GUEST COMMENTARY

Audience Loss Is Pubcasters' Gain?

Public Radio's 'First True Audience Loss' Need Not Be Cause for Alarm

by John Sutton

The Radio Research Consortium reports that the public radio system lost audience from Spring 2004 to Spring '05. According to the RRC, it is the first-ever true audience loss experienced by public radio.

The most important measuring stick, Average Quarter-Hour or average audience, dropped 2.3 percent from Spring '04 to 'Spring 05.

Public radio's ability to maintain or grow audience is still completely under its control.

Lack of focus

This is probably not the story you will hear from most quarters in public radio. Audience loss theories will abound. Most of them will blame outside influences: podcasting, the Internet, satellite radio, cable television and cell phones, to name a few. Not long ago, an NPR study blamed "Saturday Night Live" sketches for suppressing audience growth.

John Sutton

It's as if a lot of people in public radio don't want to be in radio anymore.

While this drop in audience is a good wakeup call for public radio, it does not have to be cause for alarm. The average audience is the audience at any given moment.

But public radio has always had to overcome competition and misperceptions. It grew as cable television grew. It grew as cell phone usage exploded. It grew with the mainstreaming of the Internet. It grew whether SNL ratings were good or in the tank. It grew by focusing on what public radio does best, making great programming for its core audience.

That focus is lacking today. Much of the industry's attention is on reaching new and different audiences through new and different technologies. It's as if a lot of people in public radio don't want to be in radio anymore.

On the network level, new programs are no longer intended to super-serve a loyal core audience. The audience loyalty strategy that served public radio well for nearly two decades has been abandoned in favor of a cume-based strategy to get new and different listeners, even if at the expense of the current audience.

Weak programming

Cume measures the number of different people who listen each week. It is different from AQH, which measures the average audience at any given moment. AQH is the better measurement of success because it accounts for the number of people who listen in a week and how much they listen during the week. So AQH is a reflection of a station's ability to attract listeners and keep them listening.

At stations, there are still huge blocks of weak programming on the air. Local execution often remains weak in drive time, suppressing the audience potential of even the strongest network programs.

The last thing public radio needs right now is a victim mentality. The industry is doomed if it buys into the idea that external forces have more influence over its future than strong programming decisions.

The ability to grow is still under public radio's control. The knowledge and resources are available. All that's required now is the willingness and the discipline to apply them wisely.

Perhaps the latest Arbitron numbers will be the kick in the seat needed to make that happen.

The author is president of Sutton & Associates, which provides consulting services to public radio organizations. This article first appeared on radiosutton.blogspot.com.

RW welcomes other points of view.

SBE

▶ Continued from page 8

effort to work with broadcasters replacing their equipment and educating them in the process."

Nextel had budgeted more than $500 million to move TV BAS operations out of 1,990-2,025 MHz. The 2 GHz TV BAS band is mostly used for TV electronic news gathering (ENG) purposes.

The SBE is not involved in the process of assigning DTV channels, Scherer said.

"However, there are groups looking at the TV spectrum with an eye of using it for other purposes, even though it is still assigned to TV use. Congress has a soft spot for providing Part 15 users more spectrum and has given considerable attention to home security and public safety.

"Public safety issues are legitimate, but simply handing over spectrum to Part 15 without considering its specific use is a mistake. Granting anyone free access to established TV spectrum is asking for trouble," Scherer said.

SBE has approximately 5,400 members and has been able to grow steadily despite consolidation among radio broadcasters, who have now fewer broadcast engineers maintaining multiple stations.

"I think it is a bit of a disservice for the industry to diminish the value of the engineer," Scherer said. "There are some radio groups, for example Entercom and Cumulus, who have made efforts to treat their engineers very well. Others treat engineers like glorified janitors.

"We want to have engineers seen as valuable contributors and not just liabilities and be able to improve our members' quality of life."

Now editor of a broadcast engineering trade publication, Scherer knows what life for a broadcast engineer is like. He was chief engineer at WMMS(FM) and WHK(AM) in Cleveland and WYCL(FM) in Reading, Pa., after beginning his broadcast career at the University of Miami. He graduated with a bachelor of music degree in music engineering technology in 1987.

"Originally I had thought more about audio production, but quickly realized I was the only guy around the music program that could fix a broken cart machine," Scherer said. "I rewrote my résumé and landed an engineering gig in at WEBE(FM) in Bridgeport, Ct., in 1988."

Currently active in the local SBE Chapter 59 in Kansas City, Scherer now is a trade journalist. He recalls the day in 1997 in Cleveland when he took the call with the offer of the position.

"It was a fairly typical day at the station. Everything was falling apart, the console was in pieces and everything was going wrong. I remember asking myself, 'What, and give up all of this?' I've never regretted it," Scherer said with a chuckle. "But I'm never saying never about going back, either."

Scherer, 40, holds CSRE and CBNT certifications from the society. He lives with his wife, Marilyn, in Overland Park, Kan. He joined SBE in 1989 and is a senior member. He also serves as chairman of the SBE Certification Committee.

Also elected to 2005-06 SBE offices this year are Clay Freinwald, corporate engineer for Entercom, as vice president; Vincent Lopez, director of engineering for WSYT/WNYS(TV), Syracuse, N.Y. as secretary; and Barry Thomas, vice president of engineering at Westwood One, as treasurer.

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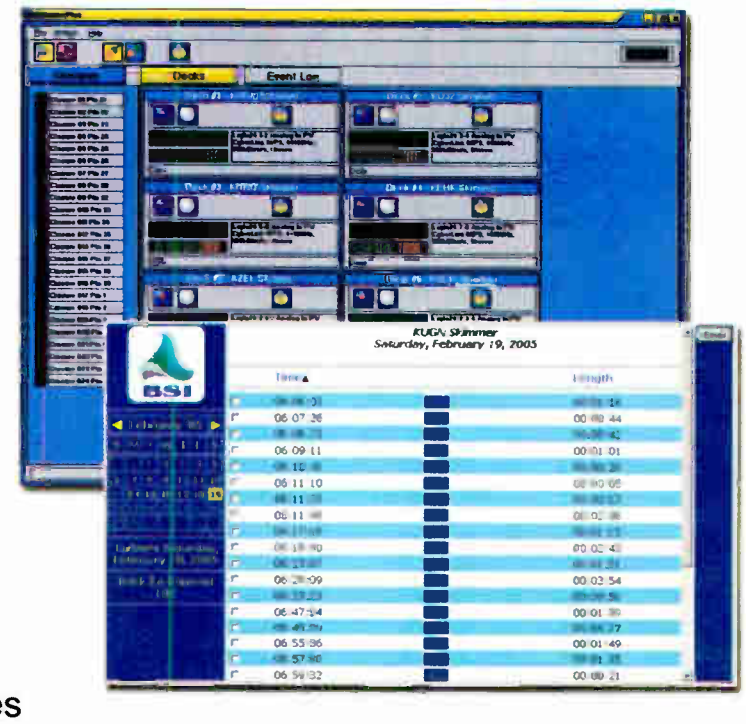

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Dig Safe or Don't Dig at All

by John Bisset

Have you experienced underground cable failure? During my time as a chief, one station lost an underground feeder for the three-phase electrical service, silencing both AM and FM. With no generator, we were on exciter power while the utility laid new cable.

ground tunneler instead — saving the ground system.

Utilities aren't always aware of what's under the ground at your transmitter site. Avoid the mess seen in Fig. 1. Post "Do Not Dig" signs and plan to be on site for any utility work to help avert this kind of disaster.

Buc Fitch encountered this problem so the station had to operate on a Marti for nearly a week until the problem was fixed.

Make it a habit to dial your local one-call number before any digging. You usually have to give them 48 hours' notice, so don't wait until the last minute.

In many places, (800) DIG-SAFE will get you to the right folks. You'll find state-by-state listings online, for instance at *www.digsafe.com/company_onecalldirectory.htm*. If you can't find the appropriate resource, ask your power utility.

I used such a service when I was replacing tower base fencing. The utility company marked where the electrical feeder to each ATU was. Since this cable was run in a bundle with the RF and sampling line, the markings told the fencing contractor where he shouldn't dig.

Buc adds an interesting color code that might be helpful. Occasionally you'll find different colored lines spraypainted on the ground. Refer to the color code key in Fig. 2 to figure out what each color represents.

Thanks, Buc, for tips that may help prevent a cable disaster. Reach Fitch at *fitchpe@comcast.net*.

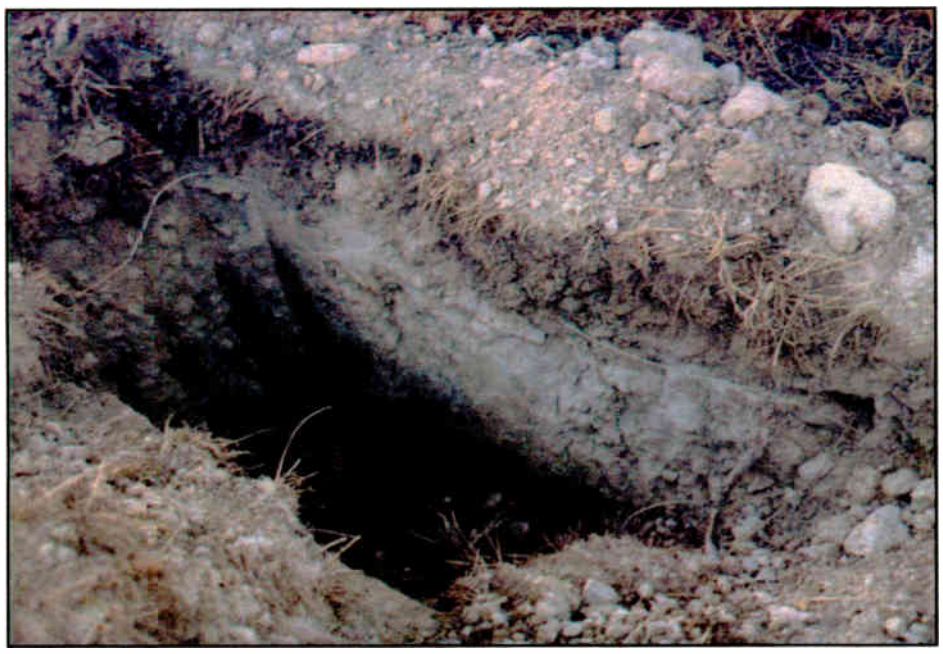

Fig. 1: AM ground radials were damaged due to unauthorized digging.

Contractor Ground Paint Color Code

White: Proposed excavation

Pink: Temporary survey markings (usually biodegradable vegetable paint)

Red: Power of some kind

Yellow: Steam, petroleum piping, gas piping, etc.

Orange: Communications including traffic control circuits

Blue: Potable water

Purple: Reclaimed or Grade B water which some areas route for fire protection, agricultural irrigation, etc.

Green: Sewer and drains

Fig. 2: A contractor's ground paint legend.

Oh, the repair could have been quicker, had they used a trencher the size of a tank. But the trencher would have ruined the ground system. I told the crew that electric current was flowing through the radials. No one wanted to get zapped, so they used an under-

once again. No one had bothered to call Dig Safe, and so excavation for a new generator pad cut through the telco cable. This put the transmitter site off the air.

The problem got worse. It was the contractor's fault, so the telco company didn't view the damage as an emergency,

★ ★ ★

In addition to practicing law, Paul Christensen is an SBE CPBE and CBNT. Paul recalls a discussion concerning the use and lack of affordability of commer-

See WORKBENCH, page 14 ▶

Multicasting.

It's like trying to fit —

well, you know.

Management has decided to multicast. Which seems like a terrific idea — until you consider just how little bandwidth each channel will get. How will the sound of your station(s) survive these shrinking bitrates? Omnia can help.

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Omnia Multicast with SENSUS codec conditioning, Omnia Bass Management system and distributed look-ahead limiter significantly improves the sound of HD multicast and other bit-reduced streams.

SENSUS technology enhances punch, preserves presence, and reduces artifacts. Even heavily bit-reduced channels (like multicast) can be significantly improved by Omnia running SENSUS. And like all Omnia processors, Omnia Multicast delivers the smooth, clean, pure signature sound that grabs your listeners and holds them hour after hour. No wonder the top stations around the world choose Omnia over all other processor brands.

Multicast like you mean it... with Omnia Multicast.

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Workbench

▶ Continued from page 12

cial-grade network analyzers for broadcast engineers. Given the power associated with the network analyzer, an affordable alternative would give broadcast engineers another valuable tool for making useful antenna system measurements.

While it's not a commercial-grade product, Ten Tec is manufacturing a Virtual Network Analyzer that gives much of the same analytical power as a commercial-grade instrument at a fraction of the cost. For $655, the product is said to perform the same complex functions as a true network analyzer.

But, Paul writes, at that price-point there are going to be obvious performance sacrifices, like a maximum upper frequency limit of 120 MHz, only 80 dB of dynamic range, 30 dB return loss range and only +3 dBm output power. Still, there's probably enough precision to offer good utility and accuracy for many measurements up to and including the FM broadcast band.

Visit *http://radio.tentec.com* and type TAPR into the search field.

Christensen can be reached at *pchristensen@ieee.org*.

★ ★ ★

Got a block of wood lying around the shop? Grab it, along with a fistful of connectors, and put together a connector solder-holder, as seen in Fig. 3.

Fig. 3: An economical 'third hand' for soldering.

Wes Boyd calls it another of his silly items, but when it comes to needing a third hand for soldering, who cares how it looks? It gets the job done.

He got the idea when he received a commercial version of this soldering fixture via BGS a few years ago. The BGS version was mounted to a nice aluminum block that could be held in a vise. Of course, someone walked away with it. So Wes grabbed a piece of 2x4, some Liquid Nails, a drill and some connectors to come up with his own version.

It works for A3M and A3F connectors, and the fixture will hold 1/8- and 1/4-inch plugs as well. And it's all under budget.

By putting the tip-ring-sleeve 1/4- and 1/8-inch plugs toward the bottom, the block can be set on its end, so the plug is horizontal as you solder it.

Wes Boyd is market chief for Cumulus in Youngstown, Ohio. Reach him at *wboyd@theradiocenter.com*.

★ ★ ★

We'll wrap up with a reminder of a find that just may save your job.

We've written about interference problems. Many are intermittent and nearly impossible to track down. Not understanding the issues that surround interference, a GM quickly may lose confidence in your engineering abilities.

Dave Biondi's Broadcast.net list serve comes to the rescue again. This time it's C-band reception and airports that don't mix. If you suffer from satellite reception dropouts, it may be an interfering signal blanking out your signal. Bobby Gray, who handles engineering for ESPN1080 in Orlando, is just one engineer who fixed the problem by heading to *www.microwavefilter.com/tvrointerference.htm*.

In addition to providing a variety of interference filters, Microwave Filter Co. has one of the best guarantees in the industry: If the filter doesn't solve your problem, they'll buy it back.

Thanks, Bobby, for the testimonial. Bobby Gray can be reached at *bobbygray@espn1080.com*.

John Bisset has worked as a chief engineer and contract engineer for more than 30 years. He is northeast regional sales manager for Broadcast Electronics. Reach him at (571) 217-9386 or jbisset@bdcast.com. *Faxed submissions can be sent to (603) 472-4944. Submissions for this column are encouraged, and qualify for SBE recertification credit.*

ERI Expands in Chandler

Manufacturer Electronics Research Inc. said site work began for two new buildings at its manufacturing and headquarters facility in Chandler, Ind.

The two structures will add 45,000 square feet; they will be used for TV antenna testing, fabrication and assembly. The company said the project will allow it to expand existing fabrication areas for FM antennas, filters and combiners.

This will bring to 200,000 square feet the space for design, assembly, warehouse, fabrication and test at ERI headquarters. The company also operates an antenna test range nearby and a facility for design and manufacture of television filter and RF components in Maine.

First 816HD Is on the Air

Tucson Mountain in Arizona is home to the first Continental model 816HD transmitter to go on the air. The unit is at Clear Channel KRQQ(FM), according to the supplier's Broadcast Sales Manager Mike Troje. It serves the Class C station at 93.7 MHz into a Dielectric directional antenna. The previous 816 analog transmitter becomes the analog backup.

KRQQ's Mike Irby and Continental's Dan Dickey

Clear Channel staff did the install. Gil Garcia is regional vice president of engineering; the market chief is Mike Irby.

Previously the room held two Continental transmitters in a main/standby configuration. Troje said space was an issue and that the 816HD has the same footprint as an 816 analog unit. In its promotion of the product, Continental emphasizes the space-saving nature and that no second IBOC transmitter or tower mods are needed.

"The unique thing is that it uses low-level combining for high-power requirements," Troje said. "We don't increase the impact on their room at all. ... You don't have a load or hybrid or anything else to consider." He said the HD Radio portion of the installation took only a couple of hours and added, "The Ibiquity/NRSC mask requires all products to be within the mask without modulation. Clear Channel, however, requires all products be within the mask with modulation. This requirement is much more difficult to meet, but the 816HD passes this test with flying colors."

The station's 816HD system incorporated a Nautel NE IBOC-FM HD radio signal generator and M50 FM exciter to allow analog and HD precorrection. Troje said Continental was "very proud to to have the opportunity to work with Nautel on this installation."

"Everything is bigger in Texas. Except equipment budgets."

"I'd gotten the green light to build new studios for our South Texas radio cluster. We wanted the ability to put any of our stations on air from any studio, so we started investigating networked audio.

"Also, management said we might add more stations to the cluster, so I needed a system that could be easily and affordably expanded later on.

"We looked at several systems. Some did what we wanted, but were very complex and required us to buy their expensive routing mainframe, whether we were building lots of studios or only a couple. That was completely outside our price range.

"Then we looked at Axia. They showed us how an IP-Audio system would let us share audio sources, switch air studios quickly, even customize console settings for individual jocks. And Axia *cost about half* what some companies wanted us to spend.

"Of course we were a little skeptical — how often is the least expensive solution actually the best?

"Then we learned that Axia's Ethernet backbone scales, like a computer network. All we'd have to do to grow is connect more nodes and surfaces, maybe add another Ethernet switch. We didn't have to commit to buying equipment for all of our studios at once .

"So we built one studio using Axia, and *it worked great*. Went together fast and smooth. A few wrinkles during installation were ironed out by Axia support right away. Those guys were amazing. It was like their entire team was there to make sure I was happy.

"We liked Axia so much we installed a second studio. Then a third. Then a whole second cluster. My colleagues are so impressed with how well Axia works, they want it in their stations, too!"

— Jorge Garza, Univision Radio, McAllen, Texas

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HD Radio: Could It Supplant FM?

by Anders Madsen

Will HD Radio someday overtake analog FM in the United States? If so, how long until most commercial FM broadcast is at least accompanied by an IBOC modulated signal? Will stations ever really start turning off their analog entirely, as originally envisioned under the "hybrid" approach to a digital radio transition?

We asked several engineers, station managers and suppliers and came up with an interesting divergence of views.

Doubts for some

It's hard to answer long-term questions, of course, when so many short-term questions remain. No consensus exists as to whether the IBOC FM standard will ever be implemented permanently or whether listeners will buy enough HD receivers to make business sense for radio advertisers. Those following AM developments know that implementation is still facing technical challenges that may delay AM IBOC for an unknown length of time.

"The jury's still out," said one prominent East Coast engineer in November, speaking on the condition of anonymity. "I think there's still a possibility IBOC might fail."

As of now, this source said, "The number of receivers out there is virtually nil. And if there aren't receivers, (stations) aren't going to spend the money to convert." He feels $100 is the price at which receivers should be sold.

Tim Eby, manager of Ohio State University station WOSU(FM), agrees. "Nobody's going to run out and buy a radio if it costs $350." For him, $100 is the target price point required for mass appeal.

Harris Broadcast's Manager of Marketing and Communications for radio Hal Kneller believes that 15 to 20 percent of the market must own receivers before the business models start to work; a $100 price, he said, "would be ideal" to bring consumers to that point.

Tim Bealor, vice president of RF systems for Broadcast Electronics, puts it a different way: "It's going to have to be something under a $30 premium" over current radio prices, and maybe even a little less than that.

What if enough receivers can make their way into the right hands? Even our skeptical East Coast engineer turns optimist in that scenario. Then he predicts HD Radio would supersede analog FM in about 10 years.

High-def crystal ball

Radio ownership groups have taken various positions on HD Radio. Many that support the technology are investors in Ibiquity Digital Corp. According to Bob Struble, president and CEO of the company, some owners are pursuing aggressive installation and implementation, others are waiting to see what happens. But he is certain HD Radio will someday replace analog FM broadcast in the United States.

When will we reach a point at which, for all practical purposes, every FM transmitter is running IBOC modulated? It's impossible to predict for sure, he acknowledges.

"We've been asked to evaluate. We came up with an estimate: 12 years from the time you say 'go,' which arguably was ... this year or last year. So figure 2018, or something to that effect."

He added, "That could be sooner; that could be later."

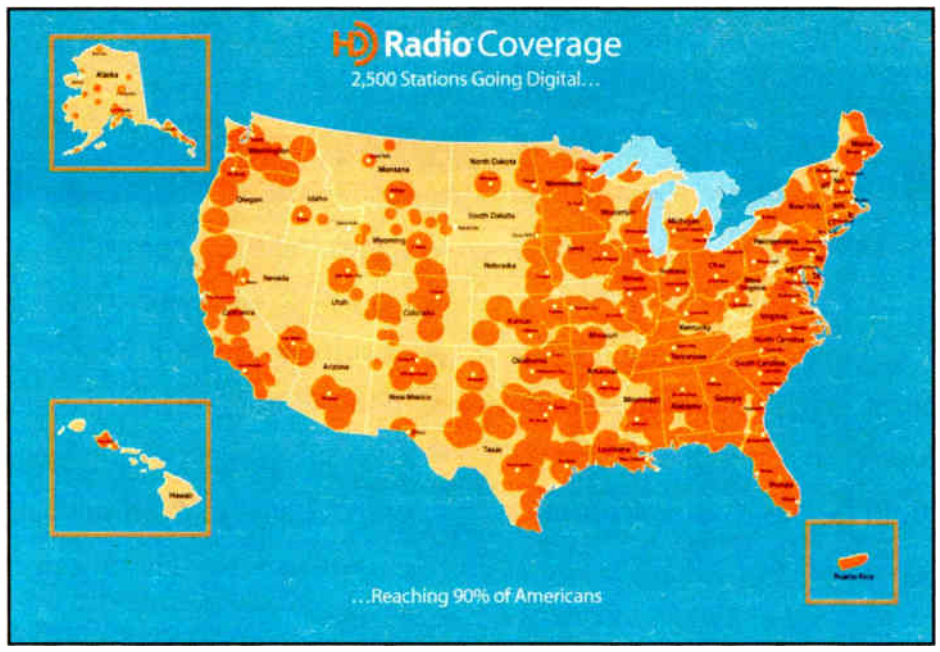
Dave Robbins, director of digital programming for Infinity Broadcasting, said, "Although we can't predict the future, we are clearly moving down the path toward digital broadcasting.

"Down the road, absolutely. In public radio, we have a lot more good programs than channels to run them."

Trend lines

And what does the supply side say?

Among transmitter suppliers, a pattern is clear: the licensed IBOC transmitter manufacturers — Harris, Broadcast Electronics, Nautel and Continental — report that IBOC transmitter sales outpace analog sales in dollar volume and in unit sales.



Ibiquity believes over 90 percent of Americans will have access to digital HD Radio broadcasting in the next few years.

Bealor of Broadcast Electronics acknowledges that putting receivers into the market is an initial challenge, but said, "Let's say that one remaining hurdle gets jumped; then, I think that, at that point, we'll still continue to operate in analog and digital simultaneously for at least the next five to eight years."

"One of the great things about HD is that it operates in tandem with analog, so that if you have an HD radio, it also picks up analog stations. There won't be a cut-off point, (as if) that's the end of this, and we're starting something new ... It's a planned transition. We're not taking any analog stations off the air ... what we're doing is putting HD transmitters right next to the analog transmitters."

Clear Channel Radio Executive Vice President of Distribution Development Jeff Littlejohn points out that with 800 million analog radios in the United States, analog FM has inertia in the market.

"I think it would be quite some time before we could even consider turning off our analog signals. We'd need to sell a lot of digital radios first." How long before that happens? "Perhaps 40 years."

Station managers interviewed for this article expect HD Radio to succeed in all markets someday, and agree that the final changeover will be more than a decade in the future.

Doug Myrland at KPBS(FM) in San Diego says, "Is it inevitable? Yes. How long before it replaces analog radio? At least a decade, if not significantly longer ... I think it is going to (have) a relatively slow start, and then toward the end of the cycle a relatively rapid final transition. The first 10, 20, 30, 40 percent of market penetration will be a long time coming, and then it will tip pretty quickly."

WOSU Station Manager Eby agress the IBOC standard will be accepted because of the way digital radio works: "The potential for broadcasters in adding more channels is tremendous." He adds that data broadcasting will be an important part of their system. But he thinks it will be more than 10 years before IBOC will dominate the FM landscape. Will the business model work?

Matthew Straeb, director of business development for Continental Electronics, said, "We're selling a lot more HD transmitters than we are analog. For a small premium, (the broadcaster) is going to be able to buy HD-compatible stuff ... The pricing will become closer, and the analog transmitters will be the same price as the IBOC."

When? "It's all quantity at this point. We're still paying a lot of the development costs off. So as development costs get paid off, and we see some of the quantities go up even higher, then we'll be able to reduce the price of the transmitters."

How long has HD outpaced analog sales at Continental? "For six months, I'd say the backlog showed that ... We just basically started shipping product."

Nautel, according to Sales/Marketing Manager Jorgen Jensen, has offered advanced HD transmitters and taken orders for two years. Nautel's HD sales are now on pace with analog sales and are expected to continue to grow.

Will HD Radio signals ever be everywhere in the U.S.? "Not in my lifetime," Jensen said.

Ernie Belanger agreed: "Without a mandate to shut off analog radio or for receiver manufacturers to (stop producing) analog radios, analog will exist virtually forever," said Belanger, sales and marketing manager of Armstrong Transmitter Corp. "I don't see U.S. manufacturers offering only IBOC transmitters for 20-30 years."

The company is in the process of developing an FM HD product line, he said. "We are right on track for the second wave of implementation, which should begin in late 2006 and 2007."

Bext Inc. President and CEO Dennis Pieri thinks, "HD Radio is here, and is here to stay. But many standards are here to stay without being necessarily dominant enough to eliminate another standard ... Unless something changes dramatically, analog service is not going to go anywhere anytime soon, and may be around indefinitely."

Pieri puts the company's position this way: "We are taking a prudent attitude ... we surely will start a Bext HD line the minute our customers show readiness to buy."

Asked if he believes analog FM will come to be replaced by HD Radio, Bernie Wise, president of Energy-Onix Corp., has a firm, concise answer: "Never." As for plans to offer the technology in his own transmitter products, the same answer: "Never."

But at Harris Broadcast, HD Radio transmitter sales have exceeded analog sales for the past year, Kneller said. After introducing IBOC transmitters in late 2002, deliveries were started in early 2003, and the company's forecasts are for HD to continue to outpace analog sales.

Kneller feels HD Radio will be successful in reaching critical market penetration, but he doesn't see analog being turned off for a "very, very" long time.

"I liken HD Radio to the color television transition, where it grew slowly over time, until one day you woke up, and color television was pretty pervasive."

When might stations start to **turn off their analog signals? Jeff Littlejohn took a stab: 'Perhaps 40 years.'**

Anders Madsen has held marketing positions with broadcast equipment manufacturers. Reach him at andersmadsen@cox.net.

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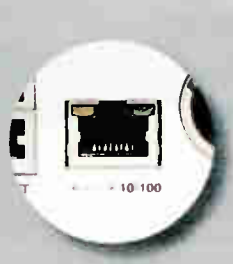

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The Big Picture

Photo: Gary Hayes, BBC

by Skip Pizzi

When Telcos Run the Transmitter

Radio Controls Its Own On-Air Delivery, But Relies on Others for Online Carriage

A familiar theme in this column has been broadcasting's tradition of providing both content creation and delivery. This is a nearly unique condition in the new media world, where most players engage in either one process or the other, not both.

Thus in the non-broadcast media space — primarily the online world today — content creation and content delivery are each handled by separate companies. This has established a schism in which content creators and service providers operate in different industry sectors and often find themselves at odds with each other.

Broadcasters, on the other hand, have enjoyed the benefits of holding two cards of different suits from the media deck, while their new competitors are only dealt one. The challenge for broadcasters is to know how to play these cards in the ongoing high-stakes media game. Competing against two types of operators, each of which may be well-honed in its particular space, requires broadcasters to act as if they are operating two separate businesses — one creating media content, the other delivering it.

For legacy broadcast services, both elements continue to work together, with on-air transmission services delivering a broadcaster's own content streams. But broadcasters need not be locked into this single mode, and they should evaluate the option of having third-party delivery systems carry content to other audiences they cannot reach — or in modes they cannot provide — with their own delivery systems.

Of course, this is already taking place. For example, while broadcasters continue to manage their own transmitters, they don't have to operate the infrastructure that delivers their content via the Internet. As a result, an online service provider can deliver a broadcaster's content to audiences beyond the reach of their transmitters, or in an on-demand fashion, thereby potentially adding significant value to their service without significant capital investment and maintenance expense on the broadcaster's part.

For a price, a netop could offer one Web site the ability to load faster than its competitor.

Conversely, broadcasters can operate as delivery companies, carrying content provided by others to the broadcast service area. This, too, has been underway for some time with subcarrier services and the like, but it is also an important part the promise of datacasting, where broadcasters can combine data services from third parties into a packetized stream they radiate in a uniform, unidirectional and inexpensive manner to a broad but regionally targeted audience.

Radio stands apart

In recent years, the television broadcasting industry has moved away from this model, as TV stations become much more important as content providers than delivery services.

Yes, TV stations still operate their transmitters — in fact, *two* of them in most cases today (one analog and one digital) — at non-negligible expense due to their high-powered nature. Yet the majority of the U.S. television audience receives these local stations' signals via other delivery systems (cable and satellite TV combine to reach at least 85 percent of U.S. homes). Meanwhile, these delivery operators create little of their own content, acting simply as aggregators of national and local content streams provided by external companies, with whom they have negotiated carriage deals.

Thus radio is becoming the last "dual-mode" medium, where broadcasters are both creators and the primary deliverers

See DELIVERY, page 19 ▶

Delivery

▶ Continued from page 18

of their programming. (Interestingly, this is also true for satellite radio, which — unlike satellite TV — for the most part also creates its own content streams, rather than aggregating channels created by other entities.)

So the discipline of acting as two different companies becomes increasingly important for radio operators, if they are to retain the agility required to compete in the ever-more-competitive new media environment.

The network strikes back

The business of having others deliver broadcasters' content has not always been a smooth process, as TV stations have learned in their negotiations with cable and satellite TV operators for carriage.

On many of these arguments the FCC and other local regulators have had to play referee and put regulations in place to keep the playing field as level as possible.

Thankfully for radio broadcasters, the service environment where most of their new services live is the Internet, which has been largely free of such assertive gatekeeping. Yes, the record industry has staked its claim on a greater revenue share from radio for the broadcast of music online than they traditionally received for on air use, but in terms of physical delivery service, the hosting and bandwidth that broadcasters purchase for online transport of their content is simply a factor of how much they have wanted to spend, in what has become essentially a commodity marketplace.

But this may be about to change. The operators of the physical networks that carry these services are beginning to realize that as broadcasters and others add value to their own services via these networks, the netops are losing ground. Demand for bandwidth continues to increase, which adds capital and maintenance cost for the network operators. Meanwhile, much of the new revenue that flows into the environment as a result of increased content-carriage potential goes to the content providers, not the service operators.

This is particularly obvious in the case of VoIP (or Internet telephony), where, for example, new broadband Internet access provided by a telephone company's DSL service is allowing consumers to actually reduce their net revenues paid to the telco, as consumers replace their use of traditional switched telephony service with VoIP service for their dial-up voice calls.

So it's not surprising that network operators are considering a different approach. Telcos have been rattling their sabers of late with calls for regulatory adjustments that would allow them to charge premiums to certain customers on their Internet service networks, in return for tiered qualities of service (QoS).

For example, for a price, a netop could offer one Web site the ability to load faster than its competitor. Or, closer to home, the netop could guarantee a given minimum bitrate to a streaming media provider so that its services would maintain a higher and more stable level of quality than its competitors.

The ongoing deployment of IPv6 technology makes this QoS-throttling easier, so these moves toward "prioritization," as it is being called, are not idle threats from telcos. But an equally vocal counter-volley has been launched by others, under the mantle of "network neutrality." They cite the tradition of openness on the Internet as unassailable and a key component of its success in attracting strong consumer adoption.

While the telcos spin this as a feature providing certain of their customers with premium services, just as other businesses do, the net-neutrality camp is looking at the glass as half-empty, and interpreting it as disadvantaging those "premium" customers' competitors. The latter group also worries that some of these same telcos have plans to launch new media services and partnerships of their own, and might use prioritization to provide advantages to such services.

As broadcasters and others add value to their own services via these networks, the netops are losing ground.

Wireless broadband services could also be subject to this or perhaps even greater control by service providers, and given their mobility, these may have particular competitive impact on radio broadcasters' prospects.

The net-neutrality battle is becoming a key front in the telecom reform process, which has begun in Washington and will likely continue for some time. Broadcasters who consider online services important to their future should take heed and follow this issue as it wends it way through the halls of Capitol Hill.

Skip Pizzi is contributing editor of Radio World.

ROOTS OF RADIO

By All Means, Please Touch That Dial

by Mike Adams

To a radio technology historian, the age of a broadcast set can be determined by the type of tube used: large four- and six-pin bulb-shaped tubes, 1920s to mid-1930s; eight-pin octal with keyed base tubes, mid-1930s to mid-1940s; so-called miniature tubes with seven or nine wire pins, late 1940s through mid-1950s; after that transistors.

But the dial of a radio is a simpler method to determine the era of a set. The rule of thumb is that three-dial sets were mid- to late 1920s, small window dials late 1920s to mid-1930s, round dials in the mid-late 1930s, rectangular dials in the 1940s.

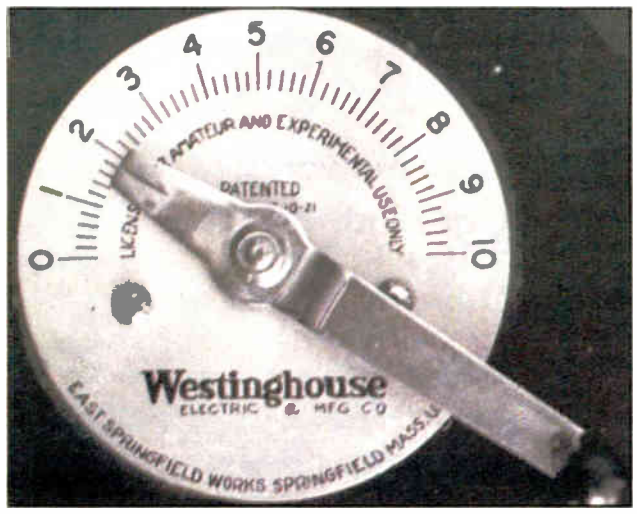

Fig. A: 1923 Westinghouse Radiola Senior

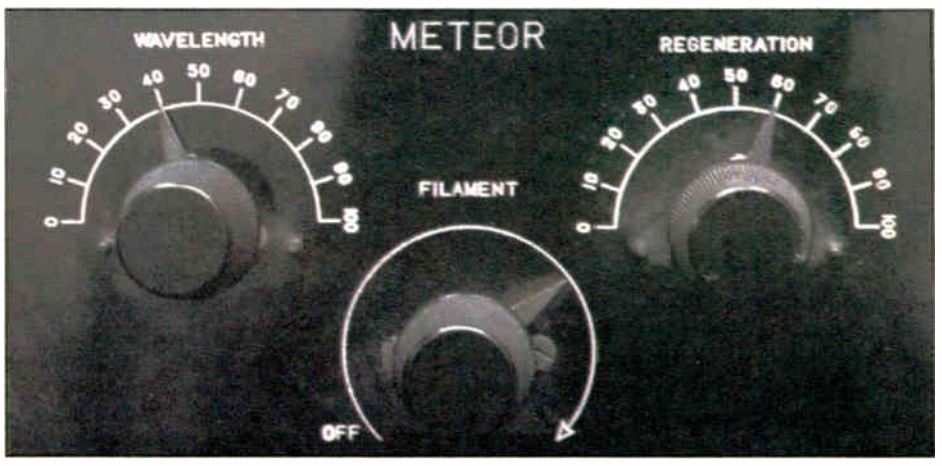

Fig. B: 1924 Meteor

Let me illustrate the mostly-unknown chronology of the radio dial.

TRF

Licensed broadcasting began in 1920: The technology of the radio influenced the type of tuning and thus the dial.

In the beginning the common radio was the crystal detector or regenerative detector with one tube amplifier, and by the mid-1920s the TRF or tuned radio frequency circuit with three dials appeared. These were battery-operated. See Figs. A through D.

Fig. C: 1925 Gold Medal

Three-dial sets date roughly to the mid- to late 1920s, small window dials late 1920s to mid-1930s, round dials in the mid-late 1930s, rectangular dials in the 1940s.

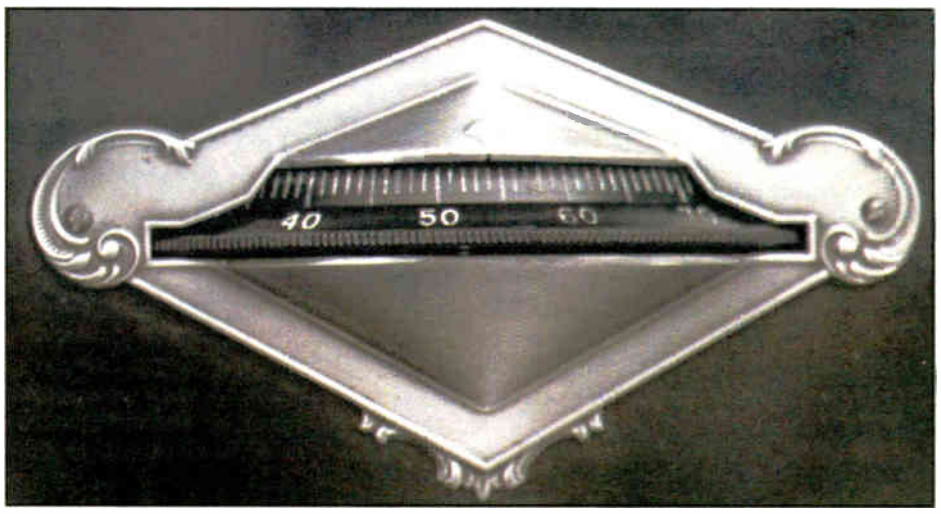

Fig. D: One of three ornate dials on a 1925 Grebe Synchrophase.

By 1927 the electric superheterodyne radio of E.H. Armstrong design appeared and it had a single tuning knob, first a small window with the numbers 1–100, a year later showing the AM dial agreed to in the Federal Radio Act of 1927, 550–1500 kc (then kilocycles, renamed kilo Hertz, kHz). See Figs. E and F.

Enter the 1930s: The decade began with the rise of network radio entertainment programming on AM. The round dial with shortwave bands began to appear in the middle to late

See DIALS, page 22 ▶

Fig. E: 1927 Brunswick, one of the first AC sets

Fig. F: 1929 Gloritone

Fig. G: 1932 Atwater Kent

Fig. H: 1934 Gilfillan

WIRED FOR SOUND

About Those 'Other' Cables

by Steve Lampen

Remember the old days? When you hooked up your audio with a shielded twisted pair? Some veterans will remember when it was all braid shield, and big bulky cable, before there was even foil shielded cable.

Now you have to choose between braid shields (sure, they still exist) and foil shields, analog or digital, shielded or unshielded (like using UTP data cables to carry audio), and networked formats (like running audio on Ethernet).

Broadcast engineers might be forgiven for finding the choices confusing.

I thought I would make everything just a little worse by mentioning some of the other cables that people use and why.

Multimedia Control

Like MIDI cable. If you're in a rock band or play a synthesizer, this is old stuff. MIDI is "musical instrument digital interface." The cable is one pair for data, and one pair for power. Often, the power pair isn't needed and you only need a data pair. Because the data is kilobits, you could probably use a Dixie cup and a string, so musicians often use mic cable to run MIDI, and it usually works just fine.

MIDI is a control architecture, not a music protocol. It's a way of connecting all these electronic whiz-bangs together. That includes foot pedals, which is where the power+data cables are required, because a foot-pedal rarely supplies power to run itself.

If you are going a long way or you want to install a permanent MIDI cable, buy something with a fire rating (for inside the wall), low capacitance on the data pair and a larger gage for the power pair.

In fact, the limiting factor for MIDI is the power pair. Just like any DC supply, it's the voltage drop that gets you. The data probably could run for hundreds, if not thousands, of feet. So the power pair on these cables is often 18 AWG.

Now if you open a catalog and look for "installable" MIDI, I'd bet you won't find any. Where you will find it is under something like "Multimedia Control" cable or maybe "Musical Instrument" cable. And where these cables are used most often is for touch panel controls, which require, you guessed it, a data pair and a power pair. Cables intended for system brands like AMX Axlink or Crestron CrestNet are exactly that, usually a 22 AWG shielded data pair and an 18 AWG unshielded power pair.

Another cable that might come in handy is another data+power cable, somewhat like the MIDI cable, but in this case we're talking real data (Category 5) and power conductors. The power conductors come in a number of conductors, usually two or four, and a number of gage sizes, 18 AWG, 16 AWG, even 14 AWG and often four to the bundle.

Now where in the world would someone use four big unshielded wires and a Cat-5? Why, in your ceiling, of course.

IR

This cable is intended to wire up ceiling-mounted speakers with the big unshielded stuff and to connect infrared remote control repeaters with the Cat-5.

You know how hard it is to hit the remote receiver with a remote control. If all you have to do is aim straight up, well, that exactly how you want to hold the remote!

Now where in the world would someone use four big unshielded wires and a Cat-5?

Sure, we're talking kilobits again for the remote control, so Cat-5 is overkill for that. Another application is surveillance cameras, which often are wired with Cat-5 these days. Power and video.

But that doesn't mean it can't be used for something else. Let's say you have an application in which you have some data protocol, network protocol, and you also need to power up the device. This is the perfect cable. And since you know you can use Cat-5 for analog or digital audio. an audio device that needs to be remotely powered also would be a good choice for this cable. And you could do four channels of analog audio or eight channels of AES digital audio on those four data pairs.

You could also use the large wires for speakers, as they were intended. Now you have the inputs and outputs from a power amp.

The only caution I would sound is to make sure the audio pairs are well balanced (good CMRR) so they will reject any bleed from the speaker side.

Steve Lampen's latest book, "The Audio-Video Cable Installer's Pocket Guide" is published by McGraw-Hill. Reach him at shlampen@ao.com.

Fig. I: 1935 Marshall Art Deco Dial

Dials

▶ Continued from page 20

1930s, and with the war in Europe looming large, those international bands with their DX or distance reception were family entertainment in the 1940s. After the stock market crash of 1929 the brief era of large furniture cabinet wood consoles ended, to be replaced by the more affordable tabletop sets, often the tombstone and cathedral models. See Figs. G to I.

By the end of the 1930s, large consoles returned, most shortwave bands, as seen in Figs. J and K.

Later, the tuning dial would experience the transition from the "round 30s to the rectangular 40s." Other 1940s sets were portable, tabletop, plastic.

We'll look at later dial designs next issue.

Mike Adams is a professor and chair of the Department of Television, Radio, Film and Theatre at San Jose State University, where he also advises the department FM station, KSJS. From 1963 to 1973, Adams was at legendary AM station WCOL in Columbus, Ohio, as DJ and program director. He is the board chairman of the California Historical Radio Society and author of "Charles Herrold, Inventor of Radio Broadcasting."

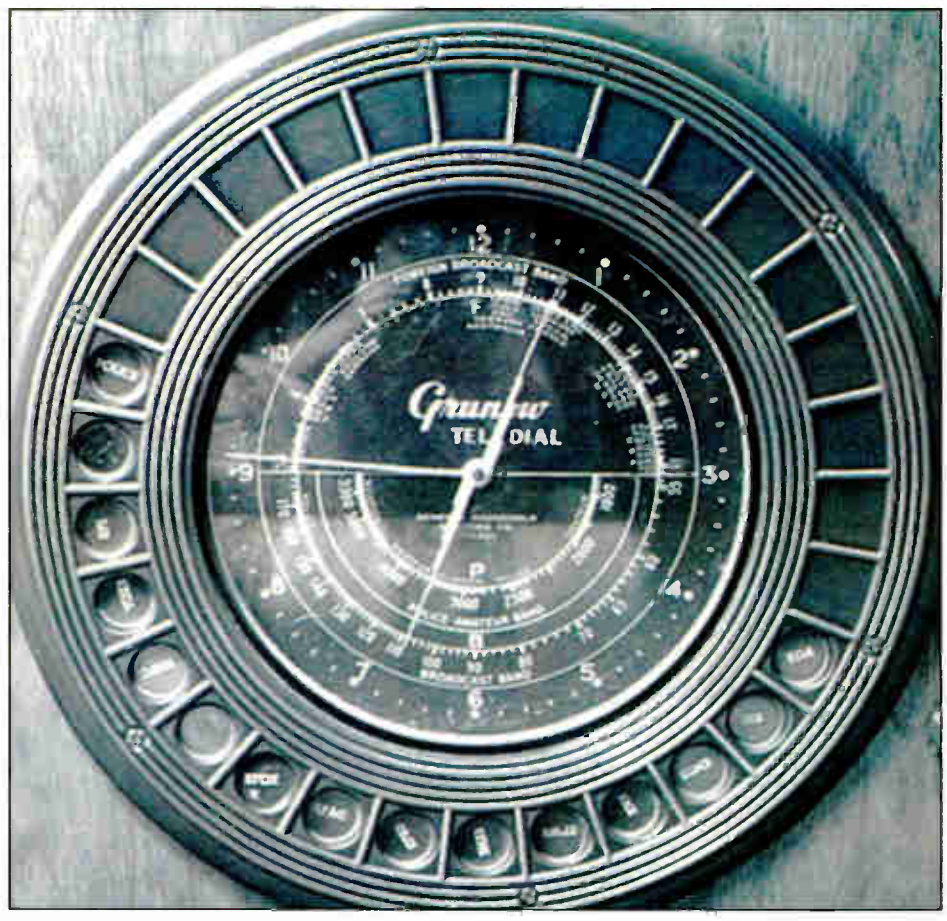

Fig. J: 1936 Grunow 'Teledial'

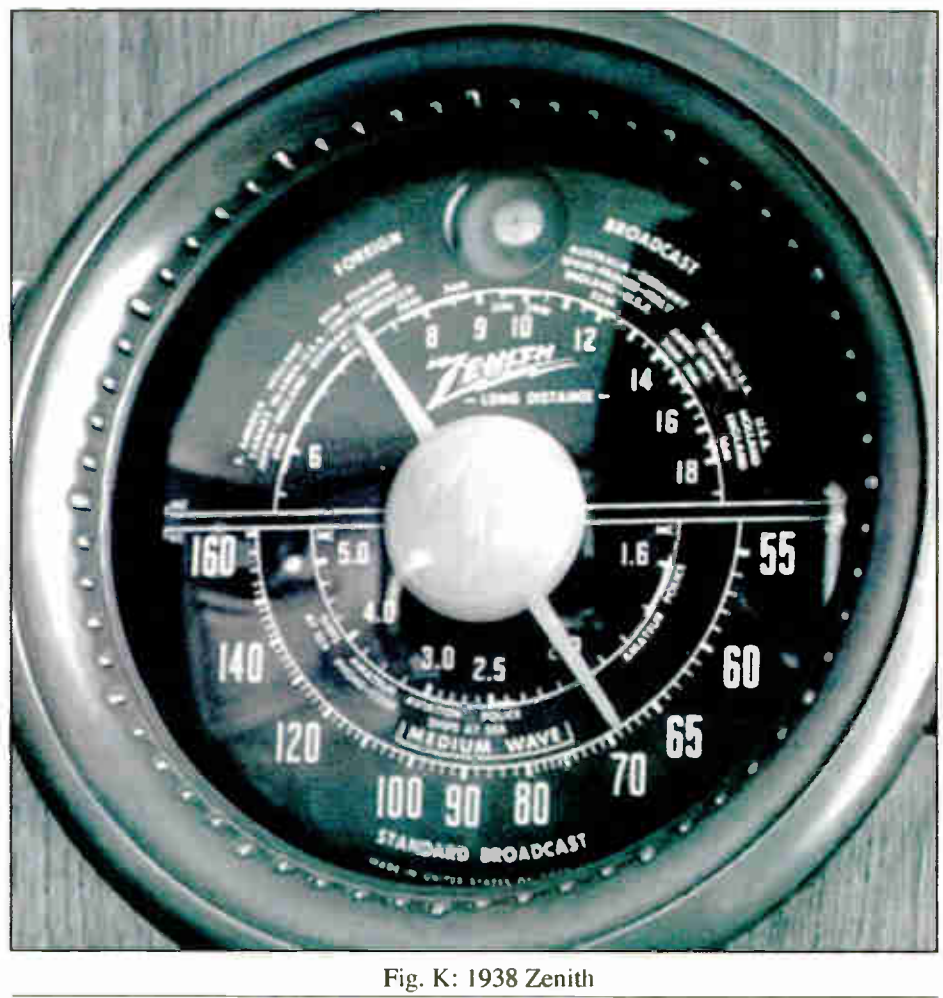

Fig. K: 1938 Zenith

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What Goes Where (When and How)

A Sampler of Training and Documentation Software That Might Make Your Life Easier

by Tom Vernon

The number of broadcast facilities being built ensures that documentation software will be an ongoing need.

CAD programs facilitate diagrams and cable runlists needed by planners and contractors. IT enterprises, a growing part of the radio plant, have their own needs for flow diagrams with database interconnectivity. There's an increasing need to provide uniform training to staff on software related to program automation and status/monitoring.

Documentation and training software helps stations meet these needs. Here's a look at several, with personal perspectives based on my own experiences.

Captivating

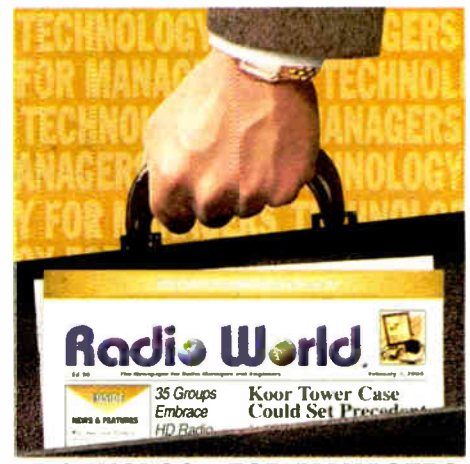
Online training materials for broadcast software runs the spectrum from good to nonexistent. Even if the vendor provides materials to educate operators, station customizations and tweaks may make additional instruction necessary, a task that can eat up a lot of engineering time.

Macromedia Captivate is a program that allows users to create interactive software demonstrations and simulations. Completed movies can be enhanced with text captions, audio, video, Flash animations, text animations, images and hyperlinks. Captivate can work with software and Web-based applications. Mistakes made during screen capture can be edited out without re-recording the project or narration. Completed movies can be delivered as Flash files for online viewing, an executable for CD distribution or a Microsoft Word document for printed handouts.

It's easy to insert quizzes and test scoring functions in Captivate projects without advanced programming skills. Quiz options include: fill in the blank, Likert, matching, multiple choice, short answer and true/false.

Branching easily can be included in Captivate movies. This enables the user to take a different path through the program as determined by responses to questions. A right answer allows the user to move forward, for example, while an incorrect response may branch to remedial material.

Documentation includes a 48-page user manual that walks the user through installation and the basics of the program. Power users and developers can tap into more in-depth information through the Macromedia Web site.



TECHNOLOGY FOR MANAGERS

Microsoft Visio has been gaining popularity with broadcasters for mapping the growing IT enterprises in the radio plant.

For under $500 and with a short learning curve, Captivate makes possible software training and demonstrations which used to take more expensive programs and considerable programming expertise to create. The only problem I encountered was with the install. Captivate requires Microsoft Internet Explorer 5.0 or later to run, something not mentioned in the instructions. If it doesn't find IE, Captivate will ask you to download the most current Flash player from Macromedia, which will do no good. This can cause a great deal of frustration, until you call tech support.

You CAD!

Creating the documentation for large facilities can be a daunting task involving several steps.

The typical documentation workflow for a large project includes creating concept-level drawings with basic flows and enough information to get project approval, developing these into bid-level drawings with sufficient information to go to bid, and finally detailed construction drawings with associated cable and system databases. This last step usually is the most tedious and is where mistakes often

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Software

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creep into the process.

WireCAD, a relative newcomer to the documentation scene, is an application that offers many of the features of AutoCAD, including database integration, without the steep learning curve.

Users begin by creating a project in WireCAD and then add drawings. Drawings have the necessary layers, text styles and blocks to accept material from WireCAD. As with Visio, users drag instances of equipment from a library on to the drawing.

An interesting feature of this program is you can select the configuration of the equipment on the drawing. For example, you can have a flow diagram of an audio console that only shows the control signals and hides the audio connections, making it easy to create separate audio, control and data diagrams of the same equipment configuration.

New equipment can be added to the database by using the "add equipment" or "edit I/O" functions. This should be important for radio users; the libraries that come with WireCAD contain mostly video gear.

Next comes interconnecting the gear. The program has pretty slick features, including a pop-up window that tells you if you are about to make an illogical connection, such as linking a data output to an audio input. You may elect to ignore the warning and make the connection if you so choose.

System names are assigned to all equipment. WireCAD will prompt you for locations of the equipment. Assigning cable numbers can be automated. The program will make sure there are no duplicate numbers. The cable information is sent to the project database; WireCAD then assigns numbers and modifies the drawing.

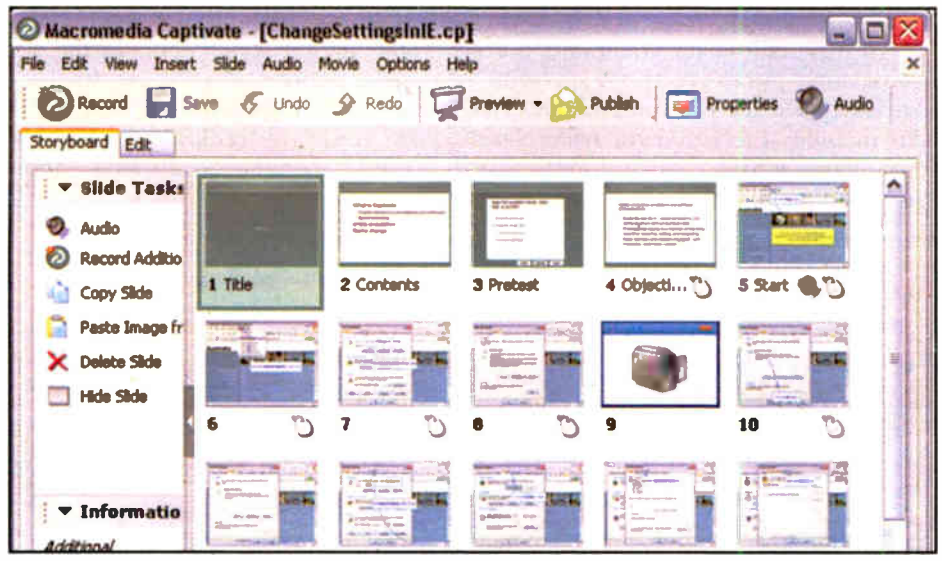
The 169-page user manual for WireCAD is delivered as a PDF file for you to print out. The easiest way to learn the program is by watching the narrated screen-cam tutorials that are included on the CD. The company also offers classroom training in Newhall CA.

My week-long foray into WireCAD made me comfortable with the basic functions, if not a power user. The program delivers on its promise of being easier to learn than AutoCAD, largely by eliminating functions not needed for facilities documentation and automating the ones that are.

Visio

With its array of tools for creating polished network diagrams, Microsoft Visio has been gaining popularity with broadcasters for mapping the growing IT enterprises in the radio plant. Users drag instances of shapes from stencils onto the work surface to represent IT gear. Signal flow is created with the connect tool. Wizards are available to create a variety of diagrams.

Users with large networks can benefit from Visio's Autodiscovery feature, which automatically will lay out a full mapping of SNMP and WMI-enabled networking and server environments, including connectivity between devices. This function is largely limited to Windows servers, since Unix does not support WMI.



Macromedia's Captivate makes quick work of software training projects.

Of particular interest to programmers, the Visio object model is fully hackable. A moderate level of customization of shape and database functionality is possible by using Visual Basic for Applications (VBA), which comes with Visio. More advanced tweaks and solutions can be devised using programming languages like C, C++, C# and Visual Basic. This opens unlimited possibilities for the radio engineer, such as creating custom Visio shapes that look and act like broadcast equipment, including remote control and metering capabilities.

The recent reorganizing of the Visio product line has led to some confusion and questions about what happened to the Autodiscovery feature. This func-

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Software

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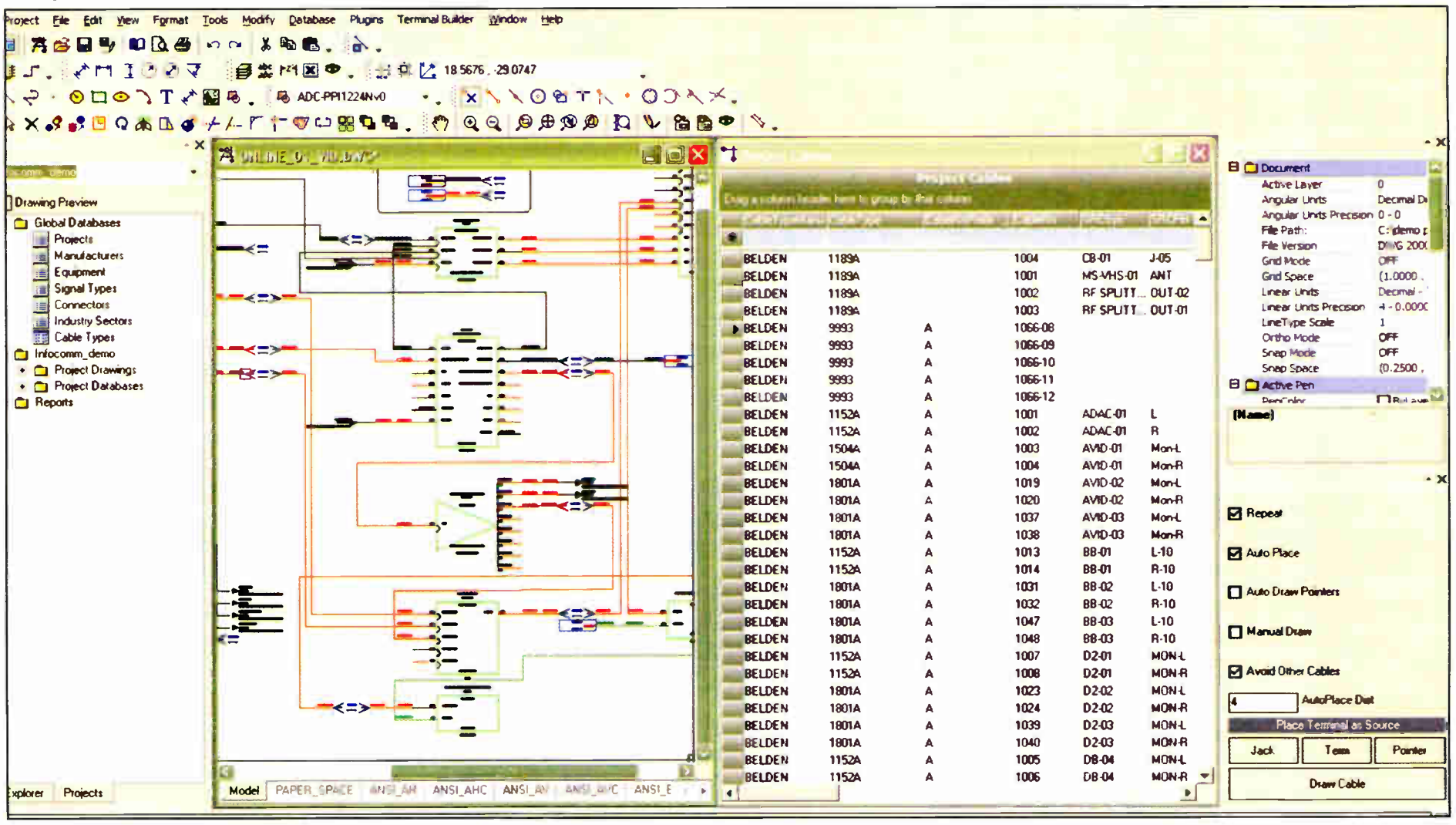
tion was a part of Visio 2002 Enterprise Edition, but is not included with Visio 2003.

To make automatic diagrams, users must now purchase the Visio 2003 Resource Kit for IT Professionals. The kit includes LANsurveyor from Neon Software, which can automatically generate diagrams of a LAN or WAN; NetZoom Stencils from Altima Technologies, which contains the most popular network shapes; and Rackwise from Visual Network Design, which can generate rack drawings that include reports detailing power requirements, heat loads and asset summaries.

To summarize, users need to purchase both Visio Professional 2003 and the Resource Kit for IT Professionals to automatically make network diagrams. The Resource Kit will not work with previous versions of Visio.



My week-long foray into WireCAD made me comfortable with the basic functions, if not a power user.

Ask the Experts

Systems integrators and contractors are the power users of documentation software. A few tips from the pros on getting the most from these programs.

Try to finish documentation before the project begins. Few projects are built exactly as proposed, but it's easy to make revisions as the project evolves, rather than starting from scratch after construction has finished.

Be consistent with documentation standards. Make one person responsible for all documentation. If that's not possible, have a style guide with agreed-upon standards for symbols and abbreviations. All drawings should have a consistent look and feel.

Make sure drawings are complete descriptions of the work, not shorthand. The project manager and/or creator of the drawings may not be around for the next upgrade. All documentation should be left so that someone not familiar with the project can understand signal flows, routing schemes and cable runs quickly.

Be disciplined about documentation. Drawings need to be checked for accuracy as soon as the project is complete, and regularly updated as the plant is modified.

More Info

Captivate ($499)
Macromedia Inc.
San Francisco
(415) 832-2000
www.macromedia.com/software/captivate

Microsoft Office Visio Professional 2003 ($499)
Visio 2003 Resource Kit for IT Professionals ($399)
Microsoft
(800) 642-7676
Redmond, Wash.
www.microsoft.com/visio

WireCAD 3.2
Personal - single user, single site ($398)
Professional - single user, multiple facility ($999)
Enterprise - multiple user, multiple facility ($1,999)
Holbrook Enterprises Inc.
Los Angeles
(661) 253-4370
www.wirecad.com

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SS 16.16

The SS 16.16 provides audio routing of 16 stereo inputs to 16 stereo outputs. This type of routing allows any one stereo input to be assigned to any/or all stereo outputs. The SS 16.16 may be controlled via front panel encoder controls and/or a multi-drop RS-232 serial port. A 40 x 4 LCD back lit display provides for input descriptions and macro setup. Additional features: headphone amplifier with front panel jack and level control, front panel monitor speaker with mute switch and level control, internal audio activity/silence sensor with a front panel ACT indicator and rear panel open collector, and a 16 GPIO port. FREE Windows NetSwitch remote control software, which supports Serial, USB and Ethernet with the optional ESS-1 Ethernet to serial converter, is available for download. Installation is simplified with plug-in euroblock screw terminals.

SS 16.4

The 16.4 provides matrix audio switching of 16 stereo inputs to 4 stereo plus 4 monaural outputs. Matrix switching allows any/or all inputs to be assigned to any/or all outputs. The SS 16.4 may be controlled via front panel switches, contact closures, 5-volt TTL/CMOS logic and/or the multi-drop RS-232 or RS-485 serial port along with 24 GPIO's and input expansion port. Installation is simplified with plug-in euroblock screw terminals.

ACS 8.2

The ACS 8.2 provides matrix audio switching of 8 stereo inputs to 2 stereo plus 2 mono outputs. Any input assigned to output one has fading capabilities. Matrix switching allows any/or all inputs to be assigned to any/or all outputs. The ACS 8.2 may be controlled via front panel switches, contact closures, 5-volt TTL/CMOS logic and/or the multi-drop RS-232 serial port along with 16 GPI's, eight relays, eight open collector outputs, and input expansion port. Installation is simplified with plug-in euroblock screw terminals.

SS 4.2

The SS 4.2 provides matrix audio switching of 4 stereo inputs to 2 stereo plus 2 mono outputs. Matrix switching allows any/or all inputs to be assigned to any/or all outputs. The SS 4.2 may be controlled via front panel switches, contact closures, 5-volt TTL/CMOS logic and/or the multi-drop RS-232 serial port along with 16 GPI's, eight GPO's, and input expansion port. Installation is simplified with plug-in euroblock screw terminals.

SS 8.2

The SS 8.2 provides crosspoint switching/routing with 8 stereo inputs, 2 stereo plus 2 mono outputs. 3 switching modes, I/O trimmers, internal silence sensor, selectable headphone and powered speaker level controls and outputs. LED VU meters, 16 GPI's, eight relays and eight open collector outputs. Multi-drop RS-232 and RS-485 serial ports, plug-in euroblock screw terminals and input expansion port .

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Gretchen Toes the Multicasting Water

Launched in September, Beasley Station Is Hopeful About Eventual Acceptance

by Steve Sullivan

Does something make a noise if there's nobody there to hear it?

A small but growing number of commercial stations — approximately 70, as of December — are confronting that age-old riddle as they debut digital multicast channels to tiny audiences.

The small audiences are predictable, given the general dearth of listening devices. But creative sampling strategies, optimistic projections on consumer acceptance and the potential for capturing disenfranchised listeners have given at least some programmers reasons to be enthusiastic — if patient — while audiences find their way to the technology.

Consider Bob Barnett, program director for Beasley Broadcasting's WKIS(FM) — "KISS Country" — in Miami.

In late September, the 25-year-old heritage country station launched "Gretchen 99.9" on HD-2. The station was inspired by, and named after, award-winning country star Gretchen Wilson.

The station's digital display as seen on an HD receiver.

"We want to give them an incentive to go out and buy a receiver. I think they'll discover that in addition to Gretchen 99.9, there will be plenty of other choices down the road, too."

Barnett says a valuable consideration in launching Gretchen 99.9 was that it gives him an opportunity to lure back listeners that commercial radio in his market had lost.

"In South Florida, if you've got 10 presets on your radio, you don't have 10 stations you can listen to unless you can understand Spanish or you're into hip-hop. This is a real challenge that faces a lot of broadcasters at the moment.

"We spent four to six months in planning this. We asked ourselves, 'What are we going to do to fill a hole in this marketplace?'"

The hole he refers to is for a harder-edged type of country music that has vanished from the dial in South Florida, as in many other markets.

"A lot of middle-aged guys have found country to be a little too soft for them. When Gretchen launched her career a couple of years ago, it made country safe again to rebel, to drink, to party, to be rednecked and proud of what it is. But as a format, we've left a lot of it on the table with no place to play," he said.

"What we've done with Gretchen 99.9, we've gone back and fetched some of these harder titles and put them into the mix."

Barnett said Gretchen 99.9 will showcase music from artists like Hank Williams Jr., Charlie Daniels, the Allman Brothers, Montgomery-Gentry, Lynyrd Skynyrd, Travis Tritt, Toby Keith, and of course the station's namesake.

"If KISS Country, marketing-wise and product-wise, needs to be a 25-54 female-targeted station to succeed, we're giving the alter ego a more male-leaning sound. We've tried to create an environment for both these radio stations to fit their constituencies, knowing full well that there are a lot of guys out there who listen to KISS Country because they've got nowhere else to go.

"But by giving them an alternative, we may be able to hold the whole pool of people here."

Early listening

Initial response seems to bear out Barnett's strategy, he said.

With little fanfare, the station launched in late September. While most of the feedback has come in response to the Internet stream, Barnett said those indicators are positive.

"The only publicity we had was an article in the paper the day before we launched the link on our Web site. When we went live, the thing hadn't been up 30 minutes before we had an e-mail from a guy offering his first critique of the music. We were 30 minutes old and we'd already gotten our first complaint," Barnett said with a laugh.

Bob Barnett

By one measure, it's a success; within a month of launch, Gretchen 99.9 represented 50 percent of time spent listening on the KISS Country site.

"We have not mentioned it on our airwaves yet. Aside from the newspaper article and an e-mail blast to our loyal listener club, it's had no marketing at all," Barnett said.

"Once we know the status of when receivers will be available in the market, we'll start promoting the station on our airwaves. But the fact is that people found it, and they're spending so much time with it I've had to slow down some of the rotations. I didn't anticipate people hanging around as long. Obviously the people who have found the streaming are enjoying it and are staying around."

Promoting the concept

Barnett said for now, he's less concerned about promoting Gretchen 99.9 as a specific channel than promoting the concept of HD Radio.

"There are no commercials in the standard sense. The 'commercial' that's running now is a 24-hour infomercial all about HD. It's about the fact that it's coming, it's a free sample, it's a different format.

"We need to be able, as an industry and a station, to self-promote this thing effectively," he said. "We need Gretchen 99.9 to serve two purposes: One, to have exciting content of its own so that it can generate listenership. And two, it needs to be a promo, a marketing concept that can sell HD receivers in the marketplace so that this thing has a future and doesn't die on the vine like AM stereo or quad."

Steve Sullivan is executive news editor for multimedia at The Baltimore Sun and was a founding principal of the Advanced Interactive Media Group consulting firm. Reach him at sullicom@comcast.net.

The launch coincided with the release of Wilson's second album, and it's no coincidence she's co-headlining the station's KISS Country Chili Cookoff in January.

He Said, She Said: The Blame Game

by Mark Lapidus

Tears were streaming down her face as the promotion director explained her side of the story.

"The client told us to arrive at the back of the mall at 7:30 a.m. for set-up. We waited until 8 and nobody showed up. I left the crew and walked around for another 20 minutes until I found the mall office.

"By the time the mall lady spoke with me it was almost 8:30 a.m., and she insisted that it was too late for us to load-in the set-up. She actually yelled at me about being there late, when in fact her staff was at fault! We were there at 7:30 a.m. just like they asked!"

"What does your sales manager say about this?" I asked.

"She yelled at me too, saying that I should've gone looking for the mall management lady after 10 minutes instead of waiting a half hour."

Negative behavior is destructive. Positive behavior brings more positive behavior and much better results.

"And where was the account executive assigned to the mall account?"

"Oh, he overslept and didn't show up until after 9 a.m.— by that time we were gone. Maybe if he'd been there he could've worked it out. He's the one with the relationship!"

Pointing fingers

I wouldn't torture you with such details if this had been just one episode of fingerpointing.

The station in question suffered from an ailment that is too common: the blame game. The department heads in sales, programming, promotion and engineering rarely took responsibility for their own actions. Worse, they would have tossed each other under the bus at the first opportunity.

This staff didn't work together as a team. An adversarial relationship had become the norm. In their collective view, the only way to win was to state a case loudly — preferably first.

Their general manager knew he had a problem. He was sick of the infighting and drama. He had considered hiring a new staff but rejected the idea.

Financially the station was in good shape. So he did what many smart folks do; he called in an outsider to help — a friend of a friend, a management consultant who specialized in team-building.

The hero of our story interviewed each person privately. Here's what he found.

Without exception, each employee was afraid of being fired. The general manager rarely gave employees positive feedback. He wanted to hear details of disagreements and then would act as judge. He would tell them negative things about each other. He rarely brought them together for anything other than department head meetings. He didn't always ask them for their opinions about matters that affected them directly.

Cooler heads

I can't recall all of the consultant's recommendations, but here's the gist. The general manager was to express these things to each of the department heads privately:

1) None of them was in danger of losing a position. In fact, he was to point out to each of them something positive they had accomplished recently.

2) They were to take personal responsibility for their actions, even if those actions didn't turn out so well. The staff needed to know it was okay to make mistakes as long as they admitted to them and learned from them.

3) Minimize highly charged emotional interaction. If a manager is unable to have a rational conversation spoken in measured tones, he or she should save it for later after a cool-down period.

4) Whenever possible, support each

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Promo Power

by Mark Lapidus

RADIO MONEY

New Laws Include Energy Incentives

Stations Could Enjoy Tax Savings Under Federal Energy and Transporation Laws

by Mark E. Battersby

No, neither the price of gasoline nor its impact on radio stations, their managers and engineers will be reduced under the energy and transportation bills passed last fall. However, both the Energy Tax Incentives Act of 2005 and the Safe, Accountable, Flexible Efficient Transportation Equity Act of 2005 could have a noticeable impact on the tax bills of many radio stations — as well as those of their owners.

It is no secret that these bills were designed to boost conservation efforts, increase domestic energy production and fund improvements to the country's transportation infrastructure. Tucked away in the provisions of these new laws, however, are tax incentives that have been added for the purchase and installation of so-called "solar energy property."

On a similar note, commercial building owners could benefit from provisions in the new law that will reward them for energy-efficient expenditures on their properties. What's more, those broadcasting operations that use vehicles in their business operations, even if only for their sales force, may be able to take advantage of the revised credits available for either the purchase or lease of hybrid and other types of alternative fuel vehicles.

Commercial buildings

According to one congressional report, approximately 9 out of 10 commercial buildings were built over 15 years ago. Not too surprisingly, only a small percentage of those buildings have been updated to meet current energy standards. After all, until now, there was no significant federal tax incentive to encourage the use of energy-efficient property, systems or equipment.

The Energy Act, however, contains a unique new tax deduction for energy-efficient commercial building property. That means an immediate write-off for a portion of the cost of "property" acquired to make the building housing the broadcasting operation more energy-efficient. The balance of those expenditures, exceeding the performance-based caps can be depreciated or written-off as capital assets.

After Dec. 31, 2005 and before Jan. 1, 2008, every radio station may claim a deduction for costs associated with energy-efficient commercial building property. That "energy-efficient commercial building property" involves property, systems or equipment installed as part of interior lighting systems, the heating, cooling, ventilation and hot water systems, or the building's envelope.

After Dec. 31, 2005 and before Jan. 1, 2008, every radio station may claim a deduction for costs associated with energy-efficient commercial building property.

Although the tax law does not define "building envelope," the U.S. Department of Energy defines the term as including "everything that separates the interior of the building from the outdoor environment, including the windows, walls, foundation, basement slab, ceilings, roof systems and insulation."

Because this deduction is performance-based rather than based on the cost of the equipment, systems or property, the Energy Act placed a cap on the amount that may be deducted of $1.80 per square foot of the building. Thus, a broadcasting operation or business that spends $5,000 to acquire a lighting system that qualifies their 2,000 square foot studio building for this unique write-off may claim an immediate tax deduction of $3,600 ($1.80 x 2,000 square feet). The balance, $1,400, is depreciable.

In order to qualify as a tax deduction, rather than as a capital expenditure, the energy-efficient property must be installed as part of a plan intended to reduce the total annual energy and power costs of the building by 50 percent or more.

Actually, the 50 percent reduction is somewhat misleading. The rule requires that costs must be reduced "by 50 percent or more in comparison to a reference building which meets the minimum requirements of Standard 90.1-2001." Standard 90.1-2001 is a publication of the American Society of Heating, Refrigeration and Air Conditioning Engineers and the Illuminating Engineering Society of North America.

Further complicating matters, the definition of energy-efficient commercial building property requires that the broadcaster obtain certification of a plan to reduce the overall energy and power costs in connection with the installation of the property. While the IRS has been tasked with designing and governing this certification process, Congress has mandated a few procedural guidelines — and loopholes.

Under one of those loopholes, a reduced deduction may be available for a building even if the reduced energy-efficient property was not installed as part of a certified plan to reduce overall energy and power costs. The IRS will issue rules containing specific energy-efficient targets and methods of calculating such targets, for each of the separate systems, namely, interior lighting, heating, cooling, ventilation and hot water.

Any radio station that replaces any of these systems in an existing building and meets the designated target will be eligible for a partial deduction. The partial deduction is available for the costs of energy-efficient systems installed up to $0.60 per square foot of the building.

Going solar

The Energy Act increased the business investment credit for solar energy property from its current level of 10 percent to 30 percent. That increased 30 percent credit applies, however, to solar energy property, hybrid solar lighting systems and qualified fuel cell property. Any other energy property, the credit percentage remains at only 10 percent.

The increased tax credit applies to (1) equipment which uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a structure, or to provide solar process heat and (2) equipment which uses solar energy to illuminate the inside of a structure, using fiber-optic distributed sunlight, effective for periods ending before Jan. 1, 2008.

And, do not forget, many states provide energy incentives through personal and corporate income tax credits.

Environmentally friendly

Many radio stations and broadcasting-related businesses use vehicles in their operations or provide them to their sales force, owners or key employees. Very few, however, have taken advantage of a unique tax deduction for fuel-saving vehicles. The new tax rules may change that situation.

The existing tax deduction for so-called "clean fuel" vehicles ends on Dec. 31, 2005, to be replaced by a series of credits for hybrid, lean-burn vehicles, fuel cell vehicles and alternative fuel vehicles under the overall title of the "Alternative Motor Vehicle Credit." Best of all, the new credit is available to both purchasers and lessors of hybrids and lean-burn vehicles.

The owners or managers of many radio stations will be happy to note that the credit

See TAX, page 31 ▶

Blame

▶ Continued from page 29

other. It's important to know when to draw the wagons in a circle against an outside attack. It's okay for department heads to be defensive together when they know a colleague has done the right thing.

5) The details about who's right and who's wrong are not nearly as important as doing the right thing for the organization (or the client).

6) In-person interaction should occur several times daily to prevent miscommunication.

The GM also had to do a better job of soliciting their input about matters that affected their departments.

The management consultant also told the general manager to reward positive behavior of individuals and as a group. The GM was to be on the lookout for things that his direct reports did deserving of praise, and then to do just that — praise them, occasionally when other staffers were present.

When department heads came to complain about peers, he was to ask if they had attempted to work it out before he interceded.

Finally, the general manager was advised to take them out together once in a while just to do something fun as a group — an activity they enjoyed, not just one more obligation.

Negative behavior is destructive. Positive behavior brings more positive behavior and much better results.

The author is president of Lapidus Media. E-mail him at marklapidus@yahoo.com.

Tax

▶ Continued from page 30

is available to lessors and is not only available for passenger cars but, also potentially, for both light and heavy trucks. The credit for heavy trucks expires Dec. 31, 2007, one year earlier than for hybrid cars, light trucks and other lean burn vehicles.

The new, two-part credit consists of (1) a fuel economy credit and (2) conservation credits. The fuel economy credit is computed on the basis of a comparison with 2002 model year fuel economy for city driving. This portion of the credit ranges from $400 for a vehicle with fuel economy that is at least 125 percent better than the base amount and up to $2,400 for one that has fuel economy of at least 250 percent of the base amount.

To illustrate, a 2002 passenger car in the 3,500-pound class had a fuel economy rating of 22.6 miles per gallon. Accordingly, a hybrid vehicle that produces fuel economy of double that amount would be entitled to a $1,600 fuel economy credit under the new law. The conservation credit relates to the lifetime fuel savings of a vehicle and ranges from $250 for a savings of at least 1,200 gallons of gasoline to $1,000 for a savings of at least 3,000 gallons.

These figures, thankfully, will be computed by the IRS for each hybrid vehicle that qualifies.

Alternative-fuel users

For those broadcasters who really want to get involved with environmentally friendly vehicles, a new credit of $30,000 is available for the commercial installation of alternative vehicle refueling property. That property includes storage tanks and dispensing units as well as charging stations for electric cars.

Alternative fuels for purposes of this credit include mixtures that are at least 85 percent ethanol, natural gas, compressed natural gas, liquefied natural gas or petroleum gas or hydrogen, as well as biodiesel/diesel mixtures of at least 20 percent biodiesel.

Congress overwhelmingly passed the Highway Act, extending authorization for trust fund expenditures through fiscal year 2009, and for highway-related taxes through fiscal year 2011. The Highway Act also contains a multitude of provisions aimed at curbing fuel fraud, provides $15 billion of tax-exempt bond financing authority to finance highway projects and rail-truck transfer facilities.

Four years in the making, Congress finally passed major energy legislation designed to shore up the nation's energy infrastructure and provide for future energy needs. The tax portion of that legislation provides $14.5 billion over a 10-year period to boost conservation efforts, increase domestic energy production and expand the use of alternative energy sources.

Beneficiaries of Congress's largesse were primarily oil, gas and renewable energy companies, manufacturers of household appliances and homeowners who make energy efficient improvements to their principal residences. However, many broadcasters will also benefit. Guidelines should be forthcoming from the Internal Revenue Service as many of these tax-saving provisions take effect after Dec. 31, 2005.

Mark Battersby is a tax and financial writer based in the suburban Philadelphia community of Ardmore, Pa. He wrote about tax deductions in the Nov. 9 issue of Radio World.

ABC, Kingsley Air PSAs for Veterans

The Department of Veterans Affairs and ABC Radio Networks this fall said they would work together to enhance the VA's outreach to American veterans through a public service campaign.

ABC Radio Networks and "American Country Countdown with Bob Kingsley" agreed to air a series of PSAs detailing benefits available to veterans. ABC also aired a Veteran's Day salute program by Kingsley in November; and Kingsley, a former broadcaster in the U.S. Air Force with American Forces Radio, was master of ceremonies for the Veterans Day commemoration at Arlington National Cemetery.

As part of the campaign, VA also created The Secretary's Award for Outstanding Service to American Veterans, to be presented in early 2006.

VA said the ABC agreement enables it to work with private industry, in addition to other outreach activities, to inform 25 million veterans of entitlements they have earned as mandated by Congress.

Shown from left are Kingsley; Secretary of Veterans Affairs R. James Nicholson; Kingsley's wife Nan; and Senior Vice President of Programming of ABC Radio Networks John McConnell.

Products & Services SHOWCASE

After 38 Years, WSBS Vet Retires

The Station He Leaves Was Also His First Paying Radio Gig After Broadcasting School

by Ken R.

He's a down-to-earth guy who barbecues, studies the weather and enjoys his neighbors as well as the scenery in the Berkshires area of western Massachussetts.

None of that has changed.

The only difference is that as Oct. 1, Nick Diller no longer sat before the WSBS(AM) microphone each morning as he had done for 38 years.

"I'll miss being on the radio," said Diller, "but I won't miss the current climate."

Diller, 61, was not referring to those infamous New England winters, which regularly dump several feet of snow on the locals. He's talking about the post-deregulation atmosphere that has settled over the industry.

A change in ownership helped prompt his decision; he retired in the wake of the sale of WSBS a couple of years ago by Berkshire Broadcasting to Vox Communications. While Diller appreciated equipment upgrades the new owners have made, he said he felt more comfortable with the more relaxed management style of the previous owners.

The station he retired from had been his first paying radio gig, directly out of broadcasting school.

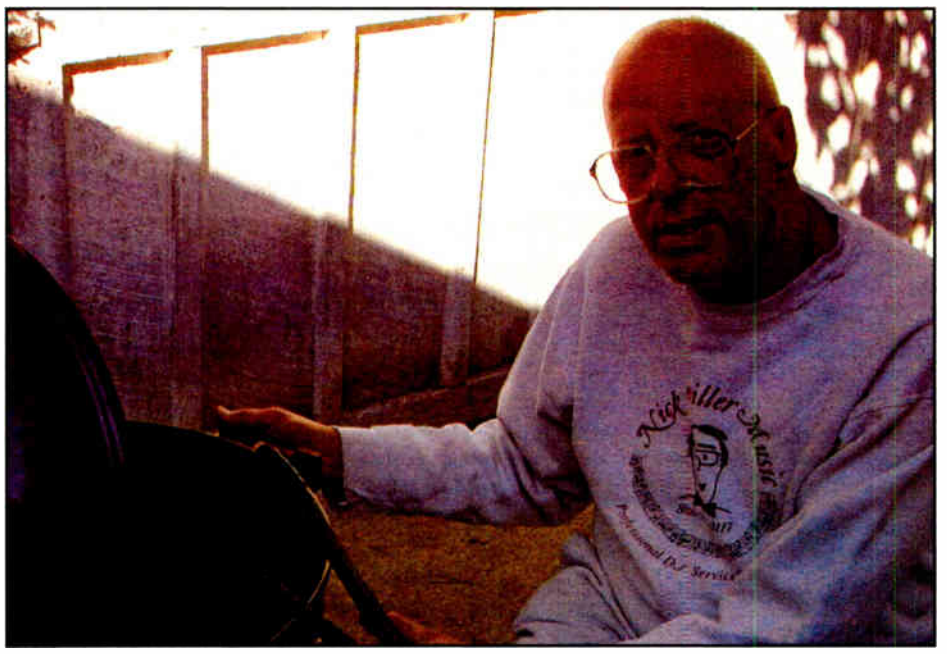
Thus one of radio's long-time cowboys decided to ride off into the sunset.

The guy next door

Morning radio in many cities has been criticized for its raunch — someone coaxing a model to remove her bikini, rude personalities playing nasty pranks or commentators committing brutal verbal assaults on political and entertainment figures. That was never Diller's style.

"I was the guy next door on the radio," he said. "I like a nice, clean program that's informative and focused on our neighbors. People like to hear about themselves on the air; and local radio really sells."

Diller became interested in radio after touring WBZ(AM) in Boston in the early 1960s. His favorite air personalities growing up included Carl DeSuze at 'BZ as well as Dan Ingram and "Cousin" Bruce Morrow at WABC(AM) in New York.



Diller in 1967

In an era in which two years on the air represents longevity at some operations, Diller was an exception. He enjoyed small-market radio and says he never desired to play in the major leagues.

The station markets itself as the primary source of news and information for local residents and visitors, serving over 200,000 people in a tristate area. But WSBS, located in Great Barrington, also in the shadow of a lot of bigger stations in Boston and New York that boom into the Berkshires, so he had to make his morning show relevant to the residents.

"Weather is a big deal here," he said. "We had a tornado in 1973 and another one in 1995, which we covered top to bottom. We competed with all the TV stations."

Snowstorms, though, are a more common threat than tornadoes, and Diller usually was the prime source of information for the Berkshires.

"I had to walk to work in 1969 because I couldn't get my car out of the driveway," he said. "We had another huge one in October, 1987. Local weather is a hobby of mine and I'm an official weather service observer."

The Berkshire Eagle newspaper wrote shortly before his retirement: "Diller is a man of no pretense, fluffy preambles or beating about the bush. On and off the air at radio station WSBS, Diller gets straight to the point — whether it's the weather, the morning's music, the voice of commercials for a string of local businesses or a happy birthday message to celebrants of all ages."

Nick Diller

Diller's philosophy is not revolutionary, but it is one he feels has served him well.

"Our station was always 'full service,' with the focus on the community; and my special interest was sports," said Diller, who is married with two children. "People want to hear how their kids are doing, so we covered Little League and other local activities."

In 1969, he participated in a charity boxing match with Bob Foster, the light heavyweight champion of the world. "I took my lumps on that one," he said. "But it was for a good cause."

The Eagle also published a letter from listeners Paul and Carolyn Ivory. They described Diller as "a morning staple for South Berkshire County for over three decades, becoming no less than an unofficial member of the thousands of families who tuned in for his morning show," and they remembered listening to him on the morning of the Sept. 11 attacks.

They complimented him on his laid-back manner, dry humor and wry commentary. In their words, he was "the consummate morning DJ for a community-oriented radio station."

Ratings Firm Says Talk Radio Has a 'Variety Issue'

Audience measurement firm Bridge Ratings says interesting things have been happening lately in talk radio.

"Beginning in January 2005 our composite group of talk radio markets and stations began showing more pronounced instability in an area of measurement we call the 'Passion Index,' which measures a station's favoriteness shares among its weekly cume audience," the company stated in late 2005.

The stations studied are KFI(AM) Los Angeles, KOGO(AM) San Diego, KIRO(AM) Seattle, WJR(AM) Detroit, WBZ(AM) Boston, WTOP(AM-FM) Washington, KGO(AM) San Francisco, KOA(AM) Denver and WCCO(AM) and KSTP(AM) Minneapolis-St. Paul. The study looked at adults 25–54.

"We continue to see attrition among talk radio listeners as a whole," Bridge Ratings stated. "While there are talk stations in our composite group who continue to buck the trend for very specific reasons, the talk stations that comprise the format's favoriteness shares clearly are weakening for very specific reasons."

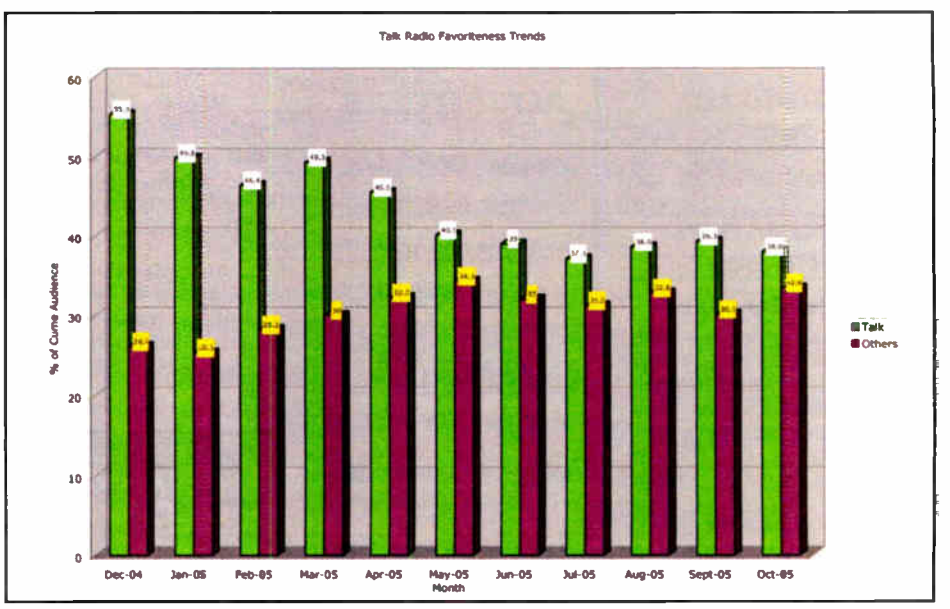
Trends in the chart, the company said, indicate that "favoriteness among talk radio listeners has been declining over the last nine months while similar scores are increasing among talk radio listeners' other cume stations.

"This study reflects that at some point, talk radio primary listeners who have been disappointed too many times by the content or host performance will reduce their tune-in occasions and time spent with the station or will fall out of the primary listener category simply because they no longer consider the station their favorite."

Bridge said it looked at talk radio "cumers," who spend at least five minutes per week listening to a talk radio station, as well as "primaries," who said their favorite station is a talk station.

Talk primary listeners were asked, "Are you listening to your favorite talk station more, the same or less than you were six months ago?" Only 9 percent said they were listening more, while 29 percent were listening less. The research firm found this notable, saying that regardless of format there is usually little movement on either end of the "more or less" spectrum; any measure over 15 percent indicates a significant change of listenership, it said.

Nearly a third of talk listeners with a favorite talk station were spending less time with their favorite station than they were six months earlier.



The company asked, "Of the following, select the one reason that you are spending less time listening to your favorite talk radio station." The top reasons: 34 percent cited the variety of topics, saying they were tired of the same discussions; 27 percent said they were not as interested in topics as they used to be; 15 percent said they were tired of the on-air talk hosts; and 14 percent said other stations offered more interesting content. Interest in other media was cited by only 6 percent.

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GUEST COMMENTARY

Radio Is a Sound Salvation

Book Looks at Radio's Underused Ability to Educate, Organize People of Poorest Nations

by William Smith

The author is the executive vice president for the Academy for Educational Development and co-author with Stephen Sposato of the book "Radio: A Post Nine-Eleven Strategy for Reaching the World's Poor," published by University Press of America.

Education sounds boring to Americans, but it is not boring to tens of millions of kids around the world who cannot go to school, and whose only route out of poverty is learning to read, write and do basic math, lessons which radio has taught successfully in thousands of understaffed schools and at home.

Radio is not boring to young men and women who have no jobs and no hope, and to whom the West seems like both a dream and a nightmare. The war in Iraq, continuing natural disasters and the fear of a flu pandemic make imperative the need to communicate to diverse local cultures honestly, persuasively and with sensitivity. Information about these problems in a credible and understandable voice can make a difference. Radio is the only voice that truly spans the distance between rural villages and commuters' cars.

"Radio: A Post Nine-Eleven Strategy for Reaching the World's Poor" underscores how radio is more powerful than ever in promoting positive social change around the world. Stephen Sposato and I accuse radio programming of falling prey to Western advertising and marketing models, which stress entertainment over education.

The tie that binds

Of all the world's media, radio is still the only one that speaks consistently, night and day, from city to remote village. "Radio" is a labor of love and respect for the medium, particularly radio in developing nations of villages and crowded cities; and of wealth, talent, poverty and educational inequality — nations with emerging democracies and terrible injustices. This is a world where radio and its ability to reach, teach, advocate and inform are vital to future human development.

The book is a series of stories about radio success in Africa, India and Latin America; and earlier, in post WWII Great Britain. It also is the story of the remarkable changes in U.S. government broadcasting, such as the VOA, Radio Sawa and other USG radio. Use has expanded dramatically since 9/11.

The stories exemplify radio's power — today and yesterday — to organize people to make a difference in the world. Sposato and I have worked in developing countries for 30 years, and helped to foster the use of radio in developing countries from the early 1970s to present day.

My work at the Academy for Educational Development gave me a unique opportunity to see radio at work in Asia, throughout the Middle East and Africa and especially in Latin America. In the 1970s, AED was constructing radio stations in Guatemala, experimenting with interactive radio in the classroom in Kenya, using radio to train thousands of women to treat infant diarrhea and developing radio novellas that often became the most trusted voice in villages that had little or no other contact with the world.

Sposato's career as a development economist around the world has enabled him to situate radio's historical experience with its relationship to the poor and their struggle against poverty.

Stephen Sposato and I accuse radio programming of falling prey to Western advertising and marketing models, which stress entertainment over education.

The actual radio production work has always been done by local radio professionals. They provided training, suggested new approaches, funded opportunities to learn new things and evaluated programs to ensure their efficacy in saving lives and changing public policy.

The creative voice and control room genius came from a small group of immensely talented and committed radio journalists, novelists and educators from countries like Kenya, Honduras, Indonesia, The Gambia and Ecuador.

The book includes radio scripts in most chapters; they are true works of art.

But many of the best programs — live broadcasts — went unrecorded. Some, recorded on audiotapes, were lost long ago. Others mildewed, ruined by the causal passage of time.

Radio is alive and well. It is in need of creative radio producers to become interested in developing nations. Some of its most important applications have been forgotten, and some of its newest applications are not well known.

Despite the rapid adoption of new technologies, radio retains its unique potential to advocate, train, instruct, organize and entertain in some of the most desperate and dangerous places on the earth.

There are millions of radio receivers scattered throughout the slums of great cities and the mountains of vast rural areas. The story of radio and human development is still being written. Our hope is that this book celebrates past pioneers and jumpstarts a new era of experimentation and growth.

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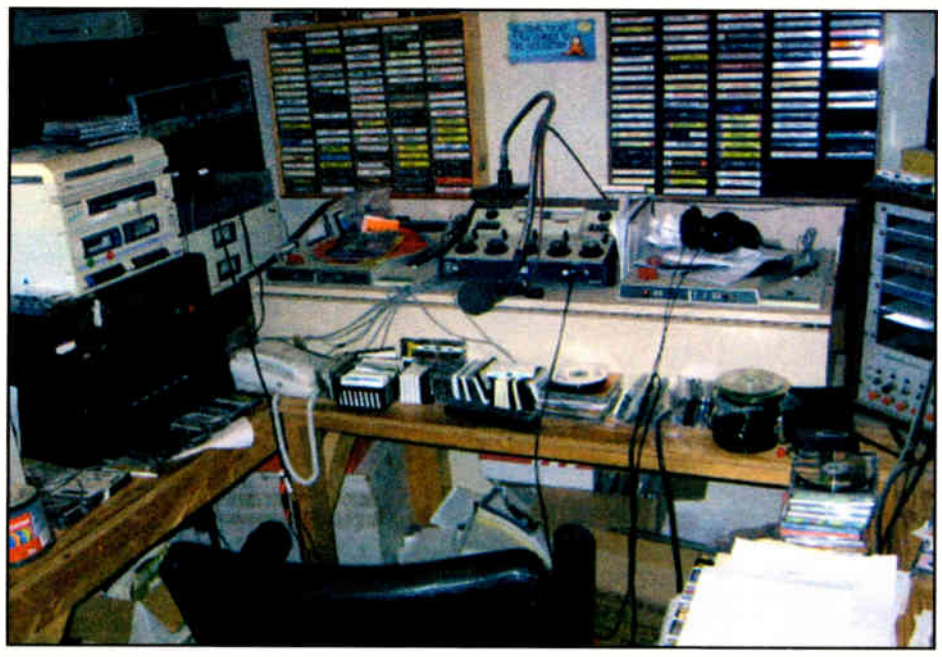
GUEST COMMENTARY

Recapturing the 'Country Giant'

by Alan McCall

I grew up in Tallahassee, Fla., in a home where my parents listened to the radio regularly — mostly country music on WMEN(AM) 1330 and Paul Harvey every day at 12:30 over on top 40 station WTAL(AM) 1450. However, it wasn't until 1969, when I was 11, that I truly discovered radio for myself during a summer trip to the beach.



WJJD is a Part 15 and Internet station owned and operated by Alan McCall/Delta Star Radio of Florida Inc.

Hooked on a format

My grandfather's house was located on Mexico Beach, between Port St. Joe and Panama City, Fla. That summer I happened to take along a small transistor radio and tuned into "Big Joe Radio," officially WJOE(AM) on 1080, operating with 1,000 watts of country music. WJOE programmed both new and classic country, along with a daily dose of community news, the twice-daily "Swap Shop," weather forecasts and tide information and a few morning preachers.

Somehow, during that week, I became hooked — not only to WJOE, but also the "country giant" breed of station in general.

Over the next few years, I discovered lots of these stations, both in our area and later in other parts of the country. My favorite was WLOR(AM) 730, located 6/10 of a mile from the city of Thomasville, Ga., in an old farmhouse. WLOR had gospel music and preaching shows in the morning, agriculture reports at noon, and their version of "Swap Shop" at 1 p.m.

Like WJOE, the Thomasville station had a lot of the old Pepper-Tanner jingles that managed to sing out "country giant" along with the call letters and frequency. I heard similar sounding packages on WFIV(AM) 1080 in Kissimmee, Fla., WGKR(AM) 1310 in Perry, Fla., and later WJRZ(FM) in New Jersey and KFOX(FM) in California.

A couple of years ago, I wrote a short letter to the editor at Radio World inquiring about these jingles, and I did hear from several people including Jonathan Wolfert of Jams Creative Productions, who sent me a tape of the package from WWOL(FM) in Buffalo, N.Y.; a gentleman named Dennis Harp from Texas Tech University, who sent a mixed bag of them from several stations; and a lot of people who were basically classic country music fans.

Most of these stations are gone now. WJOE and WGKR have been silent for years. WLOR is now WSTT(AM) with gospel music, WMEN is now Christian/Catholic talk WCVC(AM), and the others are also running with different calls and formats.

After retiring from WCVC last year due to its impending sale and format change, I prepared to launch (actually a relaunch, of sorts) my tribute to these great stations. I chose WJJD as my station of choice, due to its high profile and the fact that many of the stations about which I wrote patterned their programming after WJJD's.

My tribute page, located at *www.expage.com/wjjd*, offers a history of WJJD and a short list of a few of its best known announcers, such as Art Nelson, Roy Stingley, Ted Clark and Randy Blake of the Suppertime Frolic.

In September, I relaunched the webcast of WJJD Revisited, which also can be accessed from the tribute site. A colleague, Erwin O'Connor, who worked at Chattanooga's WDOD(AM-FM) in its earlier days, donated a classic country music collection dating to the 1950s. I plan to do a live broadcast several days a week, playing both classic country and some tunes of today, under the "country giant" moniker, complete with some original IDs and jingles.

Unlike many Internet stations, WJJD Revisited's studio includes turntables, a dual cassette deck, CD players, cart machines and a reel-to-reel.

For you radio buffs who miss this style of programming, I think you will discover the broadcasts to be quite retro-sounding and yes, quite different and laid-back compared to many of today's stations. I hope you enjoy it, and I want to say thank you to the fine folks who have helped bring this project to reality.

The Webcast is at *www.live365.com/stations/alanmccall.*

Alan McCall has worked for WTAL(AM), FSU Media Relations and WCVC(AM), first as an announcer, and later becoming operations manager and station manager. E-mail him at alanmccal@hotmail.com.

A Good First Step

Not so long ago on this page we noted a regulatory mess. A rule change by the FCC requiring Prior Coordination Notices when filing for a 950 MHz band STL license had caused a flurry of extra paperwork. Consultants responsible for coordinating new STL auxiliary licenses were forced to send out notices to just about everyone in the vicinity.

At the heart of the problem was the lack of a realistic technical standard for the 950 MHz band. In the absence of such a standard it was impossible to know for sure if a new STL would create interference or not.

The Society of Broadcast Engineers has made a good proposal as a first step to bringing this situation under control. In a Petition for Rulemaking the society has proposed the adoption of minimum antenna standards for use in the 950 MHz band. These standards, identical to those currently in use in the adjacent spectrum, would ensure that 950 MHz links would only use the minimum beam width necessary for reliable communications.

The need for minimum antenna standards is important for two reasons. First, it allows engineers to calculate the potential for interference with better confidence. Second, it helps to ensure that the 950 MHz spectrum is used efficiently by broadcasters.

The petition notes that steady growth over the last 20 years has resulted in more than 12,000 STL licenses currently authorized. No new spectrum is likely to become available as there is not enough electromagnetic spectrum to meet demands from other businesses and government agencies. How will this STL growth rate be met if the limited available spectrum continues to be used in an inefficient manner? Those planning additional HD Radio services, such as multicasting, are counting on the availability of new STLs.

Yes, the prospect of additional government regulation, even in a detail as small as this, is not likely to cause broadcasters to stand up and cheer. But in matters of limited resources, regulation is the only proven method of avoiding potentially damaging interference that renders spectrum unusable.

Furthermore, the proposal includes protection for grandfathered installations, including a 10-year period to achieve compliance and the possibility of an exception where zoning laws preclude larger antennas. On balance, the cost is outweighed by the long-term benefit.

The SBE has taken the lead on this important issue and we support its efforts.

— RW

Radio World
Vol. 30, No. 1 January 4, 2006
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NEXT ISSUE OF RADIO WORLD JANUARY 18, 2006
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Radio World (ISSN: 0274-8541) is published bi-weekly with additional issues in February, April, June, August, October and December by IMAS Publishing (USA), Inc., P.O. Box 1214, Falls Church, VA 22041. Phone: (703) 998-7600, Fax: (703) 998-2966. Periodicals postage rates are paid at Falls Church, VA 22046 and additional mailing offices. POSTMASTER: Send address changes to Radio World, P.O. Box 1214, Falls Church, VA 22041. REPRINTS: For reprints call or write Emmily Wilson, P.O. Box 1214, Falls Church, VA 22041; (703) 998-7600; Fax: (703) 998-2966.

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The NEW AUDIOARTS D-75 DIGITAL RADIO CONSOLE

A CLEAN, CLEAR on-air design: straightforward layout, easy tabletop installation, and best of all — *completely modular.*

A TRUE plug-and-play radio board from the Wheatstone digital design team!

AUDIOARTS ENGINEERING

sales@wheatstone.com / tel 252-638-7000 / www.audioarts.net

This Little Unit

Can Do BIG Things!

Our new AP-3 is the perfect HD Processor.

SETTING UP FOR HD RADIO?

The Vorsis AP-3 digital processor is the ideal tool to shape your sound exactly the way you want it —cleanly and efficiently.

Built around a multi-band compressor with complementary AGC, the AP-3 replaces a whole *rack* of dedicated units. VORSIS pre-conditions your signal (HPF, LPF, notch filter, de-esser, expander), then let's you apply 3-band AGC/compression *and* 4-band parametric EQ (signal chain reversible) before going through a final stage zero-overshoot peak limiter.

With real-time spectrum density readouts and full metering, our included PC graphic interface software makes operation of the AP-3 direct and easy, offering complete control of all audio parameters, presets, monitor functions, system settings and security—all through a single RJ-45 ethernet connection that lets you control one or many AP-3 units.

TAILOR THAT SOUND

VORSIS™

tel 252-638-7000 / sales@vorsis.com / www.vorsis.com