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Take the Initiative

Tips for radio from Sue Johenning, who places millions of dollars in ads.

Page 38

Multi-Cam Video and More

WhiteBlox hopes for bigger things for iSEEradio.

Page 33



Radio World

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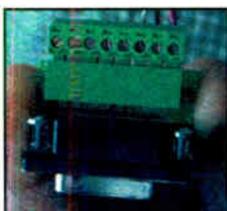
August 15, 2007

INSIDE

NEWS & ENGINEERING

▼ Opinions run hot on the proposed satellite merger.

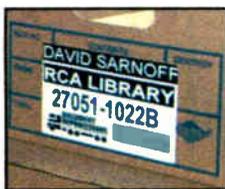
Page 3



▼ A nifty way to handle DB connectors.

Page 14

▼ With the help of donations, historians dry off a collection of valuable RCA papers.



Page 26

▼ Between the wars, WCAU launched shortwave operation W3XAU.

Page 28

GM JOURNAL

▼ Aging listeners and hosts may presage the end of German-language radio in the U.S.

Page 35



▼ Marv Nyren and Emmis Chicago do a 360, seeking new approaches to marketing.

Page 41

OPINION

How you can help a broadcaster in need.

Page 45

'If There Are Call Letters, There Is an Opinion'

Radio Engineers Find Little Common Ground in AM HD-R Nighttime Interference Debate

by Alan Carter

"Some say that the apocalypse is about to begin," said Tom Ray, vice president and corporate director of engineering for Buckley Broadcasting.

"I'm the one who will be starting it."

That would be when Ray, an outspoken advocate of AM HD Radio who is also an RW contributor, keeps the HD-R signal of the powerful 50 kW WOR 710HD in New York on the air at night and skywave effect takes his embedded digital signal hundreds of miles outside the designated service area along with the analog stream.

This, many observers believe, will undoubtedly create increased interference with first-adjacent and second-adjacent analog stations by the digital channels along the way.

Nighttime AM HD-R

Until the FCC approved so-called "final" rules for in-band, on-channel digital radio broadcasting in the United States, an AM station broadcasting a digital signal was not allowed to keep it on at night for that very reason: potential interference issues.

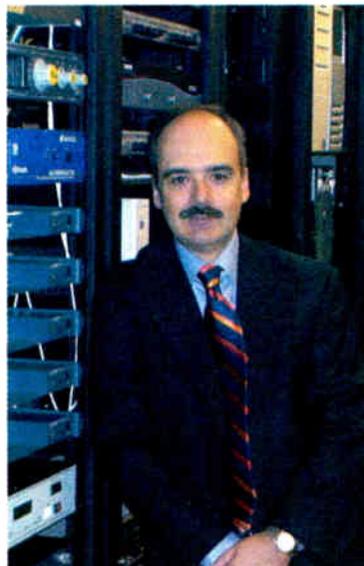
But in approving the rules in March and allowing nighttime AM HD-R to take effect soon, the commission made it clear

See AM IBOC, page 24 ▶

Some AMs Find Success in Changing Times

Four Broadcast Outlets Demonstrate That AM Radio Can Still Be a Path to Profit

by Randy J. Stine



Joel McCrea of Clear Channel in Des Moines. 'If your plan is not working, get a new plan.'

College basketball coaching legend John Wooden said he defined success as "the peace of mind obtained only in the self-satisfaction of knowing that you made the effort to become the best of which you're capable."

AM broadcasters in this country are doing the best they can to raise ratings and increase revenue as they battle for listeners who have ever-increasing entertainment options. Some AM stations, in large and small markets alike, are struggling. However, many also appear to be thriving. Here are four.

WGN(AM) in Chicago is a success no matter how you See AM SUCCESS, page 10 ▶

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◆ NEWSWATCH ◆

PPM Houston Data Shows Heavy Ethnic Listening

NEW YORK Arbitron debuts its Portable People Meter ratings service in New York in October, and says it has many of the panelists who will wear the meter in that market selected. It also is recruiting in Los Angeles and Chicago; those markets will get PPM ratings next year.

In the meantime, the company released the first "currency" ratings from the Houston PPM in July.

Houston is the second market to measure radio audience electronically, after Philadelphia. The June PPM survey ratings cover listening from May 31 through June 27.

Arbitron said PPM data in Houston show that radio delivers consistently high levels of weekly and daily cume audiences.

Also, Hispanics and African-Americans spend more time listening to radio than other consumer segments of the Houston radio metro, it said. The data shows that over the course of a week, 95.5 percent of African Americans, ages 6+, listen to radio, as do 95.8 percent of Hispanics.

Children as young as 6 are eligible to participate in PPM-based ratings, which

means age 6-11 is the newest measured radio demographic.

During April in Houston, 476,500 children in that age range were exposed to radio over the course of a week, or 95.8 percent of children 6-11 in the metro.

Arbitron: Radio Delivers Working Listeners

NEW YORK Radio sales people can use a new phrase to describe its power: the medium that delivers working people.

Arbitron said the PPM ratings in Houston show that while more than 56 percent of that adult population is employed full time, more than 69 percent of the radio audience works full time.

Radio's "working persons" advantage also applies for the Hispanic and African-American listener, it said.

Indecency Redux

WASHINGTON A bill that would direct the FCC to fine broadcasters that air a fleeting or single indecent utterance was on its way to the Senate floor for a vote in July. FCC Chairman Kevin Martin praised the bill.

The Senate Commerce Committee passed the measure, introduced by Jay Rockefeller, D-W.Va. and Mark Pryor, D-Ark.

Commerce Chairman Daniel Inouye, D-Hawaii, and ranking member Ted Stevens, R-Alaska, co-sponsored the measure, which would require the FCC to maintain a policy that the broadcast of a single word or image may be considered indecent.

Observers said the measure had a good chance of passing the House as well and being signed by the president. In June, a federal appeals court told the commission it had not justified this portion of its indecency rules.

NAB Presses for Information

WASHINGTON NAB wants the FCC to release information related to what it says are satellite radio's violations of

See NEWSWATCH, page 6 ▶



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Index

NEWS

If There Are Call Letters, There Is an Opinion'	1
Some AMs Find Success in Changing Times	1
NewsWatch	2
Pros, Cons of Satellite Merger Debated	3
From the Editor	4
Stations, Dealerships Use HD Radios to Sell Cars	8

FEATURES

Workbench: Simplify Satellite Audio, Control Wiring	14
Power Cords ... With a Guitar	16
Who's Buying What	18
Where Are the Oldest Tower Sites?	20
Sarnoff Library Recovers From Flooding	26
WCAU Used Shortwave in Philadelphia	28
Anatomy of a Split Decision on IBOC	30

GM JOURNAL

ISERadio Seeks to Engage Listeners	33
German Radio May Say Auf Wiedersehen	35
How Marketing Can Work for Your Station	36
Johanning: Radio Should Be Flexible	38
Doing the 360 at Chicago's Q101	41

OPINION

We're Here to Help	45
Reader's Forum	46
Unbundle, Rebundle	46

Pros, Cons of Satellite Merger Debated

WASHINGTON Those who favor a combined satellite radio company say such an entity will provide customers more programming choice and a la carte pricing options. Opponents say a merger would create a monopoly with fewer program options and higher prices.

More than 5,000 comments were filed to the FCC about the proposed satellite radio merger by the July 9 deadline. Reply comments were due July 24.

XM and Sirius said more than 3,500 individuals as well as 20 organizations and businesses filed comments in support of the union.

Here is a sampling of merger comments filed to MB Docket 07-57. The commission has also opened a separate proceeding asking for comment on whether it should change its rule preventing the two satcasters from combining. We'll take a look at those remarks in a subsequent issue.

*Former Attorney General
Edwin Meese III & James Gattuso
The Heritage Foundation
Washington:*

We believe that the proposed merger is consistent with the public interest, and the commission should grant the applications. ...

there. Certainly, there are differences — terrestrial radio has more local programming and is free, while satellite radio is more specialized and is subscription-based. But these differences do not mean that the two industry segments operate in separate markets. Instead, they are simply

continued competition.

Second, it masks the reality that subscription price is but one part of a larger value equation. If price is held constant, but a subscriber receives less, then a price freeze does not protect the subscriber.

Consumers will lose commercial-free

There is a bait-and-switch element to this transaction.

— Consumer Coalition for Competition in Satellite Radio

alternatives within the market from which consumers may choose. ...

Critics ... argue that competition is uneven because satellite radio is subscription-based and — unlike broadcasters whose ad-revenue depends upon ratings — doesn't lose money unless a customer drops his or her subscription. But does satellite radio really have a lock on consumers?

A radio subscription isn't like an electric bill; few consumers see it as a "must have." If radio broadcasters provide enough of what they want, subscribers will leave.

satellite radio with this merger, because it will eliminate competition. The merger will result in a rapid transition to advertising.

Sirius CEO Mel Karmazin has promised this to Wall Street. Moreover, subscribers will lose some of the channels they may value the most. There simply is no way to cross-sell the content of each system on the other without reducing the total number of channels on each. So, even if a price freeze appeared to have value, there is a bait-and-switch element to this transaction: consumers will get fewer overall channels, with commercials. ...



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Consumers today can choose among terrestrial radio, satellite radio, and — increasingly — Internet-based radio programming. Excluding Internet programming, XM and Sirius account for only 3.4 percent of total radio listenership. Moreover, other forms of audio entertainment compete for American ears. In fact, iPods and other MP3 devices, which have grown phenomenally in recent years, may be the biggest challenge to radio of any kind.

Critics of the XM-Sirius merger, however, have argued that this competition

*Consumer Coalition for Competition
in Satellite Radio
Washington:*

The Consumer Coalition for Competition in Satellite Radio, representing Sirius and XM subscribers, opposes the merger. ...

There are no meaningful merger-related gains for consumers in this merger. When subscribers were asked whether they would be willing to pay more to

(I)t is important for the commission to consider the adverse impact on consumers both within and outside of the larger Arbitron markets, especially in the areas where there is service by few, if any, local radio stations. C3SR provides the commission with an analysis of geographic areas that have few, if any, local radio signals. The analysis reveals the extent of potential harm resulting from this merger by identifying rural, unserved and underserved geographic areas where satellite radio service may be the only available radio service, or where it is critically important because there are few, if any, free local radio stations.

*Chris McCarthy
General Manager
Cherry Creek Radio
Billings, Mont.:*

I am writing to voice my opposition to the proposed merger of XM Radio and Sirius Radio.

Similar to the FCC's ruling on Echostar and Dish Network, the merger of these two companies would create one provider with a monopoly on the service.

See MERGER, page 5 ▶

doesn't count. Satellite radio, it is argued, is so different from these other alternatives that it is really a separate market all to itself.

But is the satellite radio business really that distinct? To consumers, after all, radio is radio. They don't care how it gets

receive the programming currently offered by both XM and Sirius, nearly three-quarters of the respondents said "no." Moreover, a price freeze is an illusory pseudo-benefit. First, it requires a counter intuitive assumption — subscription prices would rise, not fall, with con-

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A Key Radio Dealer Changes Hands

Over two days this summer, what had been the Harris Broadcast vendor business arrived in Pineville, N.C., from Ohio as four big truckloads pulled up, a few hours apart, at the SCMS loading dock.

I was pleased to learn that SCMS has acquired the "box house" business of Harris. Typically I'd be leery of acquisitions that could result in fewer choices for buyers, because a vibrant equipment economy is vital to your job and mine. But I'd heard rumors for some time that Harris was looking to sell off its vendor operation, the descendant of the old Allied Broadcast, and the company clearly has been moving in other directions.

This deal now moves the resale business, including the Harris phone center, into the hands of a company more suited to the dealer business by recent temperament and corporate philosophy. (The move has little to no bearing on Harris manufactured products.)

Market maturity

Bob Cauthen, president and GM of SCMS, has been in this business for 31 years. He knows that broadcast radio equipment sales is a mature market so he has chosen to grow his company in part by acquiring the "huge market share" that Harris enjoyed.

And despite the market maturity's, he told me this is a good time to be a dealer thanks to the practices of radio groups — "every time they do something, they have to build new studios, microwaves, RF equipment" — and because new stations continue to be added. "The FCC has a window coming up for a ton of educational stations; they'll all be new business. There will also always be replacement business."

While some suppliers pin growth hopes on HD Radio, Cauthen feels the peak of the digital rollout for major radio groups has already passed. "We'll still see continued growth for IBOC in the next 10 years, but nothing like we did in 2005."

But the vendor business in general — which he defines as everything in the air chain except the transmitter — is "very, very healthy." SCMS enjoyed record sales

last year, he said, atop 10 years of growth.

Another factor makes things easier on dealers than in the past. "The groups are easier to get payment from than the single mom and pops of a decade ago; and the independent stations that are left after consolidation are strong," Cauthen said. "We don't have as near the payment problems that we did a decade ago."

Not that the vendor market isn't competitive. Three to five dealers or more might bid on a given big project. SCMS carries gear from approximately 500 companies; a dealer must constantly "shop smart," taking advantage of manufacturer specials, keeping inventory in stock but

or "sales of Harris-branded products, RF and transmission solutions, console and radio studio systems."

Rep ties

I once wrote a column here headlined "Hail to the Box House." Such companies remain a vital link in the industry supply chain. For radio veterans, this deal recalls how the broadcast sales channel changed when Roy Ridge created Allied.

"When I started in 1976 there weren't really dealers," Cauthen recalls. "Everyone was a manufacturer's rep. You had Ray McMartin, who had a nationwide set of representatives. Harris had their own

This deal moves the Harris resale operation into the hands of a company more suited to the dealer business by recent temperament and corporate philosophy.

not backed up. Pressure on margins will always be tighter for companies in this type of business than for manufacturers.

But Harris didn't sell because it's a bad business to be in, Cauthen said. "I think their margins were very respectable, as good as they were in the Allied days; but there was a change in philosophy there. Manufacturing margins were greater, and software margins were many times greater. It was a corporate decision to be more beholden to their stockholders."

Generally, he said, Harris customers have been receptive to the change. "We're trying to make it very transparent," he said. SCMS acquired Harris' dealer products inventory, phone numbers and referrals from their Web site. The relevant Harris phone numbers are forwarded to SCMS staff, including two employees who came along with the sale. The Harris 800 number now has a prompt that offers callers a choice of "sales of audio equipment and non-Harris branded products"

sales people; the same with Continental and RCA. They were all independent companies; if they sold something they didn't manufacture, it was private-labeled. Belar private-labeled a lot.

"Roy Ridge changed the industry," Cauthen continued. "He started buying and reselling, telemarketing. The industry changed from exclusive manufacturer's reps to a dealer network. That was a major change and it never changed back."

"We continued to have a few exclusive lines, but we also became a dealer in order to supply packages. At the same time the manufacturers quit this private labeling stuff." The industry became more diverse and package-oriented; Roy Ridge was the stimulus.

What now for Harris? Chris Pannell, the company's new director of North American sales for radio, RF and studio systems, tells me Harris hasn't totally exited the vendor business — it will still offer some "bread and butter" transmission items from brands like ERI,

From the Editor



Paul J. McLane

Dielectric and Moseley — but, he said, "We found as we looked across the portfolio of something like 25,000 items that there are companies out there that are far better at handling high-volume, small-transaction sales."

Next issue I'll talk with Pannell about Harris' evolving strategy including its new channel partner structure.

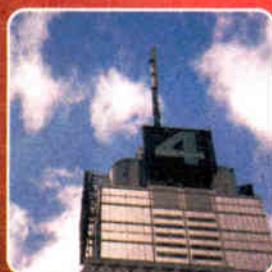
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Merger

► Continued from page 3

There would be no competition and it would be extremely difficult, and cost-prohibitive, for any new competition to enter in the business.

Although there are several other reason[s] why this merger should not be allowed I believe that the fact that it will create a monopoly is all the argument that is needed.

*Slacker Inc.
San Diego:*

Slacker takes no position regarding whether the commission should approve the merger ... Slacker is concerned, however, that this merger may have the effect of limiting the ability of consumers to have a choice of audio services in their automobiles. ...

Slacker is a new personal audio service that will soon be available nationwide. ... Slacker customers get content for their Slacker device via WiFi, Internet, and satellite. ... Slacker does not consider itself to offer a substitutable service for XM or Sirius satellite radio services, and does not intend to price its services and equipment based on XM or Sirius prices.

XM and Sirius have sought close relationships with car manufacturers. ... General Motors has always had an ownership interest in XM. [GM] holds a seat on the XM Board of Directors, as does Honda Motors. Sirius also has strong relationships with, among others, DaimlerChrysler and Ford since the 1990s. ...

Although XM and Sirius have exclusive relationships with some car manufacturers, car dealers presently can often install competitors' satellite radios. ...

But the proposed XM-Sirius merger could give the merged company enough economic leverage to obtain or expand exclusive arrangements with car manufacturers. And to the extent car manufacturers also have economic interests in the single satellite radio provider, they will have an incentive to make it difficult or impossible for alternative technologies to be installed in cars. ...

Slacker recommends that if the commission decides to approve the application, it impose two conditions. ... First,

the merged company should not be permitted to continue or enter into any exclusive arrangement with any car manufacturer; to the extent XM or Sirius has any current contracts that provide for exclusivity, those exclusivity provisions should be terminated before they may close the merger transaction. ...

Second, the commission should not permit car manufacturers to be represented on the board of directors of the newly formed company. These two reasonable measures would help assure that the merger will not interfere with consumers' ability to obtain new wireless audio services in their vehicles.

*Brian Rundle
Gainesville, Fla.:*

I was an employee of GM for 4 years and my current vehicle had XM Satellite radio. I have always enjoyed the commercial-free music channels and different programming they offer.

It was then announced that Howard Stern could only be heard on Sirius Satellite, and being the Stern fan that I am, I had to have it. However, that now leaves me paying for two different services that virtually offer the same thing. Not really sure how this is a bargain for me.

It makes absolutely *no* sense to keep these two companies from merging.

*Wayne Killen
Director, Product Planning
Hyundai Motor America
Fountain Valley, Calif.:*

Beginning in late 2006, we began offering XM Satellite Radio as standard equipment across our car models. ...

A frustration for our customers ... is that they cannot easily access the best programming from both satellite radio services. For example, without incurring additional installation hassles of a second radio receiver and paying a very high price, XM subscribers cannot receive programming unique to Sirius, such as NASCAR and the National Football League.

We understand that the merger will eliminate these issues by expanding programming choices and pricing options for all Hyundai customers. Rather than being forced to choose between content that currently is exclusive to one satellite radio provider, our customers will gain access to

packages offering the "best of both" services for significantly less than the current combined price, as well as packages of fewer channels at much lower prices. ...

We believe that efficiencies realized from the merger will benefit our customers in other ways, as well. For example, the merged company will likely

prohibition against such a combination, should be rejected by the commission due to the anticompetitive and anti-consumer effects that would flow from creating an intramodal SDARS monopoly.

Regardless of the market definition, the proposed merger, if approved, would undermine the viability of America's

It makes absolutely no sense to keep these two companies from merging.

— Brian Rundle

improve upon current in-vehicle services that support the driving experience, such as traffic and weather, and promote the introduction of exciting new services. It will also provide a more robust and stable platform for satellite radio generally, and maximize its prospects for success in the increasingly competitive market for audio entertainment services.

*Clear Channel Communications
San Antonio, Texas:*

There is already ample evidence in the record that the proposed merger of the nation's only two SDARS licensees, beyond the threshold fact that it would violate the commission's unambiguous

free, local radio stations, which would not be able to match the merged firm's ability to obtain high value content, largely because they are unable to respond to this competitive threat through any meaningful growth.

For these reasons, the commission should deny the proposed merger of XM and Sirius as not serving the public interest, convenience and necessity. Indeed, the only circumstance under which approval of the proposed merger might survive scrutiny under the commission's public interest test would be if the commission were to contemporaneously eliminate all local radio ownership regulations, thus freeing local radio broadcasters to be in a position to match the competition between XM and Sirius that would be lost. 🌐

Reps Urge FCC to Move on AM Translators

Fifteen members of Congress, including the House Budget Committee chairman, told the FCC that they support a rule change that would allow AM operators to use FM translators as a fill-in service, NAB said.

Doing so would benefit "the millions of Americans who enjoy listening to AM radio," the House members wrote to the commission's chairman, Kevin Martin.

John Spratt is the Democratic chair of the budget committee. The original sponsors of the rule change include two Republicans and a Democrat.

"Communities and consumers will benefit from improved AM service," they told the commission. "Approval of this rule will mean that AM stations unable to broadcast local events that typically occur at night, like political debates and high school sports, will become able to deliver coverage."

The rule change would "allow AM broadcasters to overcome the all-too-familiar interference of their signals caused by mountains, buildings, computers, fluorescent lighting and other conditions." Translators would also improve service for those AMs that must power down or off at night.

The proposed change is in the petition for rule-making phase. The legislators asked the commission to move ahead to a notice of proposed rule-making.

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NewsWatch

► Continued from page 2

rules governing FM modulators and terrestrial repeaters. The trade group filed a Freedom of Information Act request seeking the information earlier this year, saying the information is linked to the satellite merger proposal.

Dielectric to Hold Engineer Meet

RAYMOND, Maine Dielectric will hold its second FM Executive Engineer Conference Aug. 15-17 on the Maine coast at the Sebasco Harbor Resort. The

company said its engineering staff is preparing an agenda covering various topics including new information on IBOC implementation.

Wednesday afternoon will feature optional basic sessions, such as "Antennas 101." Thursday will be focused on IBOC; Friday morning, the conference wraps up with a guest speaker and roundtable discussion.

Contact Dielectric at (207) 655-8100 for an itinerary and information.

News Roundup

S-DARS: Reply comments are due Aug. 27 (MB Docket 07-57) on whether language in the 1997 FCC order authorizing satellite digital radio service that bars one satcaster from buying the other is a

"binding" rule. If the commission decides the ban is binding, it also seeks comment on whether that should be waived, changed or repealed were the agency eventually to decide the proposed satellite merger would serve the public interest.

EAS: The FCC released details of the order it approved in May. It requires EAS participants to accept messages using Common Alerting Protocol after FEMA adopts standards. CAP involves the transmission of EAS alerts as text, audio and video via broadcast, cable, satellite and other networks. As part of its review of EAS, the commission seeks comment (EB Docket No. 04-296) on how it is or isn't working and on the need for additional testing, station certification and assessments of how well the system works after an EAS warning has been triggered.

FIAT said it will be the first automaker to install and distribute WorldSpace radios when that satellite digital radio company begins broadcasting in Italy, likely in late 2008. WorldSpace said Fraunhofer has a radio in development and testing. Beginning in late 2009, Fiat will introduce factory-installed WorldSpace satellite radios as optional equipment on some Fiat, Alfa Romeo and Lancia models. Fiat will also sell aftermarket WorldSpace satellite radios. WorldSpace will carry a dedicated Fiat channel.

DTV and accessories are projected to lead factory-to-dealer sales of consumer electronics in 2007, according to the Consumer Electronics Association, which projects factory-to-dealer CE sales at more than \$160 billion for the year. It foresees 8 percent industry growth this year. The portable communications market will grow substantially; CEA thinks \$20 billion will be spent on portable devices, an increase of 12 percent over last year.

XM introduced the XM CommanderMT from Audiovox, said to work with any AM/FM car stereo regardless of the vehicle's make, brand or year. The company said quick channel navigation allows users to program 30 channels or press number buttons to enter and move directly to the desired channel, then "jump" to the previous station. The CommanderMT works with the portable XM Mini-Tuner, a removable cartridge containing the XM subscription that can be used to access XM programming through other compatible car and home products. The unit lists for \$179.99.

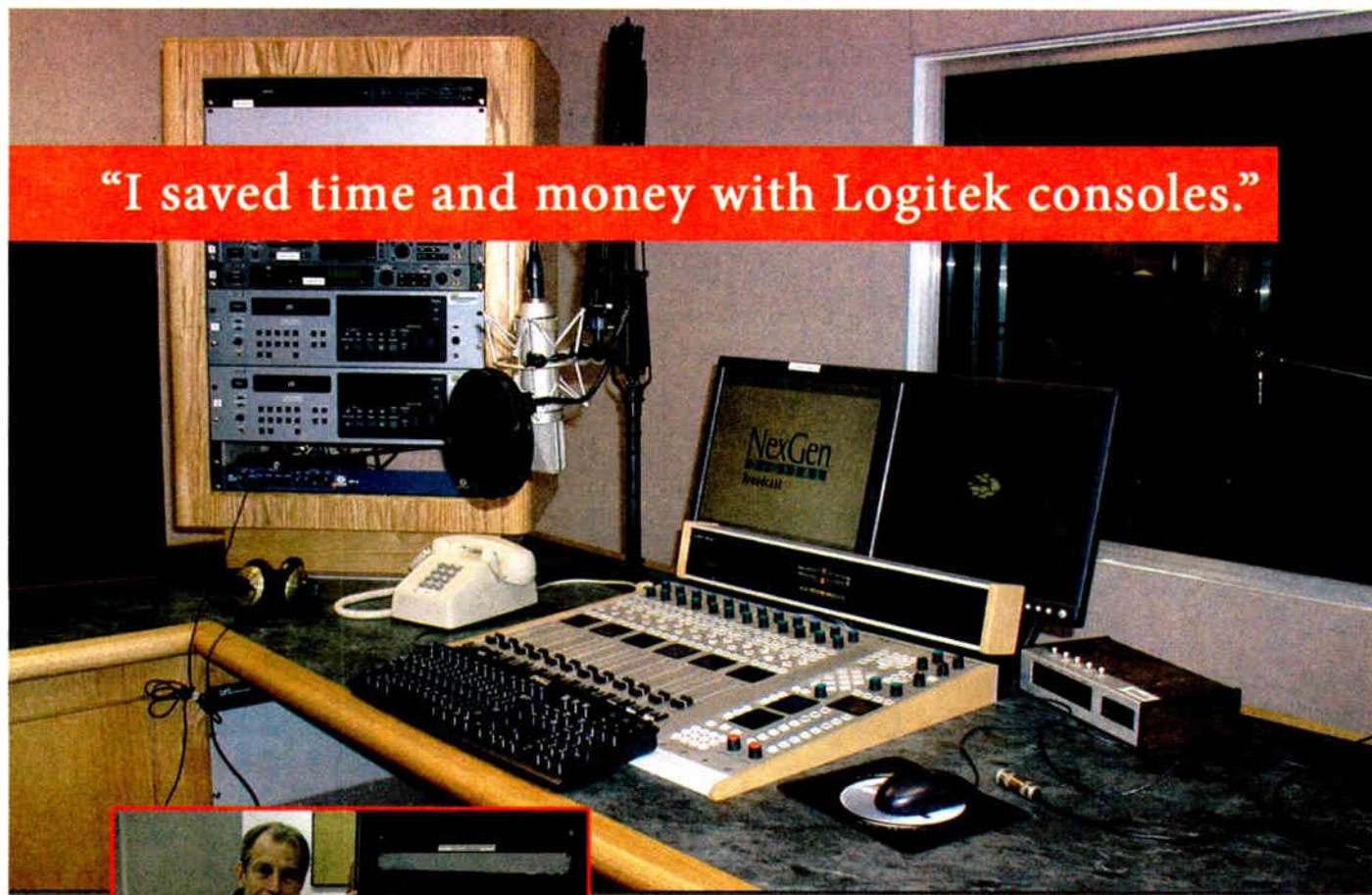
NAB's DAVID REHR wrote to House Ways and Means Committee Chairman Charles Rangel, D-N.Y., requesting a hearing to explore ways to increase diversity and representation of minority groups and women in the communications industry. NAB "strongly supports" the reinstatement of a tax incentive program for those who sell broadcast properties to minorities or women, Rehr wrote.

ILLBRUCK ACOUSTIC changed its name to Pinta Acoustic. The word "pinta" refers to the founder's association with high-performance sailing and the name of Willi Illbruck's yacht.

CLEAR CHANNEL TRAFFIC: The company's Total Traffic Network, carried via RDS, also is now broadcasting via HD Radio in 48 markets. Clear Channel is working with several manufacturers to make the special receivers available by the end of this year.

UNIQUE SCROLLING: XM has rolled out dynamic messaging that scrolls across receiver displays from digital broadcast software developer Unique Interactive. The company provides similar services for the Eureka-147 system and is developing them for HD Radio; it customized the software to include sports scores, weather, news, music track and artist information, as well as traffic news and emergency alerts.

PETER KOSANN will leave Westwood One; he is president and CEO. The company also named Gary Yusko as CFO, replacing Andrew Zaref. David Hillman took the newly created post of chief administrative officer and continues as EVP of business affairs and general counsel.



Mike O'Shea, Chief Engineer
WUSF, Tampa Florida

"When we started shopping for new consoles at WUSF, my first step was to ask my peers what they thought. I posted a question on Pubtech saying I was thinking about switching to a routing system console, and asked for recommendations. The majority of responses led us to Logitek.

We have purchased several Logitek consoles over the past few years, and are amazed at how much console we get for the price. I recently bought two consoles plus a router for less than I paid in 1989 for two analog consoles. When you consider what the 1989 costs represent in today's dollars, the cost savings are incredible and there's no comparison for the flexibility we have today.

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Keith has been broadcasting his radio program, a unique mix of personal finance, economics, politics, and real-life "extreme broadcasting" adventure for 19 years. Listen live 8–11AM Sunday mornings AZ time on NewsTalk 550, KFYI, or catch Keith's archived shows, and enjoy the amazing videos, photos and blogs of his open-ended "round-the-world" journey at his website, www.theglobaladventure.com



*Keith DeGreen says:
"Whether I'm a thousand miles out to sea, visiting unusual ports of call or exploring remote inland places, my Comrex ACCESS Portable empowers me to project a broadcast-quality signal back home at anytime from virtually anywhere."*



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DIGITAL NEWS

Dealerships Use HD Radios To Sell Cars

"Buy a car today and get an installed HD Radio for free."

That's the idea behind two car dealership promotions going on, one in Detroit, the other in Dallas and Houston. The HD Digital Radio Alliance hopes these promotions inspire stations to emulate the concept.

In Texas, the David McDavid Automotive Group is installing and giving away a free Visteon Jump HD Radio with every new and used car sold through Labor Day.

Listening kiosk

The campaign is supported by alliance member station radio and Web ads as well as HD-R signs and a Visteon listening kiosk in the showrooms of the six dealerships. The special is also promoted on the dealership Web sites.

Tom McCollum, CEO of the McDavid Automotive Group, told Radio World that being "Texas' exclusive HD Radio supplier," as it states on the dealership Web site, gives his group an edge and differentiates it from the 13 other Honda dealers in his markets. The dealer describes his offer as exclusive because it's the only dealer group currently offering HD Radios.

"It helps us make the deal," said McCollum, who said his dealers had given away a couple of hundred Jump units by mid-July, two weeks into the promotion.

The Jump installation is easy because the unit connects to the existing radio through an Auxiliary CD player port on



Listeners click on this ad on the WCSX Web site for a coupon entitling them to a free installed HD Radio with a car purchase at the dealership.



Pictured left to right: Don Fahlgren, account manager, WCSX(FM), Detroit; Michael Isabella, business development manager, Greater Media Marketing and Emily May, director of advertising and marketing, Dick Genthe Chevrolet.

the in-dash radio; the existing car antenna is also used for the Jump, he said.

Feedback on the radio has been good, he said, especially among customers who favor listening to AM stations for sports events. Customers have also told him or his salespeople they find the Jump easy to use, McCollum said.

Featuring 'free'

Only a small fraction of the customers who walk in the showrooms have an idea of what HD Radio is, he said. Car salespeople emphasize the better sound quality achievable with HD Radio and the extra channels available through multicasting. They differentiate HD-R from satellite radio by emphasizing that there are no monthly subscription payments incurred with HD Radio.

In both Texas and Detroit, station promotion managers brought the promotion idea to the dealers. In Detroit, the deal took a year to come to fruition, with the involvement of the ad buyer for the local

Chevy dealerships.

In the McDavid dealerships, customers can listen to the unit in the kiosk and also take a test drive in vehicles that have an installed Jump.

The Visteon HD Jump sits in a cradle in the car or home. For \$39, customers may also buy the home Jump cradle from the dealerships.

Of the roughly 3,000 vehicles sold each month by his dealerships, some 900 of those are Hondas. The rest are made by Acura, Nissan and Lincoln Mercury. He and the Alliance are hoping to get a lot of HD Radios seeded in the Dallas metropolitan area, which boasts 40 multicast stations.

All of the vehicles in the dealerships come equipped with satellite-ready receivers and it's up to customers

whether they choose to purchase a subscription. Asked whether he had promoted an early satellite radio unit, he said no; early models were more complex to install than HD Radio. His salespeople have been pushing the "free" concept of HD-R stations heavily, McCollum said.

Motor City Giveaway

In Detroit, Greater Media stations are working with Dick Genthe Chevrolet to give away a free, installed Directed Car Connect HD Radio from Directed Electronics with every used car purchase through Aug. 31.

The offer is being promoted through Dick Genthe Chevrolet commercials on WCSX(FM), ads on the WCSX Web site, and via streaming sponsorships on both WCSX and its HD2 companion station, Deep Trax.

"Before the Web stream begins you'll hear a 15-second announcement telling you about the offer," said Michael Isabella,



An HD Radio demo car at the McDavid dealership bears an HD Radio sticker.

Greater Media Detroit marketing business development manager, who developed the promotion. The stations also planned to conduct on-site appearances to publicize the promotion, he told RW.

Isabella also had HD Radio signs installed in the demo vehicle.

Consumers are directed to www.wcsx.com, where they can download a coupon for a free, installed HD Radio with the purchase of any used car at the dealership.

— Leslie Stimson

Receptor HD to Leave BA Product Line

PEABODY, Mass. Boston Acoustics will retire the first tabletop HD Radio, the Receptor Radio HD. The manufacturer considers the unit, which debuted in 2005, to be at the end of its product life.

Boston Acoustics SVP for Sales and Marketing Phil Cohn said, "We will not be shipping new product into the market, but there is product already seeded in the market."

The Sharper Image and RadioShack, as well as other select retailers, are likely to have stock through year-end, he said.

Boston Acoustics is reviewing "a number of applications" for its radio line and has not announced a plan. It could decide to make a replacement and updated HD-R unit, or not, which would be a troubling indicator for IBOC. It's common for receiver makers to tweak their product lines and hold back on announcing their plans so as not to tip off competitors.

The receiver maker will probably make its decision before CES.

XM Revamps Products; To Sell SureConnect Separately

WASHINGTON XM Satellite Radio is making adjustments to its product line with the addition of new Xpress models.

Also, partner Audiovox has introduced an in-dash car radio and other manufacturers of several XM radios plan to discontinue certain models.

XM will stop including SureConnect, its wired-FM modulator solution, in packaging of plug-and-plays. The new Xpress models feature SureConnect, which the satcaster has been featuring for "at least" seven months, a spokesman told Radio World.

When not integrated into a product, XM SureConnect will be sold as an accessory and list for just under \$20.

Fewer than 40 percent of customers who purchased an XM radio with SureConnect included actually used it, an XM spokesman confirmed. Many customers had wired FM modulators professionally installed, con-

nected the radios to a head unit's audio inputs or used a cassette adapter.

When the FCC looked into the problem of wireless FM modulators from satcasters and other products interfering with terrestrial radio stations last year, XM began including its wired FM modulator solution in radio packaging for plug-and-plays; it indicated a wired FM modulator would be the long-term solution for the issue as some customers were not using the devices correctly.

The new Audiovox XpressEZ and XpressR XM plug-and-play satellite radios were to begin shipping to retailers in July; the XpressR includes a split-screen display.

XM manufacturing partners will discontinue the Sportscaster, Delphi SkyFi2, Samsung Helix and Samsung NeXus. The Pioneer Inno, which matches the Helix in features, will continue to be available through the holidays.

Delphi will continue to offer the SKYFi3 and the RodyXT. Audiovox will continue to offer the original Xpress radio.

— Leslie Stimson

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AM Success

► Continued from page 1

define it. Consistently ranked in the top two or three stations in the nation's third-largest radio market, the Tribune Broadcasting station drew in \$48.5 million in revenue in 2006, according to BIA Financial Networks.

"We thrive because of our strong commitment to live/local programming 24/7," said Tom Langmyer, general manager of WGN. "As AM operators, we all must recognize the potential of providing local content."

50 kW Midwest blowtorch

Tribune, which owns 24 TV stations and only one radio station, isn't afraid to invest for local programming to ensure success, Langmyer said.

On the air since the 1920s, WGN's 50 kW signal can be heard across the Midwest, but its focus has always been the Chicagoland area. The station features local on-air personalities, a big news department and all the important service elements, Langmyer said.

"AM stations are doing spoken-word formats. I believe that is the big advantage we have over FM. They play music and are going to be very challenged to create content that can't be easily duplicated on many platforms. Now is really the time for AM operators to develop more local programming and specialized content," Langmyer said.

WGN claims to be the overall revenue market leader in Chicago, despite "struggling the past few years as most major markets have," Langmyer said. The station also airs an HD Radio signal.

"HD does improve the sound quality of AM, and that is a very good thing. However, the AM band still has some of the same limitations it always has had. Regardless of the audio quality enhancements HD gives us, there is no fix to easily receiving AM radio inside buildings and in other areas. There are still challenges to overcome," Langmyer said.

WGN is home to the Chicago Cubs and typically ranks in the top three radio stations in Chicago, Langmyer added, averaging around 1 million actual listeners in the Metro per week, according to Arbitron.

By contrast, Galesburg, Ill., is a city of just over 30,000 people that sits approximately 200 miles southwest of Chicago. It is home to WGIL(AM), named the 2007



WNNW Pat Costa with a prize winner

If your plan is not working, get a new plan. Our business rewards great ideas.

— Joel McCrea,
Clear Channel Radio
Des Moines

Small-Market Radio Station of the Year by the Illinois Broadcasters Association. It's the kind of station you would expect to broadcast music synchronized to that city's fireworks display, and it did just that for the Fourth of July this year.

"WGIL has been quite successful for almost 70 years. And as with most successful AM stations, our heritage has been a very important part of our success. However, we realize that we cannot rely on that to guarantee any future success," said Roger Lundeen, general manager for Galesburg Broadcasting Company, which also owns three FM stations in the city.

WGIL is a news/talk/sports station with a big commitment to local news, Lundeen said. The station carries some



Roger Lundeen

nationally syndicated shows, but focuses on community broadcasting.

"We are committed to local news and some local agricultural programming. We do 36 local newscasts per day," Lundeen said, a former radio chief engineer and current SBE member.

'Radio malpractice'

Commercials on WGIL typically run around \$25 per unit for a short-term schedule, Lundeen said.

"We can quantify success not only

from our quarterly revenue, but also from long-term sales success. So many stations today commit 'radio malpractice' by selling clients short-term schedules or promotions that are simply not in the best interest of the advertiser," Lundeen said.

"When it doesn't work they just move onto another client. Well, in a small market you can run out of advertisers with this short-term thinking. We try to establish relationships with clients," Lundeen said.

The AM bandwidth discussion is a concern even in small radio markets, Lundeen said, adding that he is a believer in Clear Channel's call to reduce AM bandwidth to 5 kHz to help reduce first adjacent interference issues.

"Realistically, we are wasting some bandwidth that nobody is hearing. It is even more important now with the recent authorization of nighttime IBOC," Lundeen said.

Lundeen cited the example of his wife's recent trip to the local new car dealer as he tagged along to listen to car stereos.

"Everything I heard was certainly less than 5 kHz (receivers). Most were more like 3 kHz," he said.

Lundeen handles engineering duties for his group along with another full-time engineer in Galesburg. The company also owns four stations in Burlington, Iowa.

WNNW(AM), licensed to Lawrence, Mass., is successful because it fills a niche, said Pat Costa, general manager of Costa Eagle Radio, which also owns WCEC(AM) and WCCM(AM). The

See AM SUCCESS, page 12 ►

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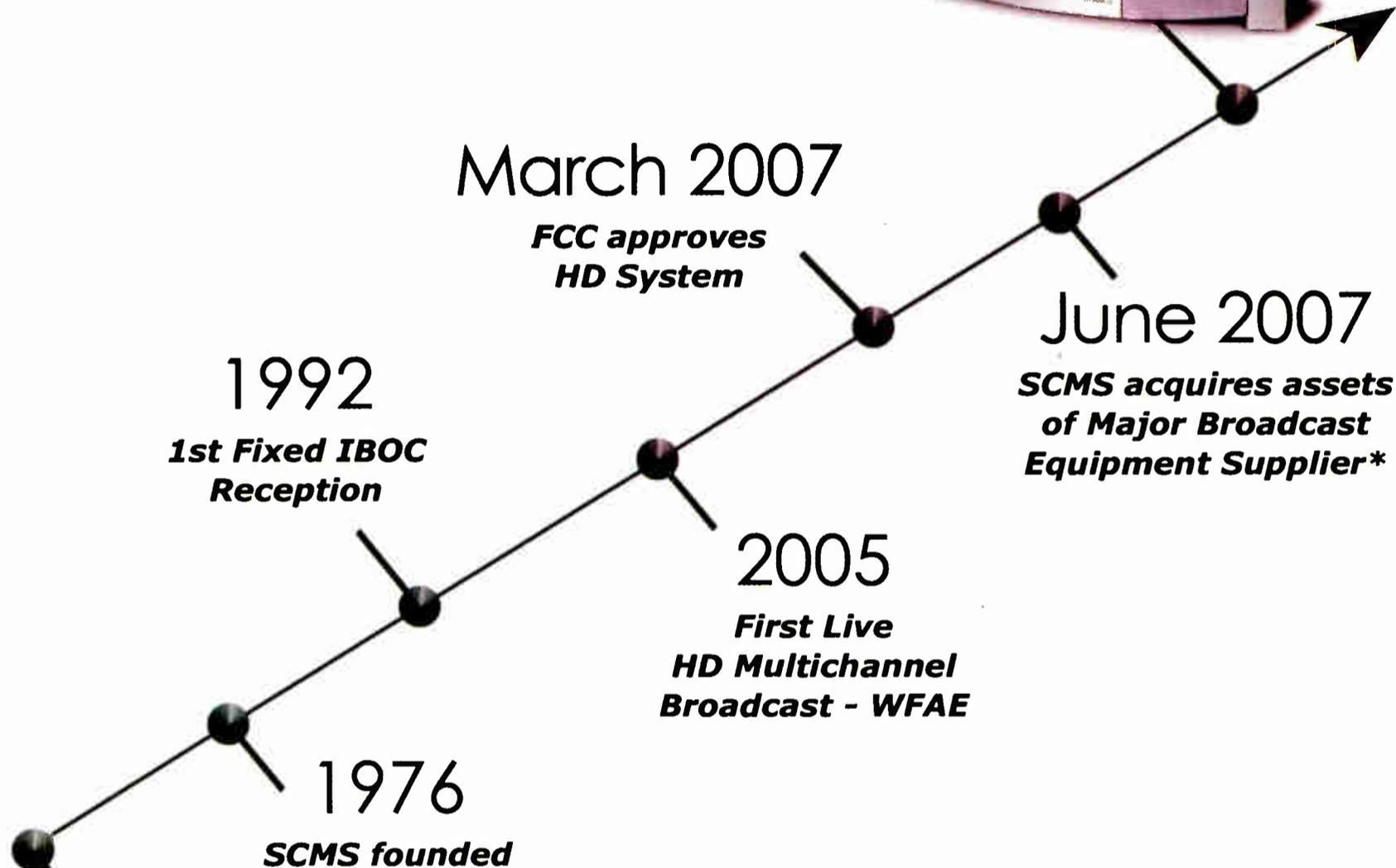
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AM Success

► Continued from page 10

group's studios are in Methuen, Mass., approximately 30 miles north of Boston.

WNNW, which plays tropical music and whose on-air talent speak Spanish on the air, regularly shows up in Arbitron ratings for Boston, the nation's 11th-largest radio market. The station garnered a 0.9 share for Winter 2007/12+ with a signal that struggles to reach south Boston.

"We are successful because we stick to the basics of local radio and are connected to the community dramatically. We are associated with as many local events as possible and promote ourselves at every turn," said Costa. "We also have a very

aggressive sales staff who are always looking for promotional opportunities for us."

Costa, who has owned radio stations since 1988 when he purchased WCEC, acknowledges he is at a disadvantage programming a music station on AM, but has high hopes for HD Radio. In fact, WNNW converted to HD Radio in January.

"We decided to change early to give our listeners the best listening experience we could. As a whole, I think the radio broadcasting industry needs to work on getting receivers out there into the hands of the consumers at a reasonable price," Costa said.

'Incredible' HD-R fidelity

Costa added that when he demos the station for listeners on a HD-R receiver at

the station office, "This is like programming a whole new radio station in that the sound opens up, fidelity appears and it is quite incredible," he said.

Costa said the broadcaster spent approximately \$50,000 on the HD-R conversion for WNNW, which was made less expensive since the station had recently purchased a new Broadcast Electronics transmitter.

WNNW, which has live announcers throughout the day, is profitable and has seen revenue increase the past several years, Costa said.

But owning an AM radio station is like being in the "bowels of broadcasting" sometimes, said Costa, who is concerned about a lack of attention from the FCC.

"The FCC really doesn't care much about us. We are like a stepchild. The FCC is all about wireless communica-

tions and data transfer, not broadcasting," Costa said.

Costa admits AM is facing a challenge "attracting the younger generation," but he's not especially concerned about competition from satellite radio. Instead, in the future the Internet will be the biggest challenger for radio listeners' ears.

"The young are all about the Internet. We are always looking for ways to tap into the Internet," said Costa.



Tom Langmyer

In contrast, market rank No. 92 Des Moines, Iowa, is home to Clear Channel Radio's WHO(AM). The station is the top-ranked radio station overall in the market, according to Arbitron, and is respected nationwide for its local news-gathering operation. The station billed \$6.4 million in 2006, according to BIAfn.

"I still believe the AM band is healthy. Yes, there are struggling stations on the AM band, but some on the FM band are struggling, too. It's more about commitment to your station," said Joel McCrea, vice president and market manager for Clear Channel Radio in Des Moines.

Clear Channel has two AM stations in town, including sports-talk KNXO. Both are broadcasting in HD Radio, which "provides a great opportunity for our business," said McCrea.

Commercial rates on WHO, which signed on in 1924, can run as high as \$200 per unit. The station's revenue has grown each of the last two years, McCrea said.

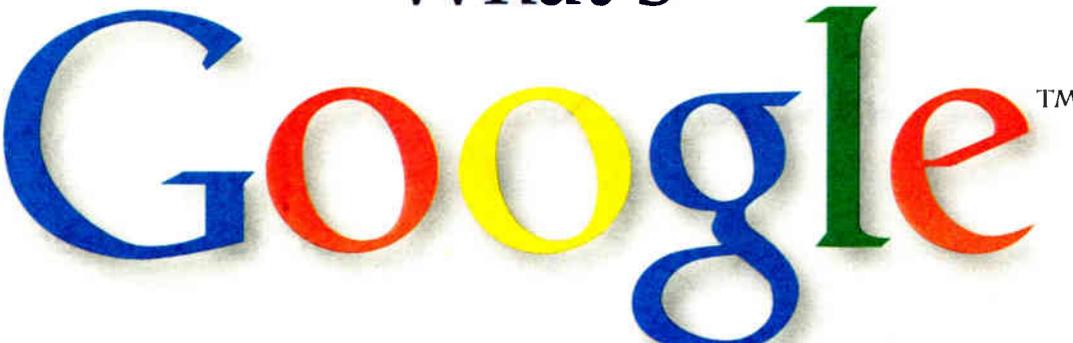
In addition to Rush Limbaugh and Dr. Laura, WHO broadcasts local talk programming while focusing on local news. "We have a good plan. If your plan is not working, get a new plan. Our business rewards great ideas," McCrea said.

Clear Channel's Des Moines cluster, which includes two FM stations, has two full-time engineers who "also double as IT guys," McCrea added.

"We are successful because our people work very hard to serve our local community and we do a good job of letting listeners know what we do for Des Moines and the state of Iowa," McCrea said, noting that the city is Iowa's capital.

"We make sure when people need to know about whatever, they come to us."

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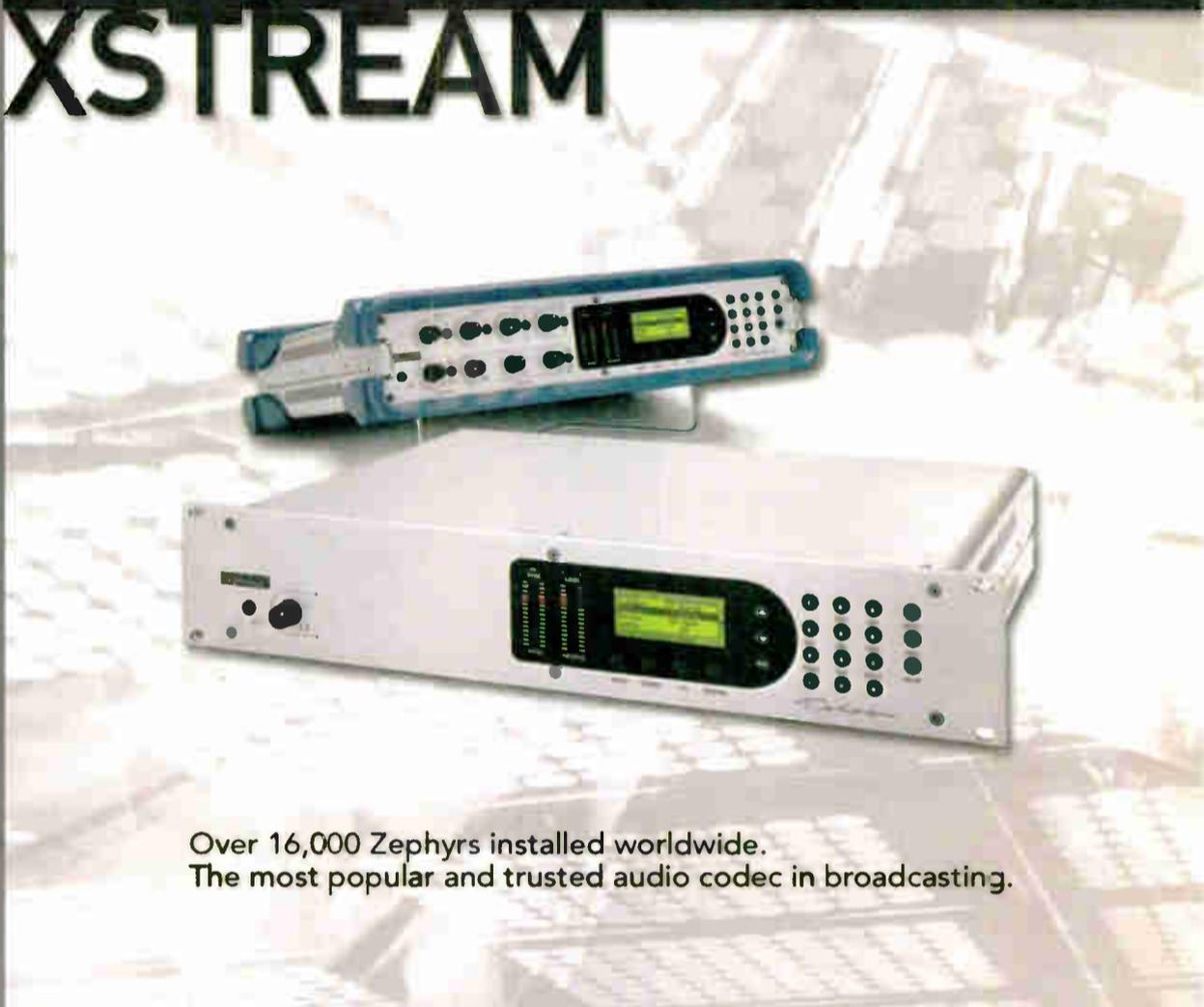
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Simplify Satellite Audio, Control Wiring

by John Bisset

Marc Mann of San Diego read our tip to keep A/C condensate drain line traps clean to prevent flooding and finds it timely. But where A/C evaporator units are located above mission-critical equipment — where water dripping could spell disaster — Marc suggests the following.

Many manufacturers offer a small float switch that installs directly at the condensate pan outlet. It typically is wired into the A/C control board circuit to shut the system down should it detect an overflow condition. It can also trigger a remote alarm should one desire.

Installation is fairly easy for anyone who has repaired an irrigation sprinkler system; the drains are constructed of PVC. The Safe-T-Switch Model S62 detects downstream clogs and interrupts the thermostat circuit to shut the system off before flooding occurs. The Safe-T-Switch is compact to fit in tight places; the potted contacts are ideal for use in a wet environment. The reed/magnet float switch resets automatically after the drain is cleared.

If you have a maintenance contract with an A/C and heating company, have them install one of these during your annual or semi-annual visit; this way you may save the cost of a call-out charge.

In addition, the technician typically fills out a preventive maintenance checklist during his visit. Ask the tech during his next visit if he specifically “blew out” all the traps and have him note that service on his report.

Marc Mann can be reached at mmann011@san.rr.com.

★ ★ ★

Cumulus Youngstown Market Engineer

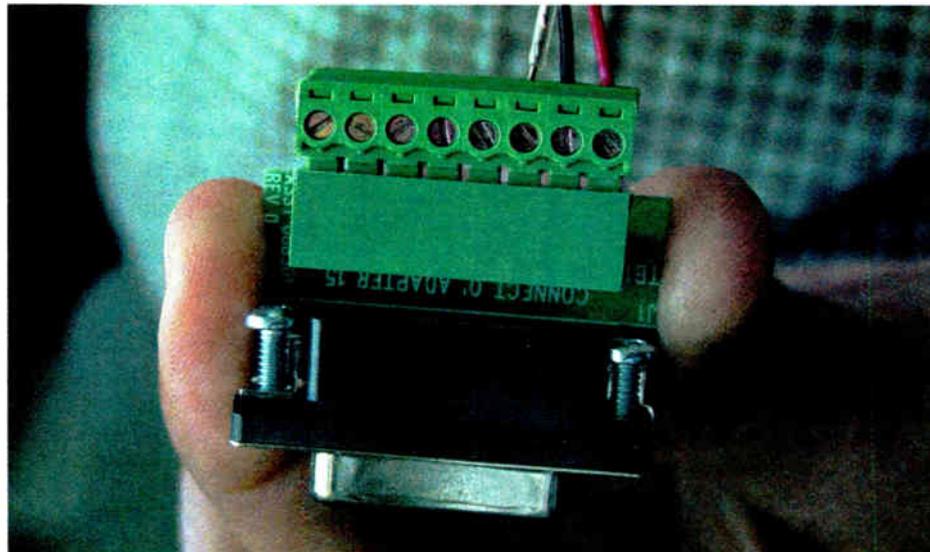


Fig. 1: A nifty way to handle DB connectors.



Fig. 2: The Connect O' Pad provides an easy connection for audio and includes trim pots for volume control.

Wes Boyd, a frequent *Workbench* contributor, asks if I've seen the latest little gizmos from Broadcast Tools.

These contact fan-out connectors sure make Starguide hookups and changes easier and faster.

The Connect O' Adapter converts DB-15 and DB-37 connectors to removable screw terminals. Joe Jarjoara, chief engineer for Quantum Communications of Cape Cod, Mass., can be seen in Fig. 1 holding the DB-15 adapter. The screw terminals simplify the wiring hookup, and the connector can separate so you don't have to remove all the wires if the receiver is removed for service.

Fig. 2 shows the Connect O' Pad, which Joe uses on his StarGuide receiver. The COP provides an effective way to connect audio wiring and adjust the audio outputs on your StarGuide II and III receivers via the built-in trim pots.

Wes Boyd can be reached at wboyd@theradiocenter.com. Quantum's Joe Jarjoara is at avcraftsmen@aol.com.

★ ★ ★

Stu Engelke is engineering manager for Salem Media of New York City. Stu writes that he always finds something of use in *Workbench*; now it's his turn to share some useful information in the form of some great Web sites.

The first helps to keep you informed: www.dailyrotation.com. This site displays the top 10 headlines from whatever sites you choose. It's a great way to keep up with whatever interests you without having to pore over several Web sites. Lifehacker, which we've mentioned previously, is one of the choices.

If you like the word “free,” this next site is for you. Go to www.techsupport-alert.com and type “46 best ever” into the Search field. You'll be taken to a list of “The 46 Best-Ever Freeware Utilities.”

See GREAT SITES, page 16 ▶

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Menu-driven setup is quick and easy. Processing functions may be enabled independently or combined for a comprehensive leveling system. Basic parameters are adjustable, but not to an extent to ever get you into trouble. Front-panel alarms and rear-panel ‘tallies’ signal dead air and out-of-limits conditions.

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It's not rude to point

• Little kids tell mommy what they want by pointing — a pretty intuitive way of doing things. PathfinderPC software gives talent the same convenience. You can **build custom "button panels"** to execute complex operations with just one click. You can map these panels to controller modules on Element consoles or to turret mounted controls, place mini-applications on studio computer screens, even run them on touchscreen monitors.



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

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

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

Push to play • Axia Router Selector Nodes are **really advanced selector and monitor panels** that you can put anywhere you need access to audio streams. Like newsrooms, dubbing stations, or even the station's TOC, so you can monitor any of the thousands of audio streams on your network at a moment's notice. The LCD screen scrolls through a list of available streams; the eight Fast Access keys let you store and recall the streams you use most. There's even an input, for convenient connection of an analog or AES device. Sweet.

Very logical, Captain • Routing logic with audio used to be as hard as performing the Vulcan Mind Meld. But Axia makes it simple, converting machine logic to data and pairing it with audio streams. So **logic follows audio throughout the facility** on Axia's switched Ethernet backbone. Eight assignable GPI/GPO logic ports, each with five opto-isolated inputs/outputs, are built into every Element power supply, so you can control on-air lights, monitor mutes, CD players, DAT decks, profanity delays, etc. Got more than eight audio devices? Add a GPIO node like this one wherever you've got gear.

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

Brains in the box • The typical radio jock cares for studio equipment about the same as a five year old cares for a puppy: haphazardly, if at all. That's why we **took the CPU out** of our Element modular console and put it in

here, with the power supply and GPIO ports.

That means a greatly reduced chance of being taken off the air by a Coke spilled into the board. Because we know that you have better things to do on a Sunday night than trying to dehumidify circuit boards with a hair dryer.

Put that in your pipe • How many discrete wires can a CAT-6 cable replace? Well, a T-3 data link has 44.7 Mbps of throughput. But Axia networks' Gigabit Ethernet links give 1000 Mbps of throughput between studios — more than 22 times the capacity of a T-3; enough for 250 stereo channels per link — the equivalent of a **500-pair bundle on one skinny piece of CAT-6**. Use media converters and optical fiber for even higher signal density. Think that might save a little coin in a multi-studio build-out?

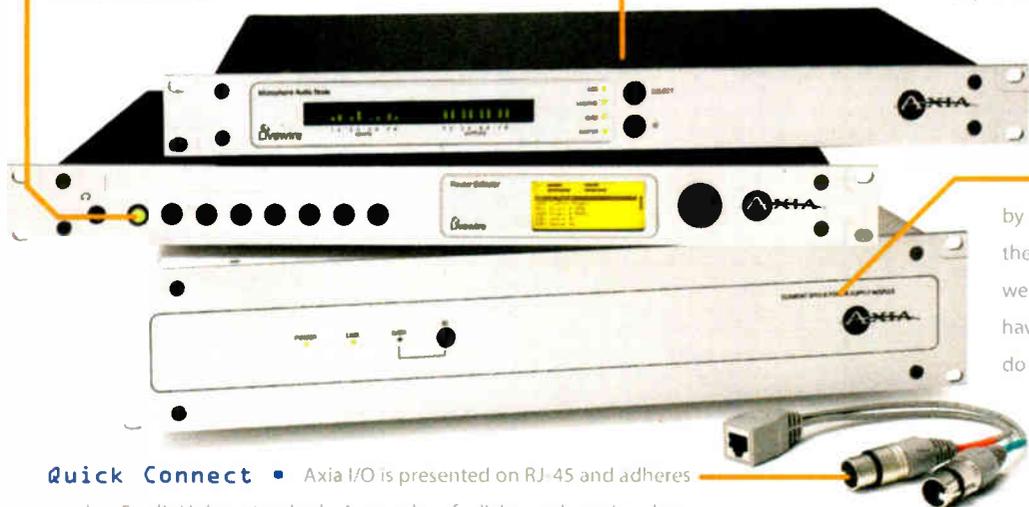
Level headed • These green, bouncing dots built into every Axia Audio Node are confidence meters. One glance and you know whether an audio source is really active — or just playing possum.



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

You got to have friends • Delivery system providers like ENCO, Prophet, BSI, BE, iMediaTouch, DAVID Systems and more all have products that **work directly** with Axia networks. So do hardware makers like AudioScience, International Datacasting, 25/Seven, Telos and Omnia. Check out the whole list at AxiaAudio.com/partners/.

Quick Connect • Axia I/O is presented on RJ-45 and adheres to the StudioHub+ standard. A couple of clicks and you're done.



AxiaAudio.com

WIRED FOR SOUND

Power Cords ... With a Guitar

by Steve Lampen

Hopefully, you would play a power chord on your guitar, and not attach a power cord.

Power cords are ubiquitous, so even if a guitar doesn't have one, a guitar amp certainly does. Every so often, a guitarist is injured or killed by becoming the "path to ground" through the guitar cable and touching some grounded device, like a microphone.

In almost every instance, someone removed the third pin from the guitar amp power cord or inserted a 3-to-2 adaptor disconnecting the ground pin. Then a simple wire fault inside the amp, where a hot wire touches ground, sets up the disaster.

Because there is no ground connection, that hot wire seeks the best ground. If it's the guitarist's lips, so be it. That missing ground pin and the green or yellow-green wire in the power cord are there primarily for safety.

On the ground

Think about this for a second: What is the purpose of a ground wire?

Ask another engineer. I used to say that it "provided a path to ground if there's a 'fault' in the device." But a friend of mine, Mark Rogers, a PE and consultant at Greenbusch Group in Seattle, pointed out that the purpose of the ground wire is to assure that so much current passes down that wire that it blows the breaker (or fuse) in the line feeding it. This saves you from being the "path to ground" that would have less pleasant consequences.

Sometimes that ground wire can be a layer of shielding in the cable. It could be a foil shield, a braid shield or a combination foil/braid.

Low-frequency performance of any shield is a non-issue. Up to 1,000 Hz, no shielding has any significant effect. From 1,000 Hz on up, different shields have difference effectiveness.

Braid shields are effective up to 400 MHz. They have a lot of mass (low resistance), which is effective at these frequencies. At around 400 MHz, the wavelengths of the signals begin to get so small that the braid becomes less and less effective. Someone compared it to a chain link fence. It'll keep out a dog but a mosquito sails right through.

Foil shields pass braid shields starting at 50 MHz or so, and go up into the gigahertz. They're more like a "skin" and these high frequencies operate where

Power cords may have wires twisted around each other but they are not 'balanced lines.'

"skin effect" predominates. In applications where there's a lot of RF, such as a transmitter site, a foil-shielded cord certainly can help reduce the amount of RF that gets into a device.

Of course, power cords, like all shielded cables, have a potential "Pin 1" problem — that is, the ground pin and shield should be terminated at the entrance to

the device. If it runs into the box to get to the power supply, for instance, you have a really nice antenna, feeding whatever's on that shield into the box.

Nice design, Sherlock!

Balance of power

Power cords may have wires twisted around each other but they are not "balanced lines" and do not reject noise. A balanced line only occurs where the two wires, and all the passive pieces attached to them, have identical impedance in respect to ground.

In a power cord, one side is hot and the other is neutral (and tied to ground somewhere at the pole or junction box). If you don't believe me, carefully read the voltage from the hot pin to ground and from the neutral to ground. If you see anything significant running from neutral to ground, you have a serious problem and should consult an electrician.

Sometimes switching supplies, which

are everywhere these days, dump all sorts of harmonic junk onto the neutral. I once saw 40 Volts of junk on a neutral compared to ground.

A shielded power cord where the ground is terminated correctly at the entrance to the chassis can be effective at external RF. But once you have crap on the neutral, it's inside the cord and shielding will do nothing helpful.

A lot of power conditioning and power balancing devices try to do just that: turn power distribution into balanced lines. I have heard more arguments about whether these work or don't work. But the idea makes sense.

If you have an opinion or two on this subject, write a column yourself and send it to the editor, Paul McLane at pmclane@imaspub.com.

Steve Lampen writes about issues related to wire and cable. "Wired for Sound" articles are archived at radioworld.com.

His book "The Audio-Video Cable Installer's Pocket Guide" is published by McGraw-Hill. He can be reached at shlampen@aol.com.

Great Sites

Continued from page 14

There are a lot of great freeware products; many are as good, or even better, than their commercial alternatives. Get the lowdown on the latest here.

And the interval at which Windows XP resets the clock via the Internet can be changed to whatever you like. As mentioned previously, this is a registry hack. You'll find out how to implement the reset at <http://forums.pcpitstop.com/index.php?showtopic=126934>.

Stu Engelke can be reached at sae@nycradio.com.

★★★

Les Proctor of KNEB(AM/FM) in Nebraska agrees that most audio transformers will not pass an FM stereo composite signal but says there is always an exception.

When KNEB(FM) bought a Harris FM-20K transmitter in 1981, there was a noise problem due to a ground loop between the transmitter composite input and the STL output. Les solved the problem with an old Westinghouse 111C tele-



Fig. 3: This site offers 'The 46 Best-Ever Freeware Utilities.'

call for ground loop elimination with composite signals.

John Huntley, engineering manager with the Cumulus stations in the Rockford, Ill., market, says General Radio used to make such a version, but the 111Cs seem to be easier to find as the phone company moves further and further away from copper radio loops. Reach Les Proctor at lproctor@krvn.com and John Huntley at jhuntley@earthlink.net.

Thanks, gentlemen, for the tip. Now it's time to scrounge around some old phone closets!

John Bisset has worked as a chief engineer and contract engineer for 38 years. He is the northeast regional sales manager for Broadcast Electronics. Reach him at (571) 217-9386, or jbisset@bdcast.com. Faxed submissions can be sent to (603) 472-4944. Submissions for this column are encouraged, and qualify for SBE recertification credit.



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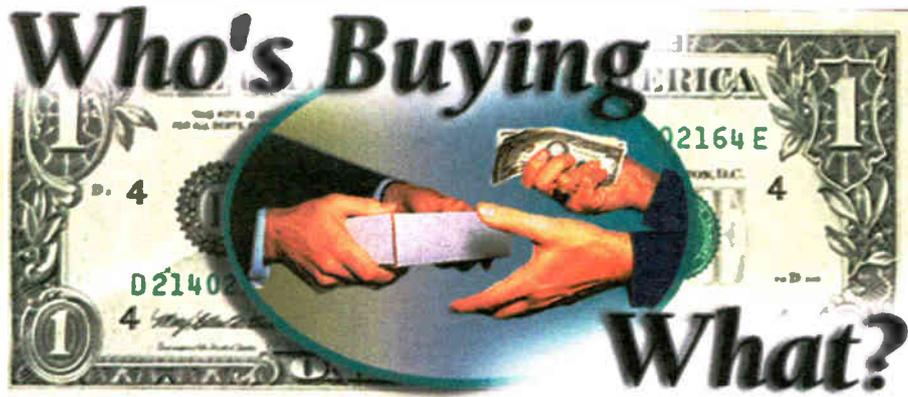
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World Radio History

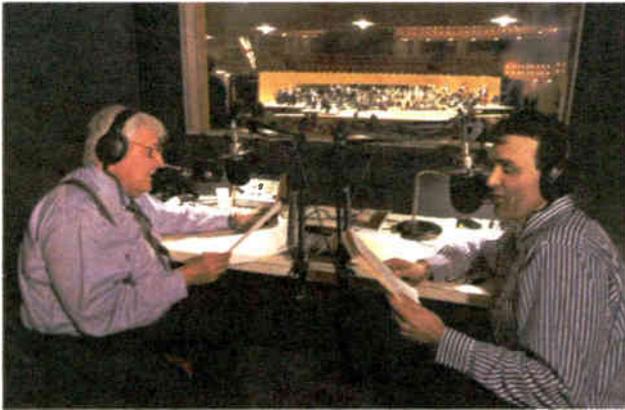


Two **Audio-Technica AT4047/SV** large-diaphragm cardioid condenser

mics were used by Robert Conrad, president of **WCLV(FM)** in Cleveland, and Mark Hart, head of **WLRN (FM)** in Miami, for the first live broadcast of the Cleveland Orchestra from Miami.

The broadcast inaugurated a three-week residency by the orchestra at the Carnival Center for the Performing Arts. Two **AT4073a** shotgun mics also were used, and the event was recorded by Bruce Gigax, recording and broadcast engineer for orchestra, using 24-bit

audio to hard drive for later replay on the orchestra's national radio series. ...



Robert Conrad (left) of Cleveland's **WCLV(FM)** and Mark Hart of Miami's **WLRN(FM)** use **Audio-Technica's AT4047/SV** large-diaphragm cardioid condenser microphones for the first live broadcast of the Cleveland Orchestra from Miami.

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Continental sold a **816HD-25**, 25 kW analog+HD system to **Regent Communications** station **KSII(FM)** in El Paso, Texas. The analog TPO of the system will be 25.0 kW. Earlier Continental sold **816HD-25** systems to **Clear Channel's KESZ** in Phoenix and **Univision's KLQV** in San Diego. ...

Bloomfield & Associates developed a plan that organized five **CBS Radio** stations in Baltimore into one workspace.

The project included selective demolition and improvements to a 28,000-square-foot single-story office building. Production and dubbing studios were arranged along a main interior hall. The broadcast facility includes 20 studios, tech support space, offices, conference rooms and lobby. Site work included communications relay connection, emergency generator, walks, paving, signage, plantings and lighting.

The company said its design fostered "community in a creative workplace" using spaces that connect departments and allow individuals to "share in the collective message of radio." Erich Steinnagel is regional director of engineering for **CBS Radio**. ...

RTÉ Radio in Ireland purchased two **Chromatec AM-xx** audio monitoring systems with remote alarm panels for use on its national radio output, which includes four themed channels for talk, pop music, classical and Irish language; the systems also serve North/South regional distribution of network outputs plus stereo and mono transmitters. The system from **Michael Stevens & Partners** allows visual monitoring and alarms for up to 32 pairs of audio channels on one frame. Fergus Carey is senior broadcast engineer in **Radio Technical Resources** at **RTÉ**. ...

The Museum of Television & Radio is upgrading radio facilities in New York and Beverly Hills, Calif.

DakingPlus donated **Daking** audio equipment for the **Ralph Guild Radio Studios** and the company principals are helping with the renovation project. **MRT** Director of Engineering **Doug Warner** is project manager.

According to **Daking**, the studios will be fitted with a **Daking Mic-Pre IV**, two **Mic-Pre/EQs** and two **FET compressor/limiters**. **SAS Audio** mixing consoles were selected; the **Mic-Pre IVs** will be integrated with the consoles for remote control via **RS-485**.

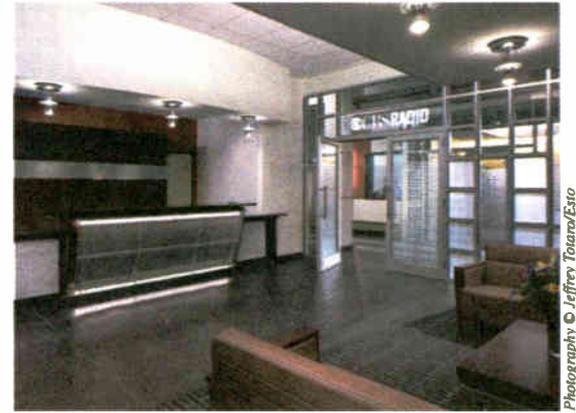
Digital audio at the radio studios allows changeovers from one operator or program to the next; the studios are used by visiting radio hosts and programs for remotes, with **Digidesign Pro Tools** systems, **Telos** phone hybrids, **CD** players and **360 Systems DigiCart** machines. **Bob Heil** of **Heil Sound** is supplying a **PR40** radio microphone and mic stands.

For the California branch, the renovation involves moving the studio to a street-side position, allowing passers-by to look in. The design of the New York studio remains largely unchanged. ...

Digigram said Swiss national state radio **Schweizer Radio DRS** is using the **UAX220-Mic** professional **USB** audio interface for mobile computing applications where recording is required.

Schweizer Radio's Jeremy Groves handles testing of audio equipment at **SRDRS**. ...

Clear Channel Boston expanded its **Wheatstone Digital Audio** network by adding a **Gen-6 Control Surface**, two **Gen-4** surfaces and additional **Bridge Router** frames.



CBS Baltimore lobby designed by **Bloomfield & Associates**

The gear will serve **WXKS(FM)**, "KISS 108." The previous **Bridge** system, consisting of four **G Series Control Surfaces** and associated router frames, will be integrated with the new gear to form a networked audio system serving new studios for **KISS 108** and **WJMN**, "JAMN 94.5." ...



WOCL's new Harris HD system in Orlando

CBS Radio in Orlando is using a new **Harris ZX3500HD+** system on **WOCL(FM)**, running **HD Radio** into a new **ERI** combiner at **Orange City**. **Jim Henry** is director of engineering/IT. ...

Americom Reno completed a seven-station, 10-studio move in Nevada. **Harris** handled the turnkey studio systems and consoles project.

The stations moved to a new two-floor facility over a 17-day period. The group needed more on-air and production flexibility and room to grow; it is planning **HD Radio** expansion.

The project included **VistaMax Envoy** studio networking and nine **NetWave** on-air consoles; wiring and integration services; system design, fabrication, installation and commissioning. Studios are outfitted with **Harris QuickLine II** studio furniture, with **SmoothLine** furniture in the talk studio.

Each **NetWave** console is outfitted with an external "World Feed" panel in a wooden frame, which includes cable con-

See **WBW**, page 19 ▶

WBW

► Continued from page 18

nections for television crews, bands and temporary audio sources like MP3 players and laptops. Harris also provided antenna systems for the group's microwave STL system. Americom Reno has nine antenna systems for STL delivery to five transmitter sites.

Bill Schulz is director of programming and operations for Americom Reno. ...

Dalet Digital Media Systems said **KQED Public Radio** is using DaletPlus Radio Suite.

The San Francisco station is the most listened to public radio station in the country. It will install DaletPlus Radio Suite across 75 workstations, including master control and production control rooms and four remote news bureaus.

"The upgrade is to integrate KQED programming and playout into one seamless production and broadcast environment so as to optimize on-air operations as well as multi-platform content distribution," the supplier stated. KQED has been a Dalet user for eight years.

Daniel Mansergh is DOE of KQED Public Radio. ...

BDSradio.com announced a group deal with **Journal Broadcast Group**.

BDSradio will be the provider of music monitoring services for all Journal Broadcast stations. Tom Land is director of radio programming for Journal. ...

Sandusky Broadcasting installed APT's Worldnet Oslo codecs on its Seattle STL/TSL in support of HD Radio operations in the market. The studio is in Bellevue while the transmitters are 17 miles away on West Tiger Mountain. George Bisso is director of engineering, who demo'ed WorldNet Oslo units through Bob Trimble at **RF Specialties of Washington**.

Separately, **Asahi Broadcasting Corp.** in Japan purchased APT WorldNet Oslo codecs. The equipment is used to deliver radio programs between facilities in Tokyo and Osaka. The company uses with a STM-1 (gigabit IP/Ethernet) link and chose APT for its audio over IP multiplexer.

ABC installed a WorldNet Oslo at each site, delivering four analog stereo programs from Tokyo to Osaka and one digital stereo program from Osaka to Tokyo. ...

Westwood One and **AccuWeather** extended their content and distribution partnership under which Metro Networks traffic content will be added to the free AccuWeather.com sites on the Web. Visitors to AccuWeather.com will have access to Metro Networks' RealTraffic interactive traffic service. The information also will be delivered to users accessing the site from mobile devices. ...

HHB said its FlashMic recorder/microphone is being used by news organizations include the **BBC**, **BSkyB** and **Capital Radio** in the United Kingdom; **NHK Tokyo** and **SBS South Korea** in Asia; **Al Jazeera** in the Middle East; **AFTRS Sydney Radio** and **AAP** in Australia; and **Danish Broadcasting**, **NRK Norway** and **Radio France** in Europe.

In Austria, broadcaster **ORF** has purchased more than 70 FlashMics, includ-

ing eight of the new DRM85-C cardioid models. ...

Airplay monitoring company **Mediabase**, which is part of **Premiere Radio Networks**, and **BigChampagne**, which provides technology and market research specializing in online music, signed an exclusive music monitoring and information agreement with **Radio One**. The two suppliers will serve the broadcaster's 71 stations. ...

Comm-Struction expanded its range of testing services for HD Radio projects that it does for clients.

Ed Bukont of the Maryland-based engineering services firm said it acquired **DaySequerra M2.2R** and **Belar**



Andrea Maiwald of ORF Radio, Information HD1 news department, with the HHB FlashMic. The Austrian broadcaster has purchased more than 70 FlashMics.

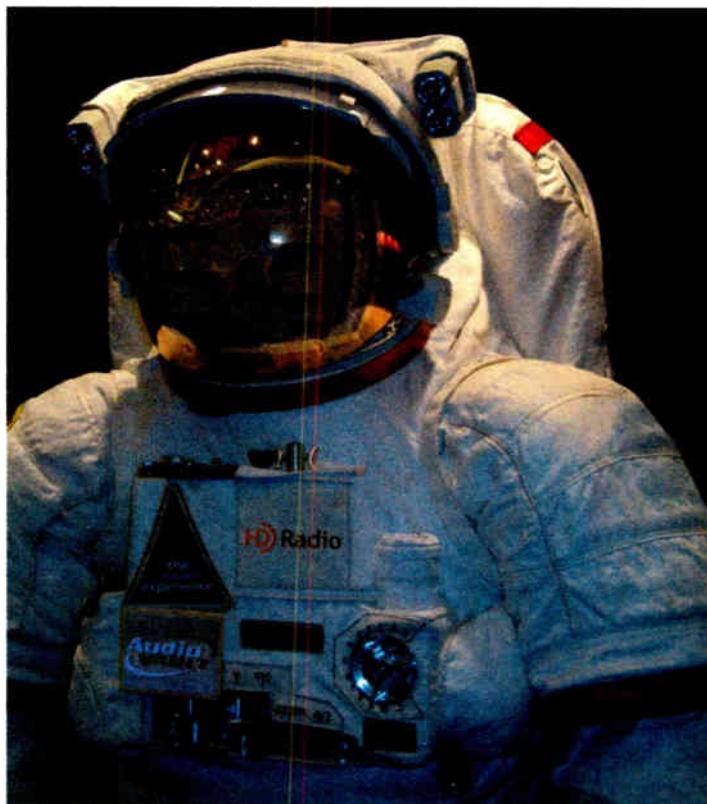
FMHD-1 HD Modulation Monitors. "The DS M2.2R, which allows for both

AM and FM measurement is becoming the standard item for many stations," Bukont said. "Our unit has Options 1 and 2 which allow for expanded measurement capabilities.

"The Belar FMHD-1 allows more in-depth analysis of signal quality including BER readings for FM. Our unit has the second decoder option. This unit is used with an external phase monitor. We have on order a well-regarded multi-channel AES/Analog audio level and phase monitor."

Users and suppliers, send news of recent projects and notable sales. E-mail radioworld@imaspub.com with "Who's Buying What" in the subject line.

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TRAVELS WITH SCOTT

by Scott Fybus

Most issues of Radio World are filled with pages of information about what's newest in the world of radio, and right-fully so.

But when Editor in Chief Paul McLane asked me to write about some of the more unusual and distinctive sites I've seen in my travels, my thoughts turned to some of the oldest radio artifacts still out there in the field.

What's the oldest transmitting facility still standing? I suppose there's an argument to be made for Reginald Fessenden's Brant Rock, Mass., tower, where that famous Christmas Eve 1906 broadcast may or may not really have happened.

But all that's left now of the 400-foot hollow steel tower erected a century ago is a hulking concrete base and some cracked insulators, and in any event it's a bit of a stretch to describe this as a true "broadcast" facility.



Brant Rock

Where Are the Oldest Tower Sites?

The towers of most of the earliest stations that were indisputably "broadcasters" are long gone.

You'll look in vain to find any physical remnants of 8MK/WJ in Detroit, or of 9XM/WHA in Madison. The Conrad garage where the earliest broadcasts of 8XK (later KDKA) in Pittsburgh was torn down a few years ago, and the original KDKA transmitter towers on the roof of Westinghouse's East Pittsburgh plant are gone as well.

Another early Westinghouse station still stands, though: atop the old Westinghouse factory in East Springfield, Mass., there are still two rusty towers that can be dated all the way back to September 1921, when a little station called WBZ went on the air out there.

The wire antenna that was strung between the towers remained in use until 1962, when WBZ finally shut down the Springfield transmitter, by then known as WBZA. (The WBZ license moved to Boston in 1931, and of course it's still going strong there.)

Another 1921 site is not only still standing, it was still in use until just a

Some Are Abandoned, Others Not, But All Provide a Door to History



WLW's 500 kW monster rig ...



... and its 1927 Western Electric.



The demolition of Frank Conrad's garage in Wilksburg, Pa., the original 8MK/KDKA, in March 2001.



The 1921 WBZ antenna towers in East Springfield, Mass.

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ing, pumping out 100 big watts every Wednesday evening and Sunday.

Alas, Grove City College eventually put a full-time FM signal on the air. The old AM transmitter failed, and despite offers from engineers in (and far beyond) western Pennsylvania to help keep the historic station on 1340 on the air, the college chose to surrender the AM license.

Midwest giant

To find the oldest AM site that's still on the air, we have to look to the Midwest.

See TOWER SITES, page 22 ▶

few years ago. WSAJ in Grove City, Pa., was born from an earlier amateur station at Grove City College, and it survived for decades as a relic of the dawn of American broadcasting.

Long after most college stations had gone full-time from vertical antennas, or been sold off to commercial owners, WSAJ carried on with a longwire "cage" antenna strung between two towers on the college's electrical engineering build-

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Tower Sites

► Continued from page 20

It was in late 1924 that WCCO in Minneapolis built a transmitter site "way up north" in Coon Rapids, Minn. Boasting a superpower output of 5,000 watts, the new WCCO site quickly made the station one of the giants of the upper Midwest.

The towers that supported a "T" antenna on the site are gone now, and the original 1924 transmitter building is now used only for storage, but WCCO still calls the Coon Rapids site home. Its 1931 transmitter building, constructed for WCCO's 50 kilowatt power upgrade, remains in use, feeding a vertical tower that replaced the longwire in 1939. (The current version of WCCO is the cover photo on my 2007 Tower Site Calendar, by the way.)

WCCO is far from the oldest 50 kilowatt site still in use. That honor goes to Cincinnati's WLW, which turned on its Western Electric rig at its Mason, Ohio site in 1927.

The Western is still there, and it's still more or less in working order — in fact, it was used on the night of Dec. 31, 1999,



KWG, Stockton. That's engineer Paul Shinn dusting the 1930 transmitter.

on the theory that it was inevitably Y2K-compliant!

WLW takes pride in a veritable museum of transmitter history at the Mason site, including a heavily-modified Crosley Cathenode 50 kilowatt transmitter and, of course, the somewhat canni-

balized remains of the 500 kilowatt transmitter (badged as an RCA product, but with substantial contributions from GE and Westinghouse) that WLW used on and off through the 1930s.

Another vintage 50 kilowatt site is WTIC, Hartford, Conn., which built its facility on Avon Mountain in 1929 and still uses it today. Of course, plenty has changed there in the meantime — the site is also now home to WTIC(FM), WWUH (FM) and two TV

stations, for one thing.

The self-supporting towers from which the original wire antenna was strung went away many years ago, but the tuning house that sat at the center of the antenna still stands, as do the bases of the old towers.

tower out back. The poles were shortened, but they still stand. Combined with the dusty old rooms inside the building that were once live-performance studios, they make the KWG site another wonderful relic of the earliest days of radio.

At the other end of California, Los Angeles isn't known for preserving its history, but the City of Angels can boast an AM facility that hasn't changed much since 1927, when a little station called KGFJ went on the air from the roof of the Odd Fellows Hall just south of downtown Los Angeles.

The old building now overlooks the I-10 freeway, the KGFJ calls gave way to KYPA some years back, and the format's now full-time Korean. But the antenna is still an inverted-L "hammock" strung between two towers up on the roof, and it works so well that KYPA ended up returning to this site after a brief attempt at duplexing with a sister station on a conventional series-fed vertical tower some years back.

This is far from a complete list of surviving early radio sites. I'm always eager to hear from engineers and historians who know of others. What relics of radio are hiding in your area?



WCCO's original 1924 transmitter building, constructed at the Coon Rapids site for the 'superpower' 5 kW signal, still sits on a corner of the property and is used now for storage.



WTIC's 1929 transmitter building, built to house the station's first 50,000 watt RCA transmitter.

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From scratch

While we're on the subject of those old center-fed dipoles, one other venerable site comes to mind.

KWG in Stockton, Calif., signed on in 1921, and it's been at its current site on the city's east side since at least 1930. The McClatchy engineers who put KWG on the air from this site did just about everything in-house, including building a transmitter from scratch.

That transmitter's still there, though no longer in use, and there's a patched-up hole in the roof right above it where the antenna once emerged. That antenna, strung between two painted wooden poles, lasted into the 21st century before it was replaced with a conventional steel



At KWG, these sawed-off poles once supported the antenna.

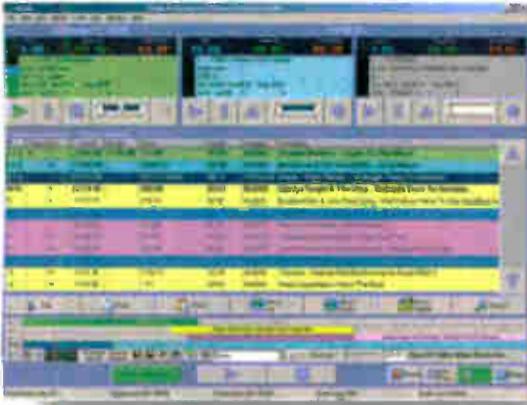
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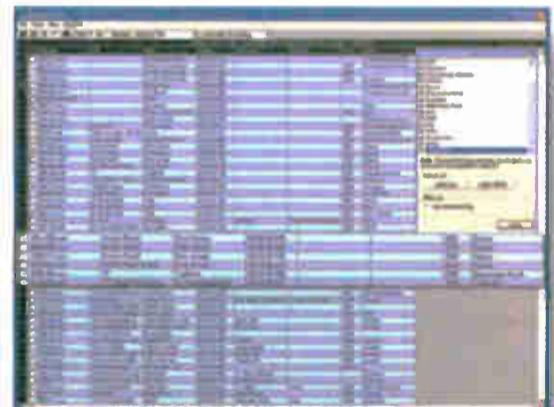
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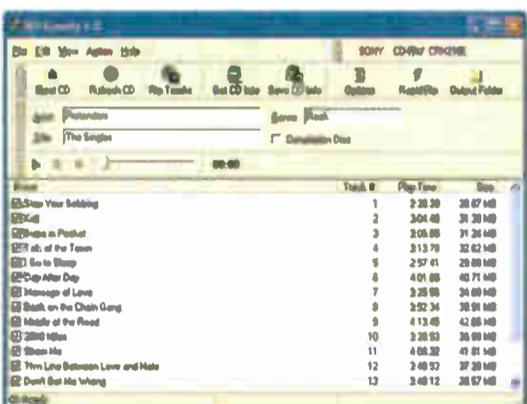
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AM IBOC

► Continued from page 1

that stations that seek HD interference relief — as allowed under the new rules in something of a compromise on the interference issue — will not find much sympathy if that interference falls outside the protected contour listening area.

To call the debate around the AM HD-R interference issue a firestorm would be putting it mildly.

"I'm avoiding real-time conversations with my colleagues as these conversations are absolutely 100-percent polarized," said Bobby Gray, operations manager and chief engineer for AM stations WHOO and WAMT in Orlando, Fla. WHOO is 19 kW daytime at 1080, and WAMT is 5 kW daytime/230 W nighttime at 1190.

"Either they are for this, or they are against this. I am choosing to read everything I can get my hands on about the subject and hold my opinions for Radio World interviews where I cannot be instantly (thrown) under the bus or in a four-hour IBOC-bashing session," Gray said.

"This is a hot topic, and the opinions are plentiful. If there are call letters involved, there is an opinion."

Positives, negatives

Gray is not against digital broadcasting for AM, despite his strong convictions about the current rollout.

"I really do like how it sounds," he said.

"Tom Ray's HD Web page (had) an audio file on it of him driving out of one

of the New York City tunnels, and when the audio switches to HD it is (like) night and day, and sounds better than AM has sounded in years."

But Gray has strong reservations about such issues as upper- and lower-channel interference with an IBOC AM HD transmitting system, such as the Ibiqity system being used by U.S. radio.

"If it (AM HD-R) would sound like this," he said, referring to Ray's sampling of WOR in New York, "without all the related issues ... I would be wearing an IBOC T-shirt 24/7."

Gray, whose company is all AM, said he is "shocked" at what he considers the industry ignoring the "elephant in the living room" regarding the noise and potential interference and only "chattering" about the positives of AM HD-R.

"There are positives. I agree," he said. "(But) there are some damn nasty negatives, and that just isn't being talked about."

NRSC standard abated

In particular, Gray does not understand why after establishing the NRSC AM preemphasis/deemphasis and broadcast audio transmission bandwidth specifications to reduce interference on analog AM in the late 1980s, the industry would seemingly go along with a digital system that he said creates data noise.

"Am I missing something?" Gray said.

Ray, who also is writing a book for Focal Press and the Society of Broadcast Engineers about HD Radio implementation, was part of the AM HD-R nighttime industry testing at WOR. In addition



Jerry Arnold in the WMGI(FM) control room.



Bobby Gray at his facility in Orlando.

**I'm avoiding
real-time
conversations with
my colleagues as
these conversations
are absolutely
100-percent
polarized.**

— Bobby Gray

Buckley Broadcasting has four AMs in the Hartford, Conn., area; two in Syracuse, N.Y.; one in Bakersfield, Calif., and one in Monterey-Salinas, Calif.

"The sky is not falling, though skywave reception will be iffy for the analog signal," Ray said.

Within the station's 0.5 mV/m coverage area, the analog is "pretty clean," he said, though there is "some hiss" under the audio on the fringe.

"Once you get into skywave territory, it's pretty much a crapshoot — but so is present-day skywave reception," Ray said. "In the test we did, it is interesting to note that skywave reception was just as noisy and unpredictable with the adjacent station's HD carriers off as it was with them on.

"So where's the problem?"

Ray said he does not believe the average listener is going to notice much difference, with the exception of "a few cases" that Ibiqity has identified.

"The AM landscape is changing, like it or not," Ray said. "Change sometimes is not comfortable."

Up but turned off

At Cox Radio, one of the industry's largest radio broadcast groups with 67 FM and 13 AM stations, and where HD is considered a priority, AM HD-R has been turned off at the three or four stations that are outfitted, said Sterling Davis, vice president of engineering.

"Once we had several of our stations up and working, we have turned around and shut them off," he said.

Davis explained that Cox discovered that radios in Chrysler and Mercedes

automobiles are designed with wide front ends and that there is "some faint buzz" in the background digital carriers.

"We are not willing to compromise signal quality on those products," he said.

The problem, Davis said, is with the digital scheme of the Ibiqity system.

The respective RF chains at the Cox stations have been investigated by the transmitter supplier Harris and by Ibiqity.

"Ibiqity acknowledges the problem and claims to be working on a solution," he said. "So until Ibiqity solves that issue, we are keeping those stations off the air."

Vicki Stern, director of corporate communications at Ibiqity, told RW "a few" car radios, mainly in the Daimler-Chrysler family, were produced with "wide-band" receivers, which picked up a broader portion of the spectrum than standard analog radios.

"Unfortunately, that included some of the spectrum used by HD Radio broadcasts, therefore, the hum," Stern said. "To our knowledge, a few wide-band receivers were sold, and these radios are no longer being manufactured. Therefore, this is not a serious issue."

Davis said he is unaware of a similar situation with other radios on the market. But even so, he said, "We are not willing to compromise the existing stations for the sake of a very few listeners."

A proponent of AM HD-R, Davis said he believes implementation is going well.

See AM IBOC, page 25 ►

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AM IBOC

► Continued from page 24

"I think it is probably a B+," he said. "It makes a difference when you have it on."

Davis said the new technology allows stations to have new avenues and options for revenue.

"I don't think every station will automatically avail themselves to that option," he said, "or they may choose to do something else. (But) it certainly makes the options available."

No doubt of 'impact'

Cox is the owner of clear-channel WSB in Atlanta, a well-known station heard at nighttime via skywave. Cox took no position during the FCC IBOC proceedings on whether to lift the nighttime restrictions.

Davis said nighttime AM HD-R will have an impact: interference.

"It is going to be case-by-case related and station-by-station related," he said. "I don't think there is a universal answer. The answer is that many stations will be impacted. The question that remains, and why we are not taking a position on it: Does it hurt those stations or not?"

Davis said nighttime broadcasting will particularly affect small stations that may not cover their whole markets that well.

At Crawford Broadcasting, which owns 15 AMs and 11 FMs, the AM HD Radio rollout is well underway, with all but two AM broadcasting in digital, and those are expected to go online next year.

"Within our company, we restored several AM stations to music formats because we can now offer good fidelity via HD Radio," said Cris Alexander, director of corporate engineering for Crawford and an RW contributor.

While pushing ahead with AM HD-R, Alexander, like Davis, said the impact will be interference at a certain level.

Once you get into skywave territory, it's pretty much a crashshoot — but so is present-day skywave reception.

— Tom Ray

"There will be virtually no impact within the 2 mV/m 'metro grade' and very little within the 0.5 mV/m protected contour where no grandfathered overlap exists," Alexander said.

But, he continued, there "likely" will be "some" interference outside the protected contour, "perhaps in areas where some stations now enjoy 'coverage' but are not entitled to protection from interference."

Alexander said the situation at night could be different.

"But again, I anticipate very little impact within stations' 'interference-



Sterling Davis of Cox Radio

free' contours," he said.

The nighttime impact likely will come, Alexander explained, in areas outside the "interference-free" (50 percent RSS) contour, especially for stations that have secondary nighttime service — for example those stations that are otherwise Class D and that do not receive protection from interference at night.

"But this remains to be seen," he said.

Some exceptions

One exception to all this, Alexander said, is where there is a high-power third-adjacent channel AM HD-R within the primary coverage area of another station.

Even if that digital station has its +/- 25 kHz spectral regrowth products down 65 dBc or lower, he continued, those can produce a high field strength within the other station's coverage area

within a few miles of the digital station's antenna, effectively "poking a hole" in the affected station's coverage area.

"In such situations, stations will have to cooperate by reducing digital sideband power or installing filters to reduce radiation of the unwanted products," Alexander said.

Car receivers

Like Davis at Cox, Alexander has run into problems with automobile radios, specifically with aftermarket units.

Hondas in particular have "poor" AM antennas, he said, usually a rear-window horizontal wire incorporated into, but electrically isolated from, the defogger. These antennas do not provide enough signal for proper AM HD-R decoding of any but the strongest signals, he continued.

See AM IBOC, page 27 ►

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ROOTS OF RADIO

Sarnoff Library Recovers From Flooding

With the Help of Donations, Historians Dry Off a Collection of Valuable RCA Papers

by Scott Fybush

Alex Magoun was already having a pretty bad weekend when heavy rain began falling early on the morning of Sunday, April 15. The director of the David Sarnoff Library in Princeton, N.J., had stopped home between conferences in Hartford and Philadelphia for the night and he was coming down with a nasty cold.

The rain kept coming down all day Sunday, and Magoun knew some of it would be flooding the basement of the building where many of the library's records were stored. He wasn't up to the challenge of moving them without another night's rest. In previous floods, only a few inches of water had entered the basement, and the material stored there was elevated on pallets or filed above the bottom drawers of the filing cabinets.

So on Monday, after a three-mile drive to the library that took an hour and a half because so many roads were closed from the flooding, Magoun wasn't expecting the scene that greeted him when he finally arrived at his office.

"I was more than a little stunned to see 20 inches of water in the room," he recalled.

RCA manuals

After getting a pair of hip waders to enter the flooded room, Magoun began to assess the damage.

The space was called the "reports room" after the main collection stored there: the complete files of RCA's Princeton Labs from 1942-1960, which were the core of the library's holdings when RCA established the facility in 1967.

"That research covers color TV, the

beginnings of transistor research, traveling wave tube development, and working on the beginnings of a consumer fax system," Magoun said.



One of the 40-foot-long vacuum chambers at Document Reprocessors' Middlesex, N.Y. facility, where the Sarnoff Library materials were salvaged.

Additional sets of irreplaceable materials had been added to the collection over the years as RCA began closing down divisions in the 1970s and '80s, including what Magoun described as the "most complete set of manuals" from the RCA Broadcast Division, spanning the history of broadcasting from 1930-1984.

The flooded area also contained artifacts and research notebooks from RCA's Lancaster, Pa., color picture tube factory and reports from other RCA lab facilities in Camden, Morristown and Somerville, N.J., Burlington, Mass., and

Van Nuys, Calif., including most of RCA's satellite and space research from the company's later years.

As RCA divisions closed, the library salvaged as much as it could as quickly as possible; many files hadn't yet been fully cataloged or stored archivally.

"This material was on wooden pallets, typically stacked two pallets high, with plastic sheeting underneath for the more minor levels of flooding we'd had," Magoun said.

Rising waters, rising costs

Unfortunately, the pallets and plastic began floating in the high water of the April flood, and eventually they tipped over.

"Just about everything landed in the water," Magoun said.

He quickly contacted the New Jersey State Archives and the Special Collections division at the nearby Princeton University library for recommendations on what to do. They referred

that kind of money."

So he turned to the broadcasting community, putting out an urgent e-mail appeal for funds to help save the library's archives, offering the opportunity to sponsor the restoration of a single report for \$25, a carton of documents for \$100 or a cabinet full of documents for \$1,000.

'Patrimony'

While Document Reprocessors was loading the soggy reports into a freezer truck for the trip to its upstate New York facility — where a patented vacuum process sublimates the frozen moisture directly to gas, producing dried, flattened papers — donations began pouring in from industry associations, fellow historians, former RCA employees and even from members of the Sarnoff family.

Magoun credits Tom Peterson of the Antique Wireless Association with getting the ball rolling with an early \$5,000 donation, followed by an IEEE contribution of over \$11,000 and more than a dozen \$1,000 donations, including contributions from NBC and the Antique Radio Club of Illinois.

He also credits Document Reprocessors for cutting its usual rates significantly to help the library. Because the library is a nonprofit institution, the company gave it a 50 percent discount from a bill that eventually approached \$120,000, plus a further discount to \$50,000 if the library was able to pay immediately upon delivery of the restored material.

With a \$5,000 gift from the Olsen Foundation, Magoun was able to meet the goal, and the material returned to Princeton on May 16.

"This is the patrimony of RCA to the twentieth century," Magoun says of the collection, nearly all of which was salvaged and remains usable to researchers.

Now that it's back home and dry, he's determined to make sure it is never again threatened by rising waters.

"You don't want the stuff back on pallets, and you don't want it in filing cabinets," he said.

The Sarnoff Corporation, which owns the former RCA complex where the library is located, agreed to provide a new storage area above ground for the material, which the library hopes to

Irreplaceable materials included 'the most complete set of manuals' from the RCA Broadcast Division, spanning the history of broadcasting from 1930-1984.

him to several document restoration companies; within a few hours, the library accepted a bid from Document Reprocessors of Middlesex, N.Y.

"They were much more aggressive and forthright (than other bidders) about wanting to help us," Magoun said.

But as he measured the flooded material and confirmed that the library's insurance didn't cover flooding, the initial panic over the wet material gave way to a new worry: how to pay a restoration bill that was quickly rising past the initial \$25,000 estimate.

"When it became a \$60,000 bill," Magoun said, "it was a little frightening for our board, because we didn't have

house in archival boxes properly filed on compact shelving.

That means more fund raising, and the library's board has agreed to keep its campaign going to make sure enough money is available to do the job right.

The result, Magoun hopes, will be an archive that's much more accessible to researchers.

"Who knew that such a historic disaster could point to such a promising future?" he asked.

Donations to the David Sarnoff Library can be made at its Web site, www.david-sarnoff.org, or to the David Sarnoff Library, 201 Washington Road, CN 5300, Princeton, N.J. 08543-5300.

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AM IBOC

► Continued from page 25

Ibiquity, in cooperation with its receiver manufacturing partners, will have to address this by some means, providing preamps for such installations or increasing receiver sensitivity, Alexander said.

A "well-engineered" AM HD-R station will provide reliable digital coverage out to roughly the 1 mV/m contour in most cases — no grandfathered overlap or local interference.

"This is adequate, but without a good external antenna, it may take 30 mV/m or more to achieve acceptable digital reception performance," he said.

Stern said Ibiquity suspects the installer bypassed the amplifiers for the AM antennas in the Honda cars when factory-installed head units were replaced with aftermarket products.

"If installed completely, the aftermarket radio should properly decode the HD Radio signal," she said. "But, again, we do not know which radio was installed in which configuration of a Honda automobile to be certain that this is the issue here."

Alexander said his group has searched for the antenna amplifier and cannot find it or how it is powered — or if it exists. Alexander said they are working on other aspects to try to solve the situation.

Trouble ahead?

Some AM HD-R opponents see nothing but trouble ahead for the band with the current digital scheme.

Jerry Arnold, director of the Terre Haute, Ind., market for Midwest Communications that owns one AM and two FM's there, said AM IBOC will be the "death knell" for small to medium

markets if the FCC ever goes as far as mandating the system, which it did not do in its recent IBOC rules.

His station, WPRS(AM), is a 1 kW daytime/250 W nighttime nondirectional at 1440 kHz.

"It will end up costing listeners, since the 'big boys' who have IBOC will 'bleed' on the little guys, causing intense interference with result of losing listeners for the little guys," he said.

Arnold, with 40 years experience in broadcasting, also does not think much of AM HD-R as it currently stands.

"The 5 kHz 'kinda-analog' remnant, in many cases, reminds me — and to others to whom I have spoken — of a telephone conversation," he said. "The first- and second-adjacent 'rushing noise' in a standard receiver blankets a lot farther away than one might think."



Contract Engineer Kevin Berlen

Kevin Berlen, a 23-year engineering veteran and a contract engineer for a 250 W daytimer and a 1 kW day/250 W nighttime station, is in the same camp.

"The biggest problem I have with the technology is the total disregard for the NRSC curve that we have been operating under for many years now," he said.

The NRSC system implemented to help reduce AM interference is not perfect, he said, but it mitigated a great number of the interference issues.

"AM IBOC totally blows this foundation away," Berlen said. "It is astonishing to me that AM stereo was implemented over two decades ago and with minimal impact on adjacents."

"With today's technology, we should have been able to do better."

Alan Carter is the former editor in chief of Radio World International.

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SINCE 1963

AMERICAN SHORTWAVE

WCAU Used Shortwave in Philadelphia

Between the Wars, the Station Launched a Shortwave Operation Under Call Sign W3XAU

by **Adrian M. Peterson**

This is the third in an occasional series about shortwave broadcasting stations in the United States and its territories, published in cooperation with the National Association of Shortwave Broadcasters. Some stations are almost forgotten, others can still be heard today.

During the radio era before World War II, many broadcasters in the United States and abroad sought to establish shortwave relay stations in an endeavor to give them wider coverage.

At the time, television was more a concept than market reality, and FM radio as we know it was still in the future. The medium-wave band was not overcrowded, though the medium-wave signal generally gave only local coverage. However, shortwave transmissions could give wide-area coverage within the country and even international coverage on a wider scale.

Many medium-wave stations in the United States established shortwave relay transmitters during the late 1920s and 1930s to carry programming to distant listeners. In fact, some radio historians estimate that there have been somewhere around 100 shortwave stations on the air in the United States during the past 80 years; probably more than half of these were active in the pre-war era.

One of the shortwave stations that enjoyed a high reputation during the early years was in Philadelphia. Engineers at AM WCAU constructed the transmitter for this collocated shortwave station, which was licensed by the Federal Radio Commission under the experimental call sign W3XAU.

Ambitious

A casual glance would seem to indicate that this was an amateur radio station, but that is not the case.

The X in a prewar call sign indicated an experimental station, either amateur or professional. Station W3XAU was a professional station, relaying the programming from medium-wave WCAU.

It was in 1922 that the Philadelphia Radiophone Company had launched medium-wave station WCAU as a small operation in the back room of a radio shop in Philadelphia. Ten years later, following a couple of intermediate migrations, a professionally built studio complex became the new home for WCAU; this was the first building in the United States constructed specifically as a radio station. The modern facility was located at 1622 Chestnut Street.

At the same time, the WCAU engineering staff installed a new 50 kW medium-wave transmitter in a new building at Newtown Square. The initial broadcast from this grand new WCAU was Sept. 19, 1932. At this stage William Paley owned WCAU and looked upon it as the flagship station for his fledgling CBS network.

Early in 1930, the staff installed a small, locally made 1 kW shortwave transmitter with the call sign W3XAU with the regular medium-wave unit in Philadelphia.

WCAU personnel believe that this was the first license issued by the FCC for an international shortwave broadcast station as a commercial operation.

The main purposes for adding a short-

sign chosen to replace W3XAU was WCAI. This call sign for the shortwave outlet proved temporary. According to information in Time magazine, FCC news releases and several other sources, "WCAI" was in use for a little less than two weeks beginning in mid-August of 1939.

The FCC subsequently ruled that all



'The Spirit of WCAU,' a pamphlet from the 1930s, courtesy of Charles A. Higgins.

wave transmitter as a slave relay of the medium-wave unit were to extend the station's coverage area, even internationally, and to provide a program service that could be relayed locally by distant medium-wave stations. Management saw this additional programming coverage as an incentive for advertisers to purchase time on such stations.

Two years after the Newtown Square facility was inaugurated, engineers rebuilt the 1 kW shortwave transmitter and installed it alongside the huge 50 kW medium-wave unit. Four years later, they re-built the transmitter to 10 kW capacity and two V-type antennas were erected for coverage into Europe and South America.

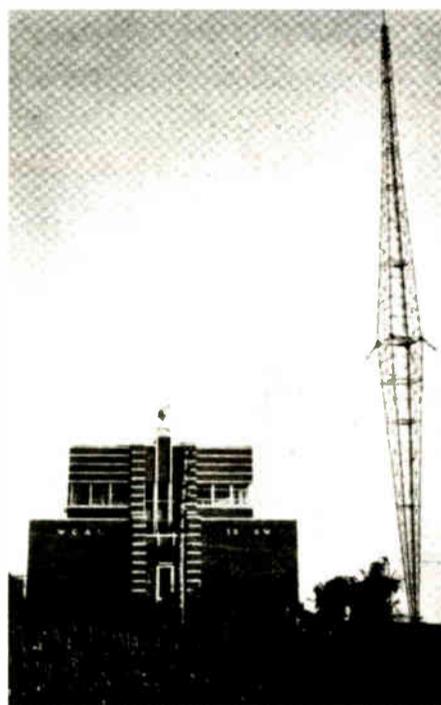
WCAU became even more ambitious for an international outreach with the erection in late 1938 and early 1939 of two large curtain antennas for coverage of those two continents. At the same time, the station made a request to federal licensing authorities for 50 kW operation on shortwave. On several occasions in the late 1930s and early 1940s, they had already submitted similar applications, but on each occasion the request was denied.

Regularized

With the threat of war spreading in Europe in 1939, the FCC took a hard look at the international shortwave scene in the United States and issued a set of new rules.

The edict, issued on May 23, 1939, required that shortwave call signs should be regularized; power should be increased to 50 kW; and directional antennas should be installed.

The ruling provided time for consideration and negotiation regarding desired call letters. Initially, the first new call



The WCAU-W3XAU transmitter building at Newtown Square, Pa., around 1930, from a QSL postcard.

were in place. And the power increase to 50 kW? They had already applied on several occasions previously and been denied.

However, there was another factor to consider: CBS had a large new shortwave station under construction at Brentwood on Long Island.

Just prior to World War II, CBS owned and operated two shortwave stations, the 10 kW W3XAU in Pennsylvania and another 10 kW unit, W2XE in Wayne, N.J. However, with the escalation of the conflict, CBS was involved with two large additional shortwave stations; Brentwood as well as Delano in California.

Initially, the concept was for WCAB in Philadelphia to supplement Brentwood. However, in view of the FCC power restriction, CBS finally decided to close the Pennsylvania station in favor of the large new facility under development on Long Island.

The 10 kW W3XAU-WCAI-WCAB at Newtown Square was switched off at midnight on Dec. 31, 1941.



WCAU studio building at 1622 Chestnut Street in Philadelphia, seen on a QSL postcard postmarked 1935.

New Year's Eve

Programming from the Philadelphia shortwave station initially was a tandem relay from medium-wave WCAU, though separate identification announcements were given live over the air.

However, when the station became a genuine international broadcaster, much of the scheduling specifically was prepared programming for the target areas, Europe and Latin America. Programming in foreign languages was taken on relay from W2XE in Wayne, and programming in English was also taken live from the CBS national network. This

See SHORTWAVE, page 29 ►

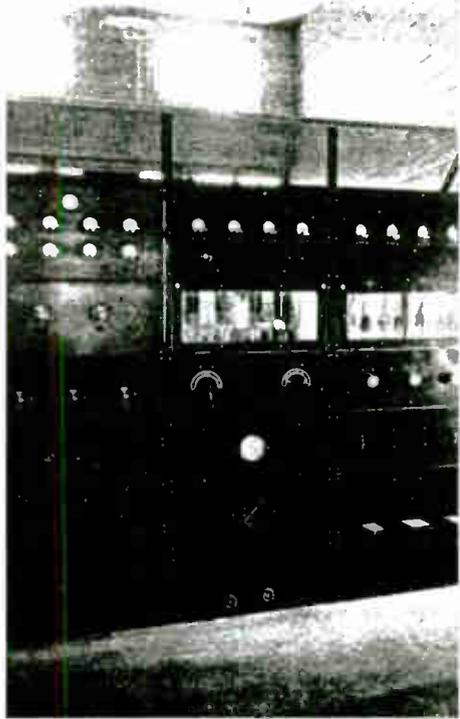
Shortwave

► Continued from page 28

shortwave station was heard frequently throughout the Americas, in Europe and in the South Pacific.

The 50 kW shortwave transmitter WCRC at Brentwood was inaugurated on Jan. 1, 1941. Just one year later, the 10 kW W3XAU-WCAI-WCAB at Newtown Square was switched off. This nostalgic event occurred at midnight on Dec. 31, 1941.

However, that is not the end of the story. The large new international shortwave station at Brentwood was taken



Shortwave transmitter W3XAU in the 1930s, co-sited with AM-MW transmitter at Newtown Square, on another QSL card from W3XAU.

into service with OWI-VOA (Office of War Information & Voice of America) programming less than two months later, on Feb. 24, 1942 and the 10 kW unit in Philadelphia was packed up and sent over to England for use by the BBC in London.

How interesting it would be to find out what happened to this famous American transmitter while it was in service over there.

Dr. Adrian M. Peterson is a board member of the National Association of Shortwave Broadcasters. He was born in South Australia in 1931; since 1944 he has written several thousand articles on radio history, which have been published in 25 languages. He is advisor to the program "Wavescan" and coordinator of international relations for Adventist World Radio.

MARKET PLACE

Kaltman Has Handheld RF Spectrum Analyzer

Kaltman Creations has expanded its line with a handheld RF spectrum analyzer, the Spectran HF4040.

The company calls it "the world's first low-cost, handheld, field RF spectrum analyzer that addresses channel selection, interference identification, RF system monitoring, testing and exposure limits."

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"The increased challenges of identifying interference and finding available frequencies are in some cases becoming unmanageable," the company's Mark Kaltman stated. "One area of particular concern is within the UHF band where wireless microphone users are getting 'squeezed out' with the FCC's UHF band reallocation and the digital television UHF

mandate."

Features include standard frequency sweep readings and signal strength readouts, as well as display markers that show the three strongest peaks and their associated frequencies during each sweep. A Zoom feature allows the user to narrow the frequency span to 100 kHz. The system will also do extended data logging and long-term Peak Hold recording.

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Anatomy of a Split Decision on IBOC

Reaching FCC Consensus on 'Final' Digital Radio Rules Required Leaving Some Key Items Until Next Time

In the Aug. 1 issue we began an examination of the items that remain unsettled in digital radio rulemaking, focusing first on the issue of subscription radio.

We'll continue with consideration of the other open matters regarding IBOC.

One point that came as a surprise to some was the question of whether radio broadcasters' disclosure obligations will be "enhanced." While this is probably a worthwhile discussion, it is somewhat oddly placed in the IBOC rulemaking process.

In any case, it seems inevitable that this would come up in some radio broadcast proceeding, and such revisions might actually make compliance easier in the end.

This is particularly true if it involves broadcasters placing such data on their Web sites rather than having to maintain a hard-copy file.

Politics vs. technology

More contentious are the issues of broadcasters' public interest responsibilities and diversity on new multicast channels.

Disagreement over this point among the commissioners was the main reason the Second Report & Order (FCC 07-33) was held up for so long. Ultimately the minority on the point — Democratic Commissioners Michael J. Copps and

Jonathan S. Adelstein — agreed to voice their grievances in somewhat unusual "partial dissents" contained in their supplemental statements to the proceeding, and the ruling was issued in late May, some five years after the first R&O.

The concerns of the dissenting commissioners here are not simply semantic. From a political perspective, it is difficult to resolve the very limited access to broadcast spectrum offered to new entrants (such as with LPFM) with the new ability of incumbent broadcasters to multicast.

While the technically savvy can understand why simply slicing up a multiplexed bit stream into multiple compressed signals is different than squeezing new RF channel allocations into an already crowded spectrum band, these distinctions are lost on most policymakers.

And ultimately, from a pure policy perspective, it doesn't matter anyway. To those who would advocate greater diversity of the airwaves, the situation clearly is a case of the rich getting richer, with no benefit flowing to the disenfranchised.

To these sectors, the unfairness is obvious when comparing how limited LPFM authorizations are, for example, with how easily incumbents gain multiple new channels via IBOC multicasting. In fact, even

though IBOC technically occupies no new bandwidth, the dissenters repeatedly refer to the service as "digital spectrum" or "free use of additional spectrum made possible by digital technology."

In his dissent, Commissioner Adelstein cited how few U.S. broadcast stations are in the hands of women and minorities (current station ownership or control stands at about 93 percent white male), a level of diversity that he declared "embarrassingly and unjustifiably low." He characterized the new IBOC rules as "another missed opportunity to promote diversity, another dream deferred."

It seems clear that the book is still quite open on digital radio rules.

Meanwhile, Commissioner Copps questioned the impact of IBOC multicasting in the context of broadcast ownership, saying in his dissent, "I hope we'll look at this (multicasting) before anyone suggests loosening our ownership limits." He also asked, "Does a company really need to own eight radio stations in a market when it has the ability to multicast?"

Other concerns

Localism was also on the commissioners' minds, and here again the dissenters criticized the Second R&O for not adequately specifying requirements for maintaining or increasing local content in new IBOC services.

Adelstein criticized the commission's own Localism Task Force in his statement, lamenting its inability to as yet complete a report on the status of localism in U.S. broadcasting, a process it began in 2003. He felt the report would have been useful in writing the new IBOC rules, and encouraged the commission to complete the study soon.

Copps also questioned the proceeding's leaving open the rules on subscription IBOC services to another round of rulemaking, wishing instead that the commission had settled on public interest obligations, indecency requirements and fees before issuing the Second R&O.

Regarding that Second Further Notice of Proposed Rulemaking included in the proceeding, Adelstein also took issue with its lack of directed questions on how to best implement public interest obliga-

The Big Picture



Photo: Gary Hayes, BBC

by Skip Pizzi

tions on digital radio, and how to establish policy enforcing those obligations while serving both broadcasters' needs and the public interest.

Even the statements by the Republican majority of the commission expressed hope that broadcasters would utilize multicasting to promote localism and diversity of content. Left unsaid but perhaps implied was what might happen if broadcasters failed to adequately deliver on this expectation.

Commissioner Robert M. McDowell summed up the overarching message of the proceeding in this area with his statement's recommendation to "study how multicasting evolves on its own and under existing public interest obligations before we try to anticipate or micromanage the market," along with his belief that "the proper course now is to allow these nascent digital radio services to develop in the marketplace without heaping additional regulations upon them."

He added, "My guess is my dissenting colleagues will be pleasantly surprised."

Yet even McDowell's lighter regulatory touch was countered with the admonition that "the commission will watch market developments carefully, mindful of our role to adopt new rules should they become necessary."

He and other commissioners also noted that they will observe with great interest the comments received in response to the Second FNPRM. Thus it seems clear that the book is still quite open on digital radio rules in the United States. The possibility of a different political makeup on the commission by the time a Third R&O is written only adds to the uncertainty of what truly final IBOC rules will look like.

Next time we will conclude our look at the frontiers of IBOC regulation with an examination of the conditional access system proposed for use on subscription services by Ibiqity Digital.

Skip Pizzi is contributing editor of Radio World.

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Name: Donna Lee Halper
Occupation: Media historian, consultant, educator
Accomplishments: Ph.D. candidate, Univ. of Massachusetts; author of three books and numerous articles; award-winning teacher and consultant.
Hero: One is Eunice Randall, first woman announcer in Boston (1919-25) and first woman radio engineer
Favorite Station of Yore: WMEX Boston and Arnie "Woo Woo" Ginsburg with his bells, whistles and sound effects and great personality. He didn't have a big deep top-40 voice yet he proved that if you're entertaining, people will like you.
Favorite Quote: Micah 6:8. "For what does God require of you but to do justly, love mercy and walk humbly with your God."
Other: I am the advocate for an adult with autism and I have been a Big Sister. I collect stamps and old radio memorabilia. I discovered the rock group Rush, who dedicated their first two albums to me.

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iSEEradio Seeks to Engage Listeners

With a Handful of Clients, WhiteBlox Hopes For Bigger Things for Its Technology for Radio

by Donna L. Halper

Ever since commercial radio's earliest days, listeners have wondered what their favorite announcers looked like and what went on behind the scenes during their favorite shows. Devoted fans might try to get tickets to sit in the studio audience and watch a live broadcast.

Today, thanks to modern technology, anyone with a computer can see as well as hear what's on the radio.

One company involved in video streaming is iSEEradio, a subsidiary of WhiteBlox, which provides Internet-protocol television, or IPTV, technology for radio.

The company was founded in 2003 by entrepreneur Greg Demetriades, who serves as the CEO. The parent company, also founded by Demetriades, is Continental Vista Broadcasting Group Inc., with main offices in Texas, not far from Houston, as well as branch offices in New York, Los Angeles, Orlando, Minneapolis, Milwaukee and Latin America.

Demetriades, 46, is a long-time fan of radio. He grew up in Cleveland and has pleasant memories of listening to his favorite stations.

"I can remember when there were radio station bumper stickers on a lot of the cars, and your social life revolved around going to clubs and seeing your favorite DJs."

He never went into radio; but while working in the travel industry in the 1980s, he became involved with creating radio commercials for the travel agency he owned.

He was especially interested in the technological side of broadcasting, since he wanted his commercials to sound unique. As the Internet grew more influential, he also became interested in streaming media.

Interactive

When the technology market seemed to die out in Cleveland, he sought out a city where technology was still going strong. That led him to Houston, where he moved in 2001, preparing to start a company that would focus on his two interests: streaming media and radio.

Demetriades still believes in radio, but these days it seems to him that young people are not as excited about it. That's where iSEEradio comes in. In a media environment where YouTube and Myspace are popular, he says

iSEEradio will make listening more fun by making it more interactive.

Program directors will recall experiments with visual radio such as CU-SeeMe in the 1990s. But the state of the art and the bandwidth of earlier days made obtaining a quality visual experience difficult.

Today that's no longer a problem, and WhiteBlox can deliver high-quality streams. But the company touts advantages to iSEEradio beyond the quality of the video.



Greg Demetriades

online communities, where fans can participate in social networking while enjoying the music and watching how the jocks do their show.

Among the earliest believers in iSEEradio is Jeff Vettrus, the regional director for online at Clear Channel Communications' Orlando cluster.

He is in charge of a territory that includes Florida, Mississippi and Alabama; he became interested in WhiteBlox after it was recommended to him by sister station 94.5 KTBZ, "The Buzz" in Houston. In 2005, he made the move.

He has been pleased with the results.

"Visitors who come to my Web sites won't just find our station phone numbers and DJ bios. They can immerse themselves in a rich multimedia experience that include music videos, news on demand, live streaming, video clips of the latest jock stunts and now, with the service that WhiteBlox provides to my stations, live in-studio multi-cam video."

Thanks to iSEEradio, he says, there has been a dramatic increase in site traffic, especially at Orlando's WTKS(FM), "Real Radio 104.1."

Since the station began using iSEEradio, "nearly 30 percent of our audience visits the station Web site and REAL TV is a big part of the reason why. Listeners love to watch the antics in the studio and discuss the show with other listeners via the built-in chat room."

Vettrus has also found the product can enhance station promotions. "We often take the setup on the road for live reality shows. Our remote encoder allows us to instantly fire up a high-quality remote Web videocast from anywhere we can get online. That has let the listeners see events live that in the past we could only describe, and we have smashed Web traffic records.

"For example, there was 'Tiffany's Slumber Party', where five female contestants spent 30 hours partying

See WHITEBLOX, page 34 ▶



iSEEradio is in use at KTBZ, 'The Buzz' in Houston.

"What's unique about [it] is that our focus is on engaging the viewers," Demetriades says. "They can do more than just watch.

"For example, we offer a live multi-angle camera, so viewers can become their own director by switching to an angle they prefer. And we have simultaneous live chat. They can send their friends an instant message and tell them to log on, so they can all talk about the show while they are watching it."

The benefit to the stations is the ability to create

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WhiteBlox

► Continued from page 33
with Tiffany (a member of The Monsters in the Morning), all vying to win prizes.”

NTR

Vettrus also found that iSEERadio became a source of non-traditional revenue for his stations, although he doesn't state how much.

The flexibility of WhiteBlox technology has enabled the staff to create interesting remote broadcasts for clients, and then post videos after the event. Among the ways his Orlando stations have used this approach were shows of the “Big Brother” and “Fear Factor” type, a live broadcast of laser hair removal at a client's office, 24/7 video of an “extreme home makeover” and live backstage interviews at rock concerts.

The reaction to iSEERadio pleases Kenny Fenton, vice president of sales for WhiteBlox. He says he has seen a growing number of national sponsors become believers.

“We've got Bud Light, Time-Warner and McDonalds,” he says, “and local sponsors too. This really brings more people to the Web site. The stations that are using it are having great success with it.”

iSEERadio is on seven stations with seven more pending; the company expects 20 more contracts in the near future, including some from broadcast owners other than Clear Channel.

As for how the announcers feel about suddenly being seen as well as heard, Fenton says they've been having fun

with it.

At KTBZ in Houston, the first Clear Channel station to use iSEERadio, Rod Ryan does the morning show. Fenton recalls that “when they began streaming his show, he was heavyset and didn't pay a lot of attention to style. But he was getting so much recognition that when people would see him in person, they would start commenting on his shirt or whatever he was wearing in the studio.

**Viewers can become their own director
by switching to an angle they prefer.
And we have simultaneous live chat.
They can send their friends an instant
message and tell them to log on.**

— Greg Demetriades

“Pretty soon, Rod started losing weight and getting in shape. It was like being on TV every day. It gave him more social status, a visual presence. In fact, some of the DJs have gained more confidence from it.”

There are other systems, such as Roo, that can offer streaming video to radio stations, but Demetriades believes none of his competitors offers all the features that WhiteBlox does.

He is certain that bringing a visual component to radio is the way to go.

“We can help stations to raise their

visibility,” he says. If an announcer is doing something crazy or has an interesting guest, the station can put the video clip up on YouTube and get even more publicity from it.

WhiteBlox provides the tools for capturing the content, he says, but then stations can be as creative with it as they want to be. They can do viral marketing. They can turn one of their personalities into a video star. They can create their

mounted system. You run wires to the two cameras, and you just need a DSL line.” And for stations that run talk programming or morning zoos, the software can accommodate a 7- or 15-second delay.

In a competitive world where radio is only one of many entertainment choices, bringing interactivity to radio listening makes the audience feel more engaged, says Jeff Vettrus.

“One of the first things I realized when I made the jump from on-air to Web guy was that radio didn't have to be ‘theater of the mind’ any longer. We could now enhance our product and tell the story better by adding a visual component. From photos to video clips to live video reality shows online, our listeners became hooked immediately.”

iSEERadio costs vary, depending on what kind of solution each station prefers — live, video on demand, what features, how often they broadcast, user minutes and so forth.

The company emphasizes that the player contains many advertising opportunities and a title sponsorship opportunity that the stations can sell to advertisers and sponsors; they say the new revenue essentially allows the solution to pay for itself.

A demo can be found at www.whiteblox.com under the Radio Clients Showcase.

Donna Halper is a radio consultant, media historian and educator. She wrote in May about the annual report on the state of media by *The Project for Excellence in Journalism*. ☺

commercials to be both audio and video.

“All of this brings more people to the Web site and gets people talking about the station.”

Currently, he says WhiteBlox is targeting mainly larger markets, although that will soon change. He believes stations of any size can benefit and says the system is affordable even in smaller markets.

“It's very easy to install. It's a rack-

Greater Media Raises Funds for New Summer Camp

Greater Media held the first of what organizers plan to be an annual radiothon to raise funds for the new Camp Harbor View.

The daylong fundraiser aired in June on the five Greater Media stations in Boston. The project is a partnership of the city, the Camp Harbor View Foundation and Boys & Girls Clubs of Boston. The goal is to provide a safe, challenging summer camp experience for Boston kids age 11 to 14.

The camp is on land in Boston Harbor.



Campers Denise, Jasmin, WMUX talent Candy O'Terry, Craig, Zakisha and (front) Eduardo



Wally Brine, left, and Loren Owens of the WROR morning show flank Jack Connors, founder of Camp Harbor View Founder. At right is Peter Smyth, head of Greater Media.

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German Radio May Say Auf Wiedersehen

Aging Listeners and Hosts May Presage End of German-Language Radio in U.S.

by Arndt Peltner

Though almost unknown to many Americans here, German-language U.S. radio — an important part of German history in the United States and of the American radio landscape — may soon disappear.

As early as the 1930s, foreign-language shows emerged on U.S. radio.

While some immigrants listened to programs from abroad on their shortwave radios, American-produced foreign language broadcasts grew in popularity. Programs originally were geared towards immigrants as language courses, but demand grew for information from countries of origin and from immigrant communities within this country.

Today, only about 20 German-language programs remain on the air in the country, and most of them are likely to end in the foreseeable future.

With the end of World War II, the radio industry in the U.S. boomed. Radio receivers became less expensive and more portable, creating a mass market with huge demand for diverse programming.

Station managers and business owners around the country recognized the influx of immigrants as a possible target audience for advertising. Therefore, some stations were programmed for immigrant audiences for commercial rather than cultural reasons. Air time was made available for local hosts who could purchase time slots for their self-produced programs.

'Home Melodies'

German-language shows sprouted up around the country like mushrooms in the forest after a night of rain.

Shows such as "Stimme der Heimat" (Voice of the Home), "Heimatmelodien" (Home Melodies) and "German Hit Parade" became popular in German communities.

In areas as far apart as New York, Illinois, Wisconsin, Kansas and California, German-language programs could be heard.

The experience here in the San Francisco Bay Area seems typical. The shows' programmers were also the hosts; most of them had had little idea about doing radio prior to their first time on the air. They were members of the local community, aiming to serve and inform their fellow members.

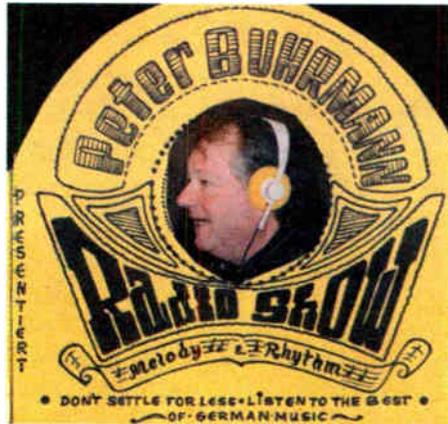
The amateur nature of the programming was a good part of the charm of these early programs.

Hugo Schneider started a show in the late 1950s on a South Bay Area station,

presenting his audience with a light musical mixture of the genres "Schlager" and "Volksmusik." His goal was not to inform but to entertain; Schneider didn't feel the need to present news of any kind on his show.

Other shows emerged with a mixed format, such as Manfred Müller's "Schlager Cocktail," which began in the mid-1960s and was aired in Fremont. Müller wasn't satisfied with Schneider's music-only format, which lacked information.

"I think my show was more profes-



'Don't settle for less; listen to the best — of German music.' A promotional image for Peter Buhrmann.

sional," he said. "I didn't play the same songs over and over. Instead I got my records from Germany. In the first half hour of the program I played more pop songs; the second half hour was more German folk-oriented. After that, half an hour of opera, followed by 30 minutes of classical music. And that was well received."

Before every broadcast, Müller listened via shortwave radio to the news on Deutsche Welle, the government-funded radio program out of Cologne. Sometimes he had to listen three or four times because of the low quality reception of those broadcasts.

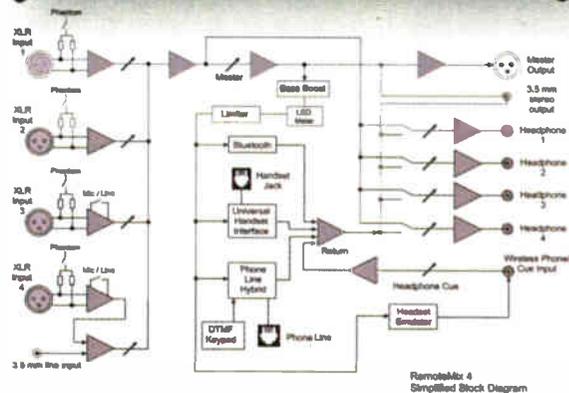
His goal was to inform his audience and bring them news from their home country. He also had a friend in Germany who sent him a weekly letter with the lat-

See GERMAN, page 36 ▶



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How Marketing Can Work for Your Station

"I don't believe in marketing outside our own radio station," the general manager exclaimed as he pointed his finger in the air.

I'm not sure what he was pointing at, but his declaration has become a common mantra in radio markets across America. The lecture typically includes complaint about how expensive it is to advertise — and indeed it is — but it's too often punctuated by a die-hard belief that doing so doesn't produce ratings results.

I will forever be astounded that there are many in senior radio management who question the effectiveness of advertising our product. And with corporate financial constraints prohibiting local managers from investing in marketing these days, it's even easier to limit oneself to this frame of mind.

But for those interested in fighting the good fight, here's a summary of how you can improve results.

What's your message?

The answer is complicated but must be explored by anyone attempting to score. Make sure you carefully consider these areas before you even try to convince the powers-that-be that marketing can increase your ratings.

1) Does your radio station sound great enough to attract additional listeners? Do you have research that backs up your answer, or are you guessing? If your cume is large and your TSL small for your format, you're looking at a fairly big clue. Marketing brings in cume and many believe it can increase occasions, but duration is much more of a product issue. Without TSL, ratings growth is unlikely.

2) Do you have enough money budgeted for the medium you've chosen to advertise your radio station? If you're not able to buy enough reach and frequency with television over many weeks, select another medium. Direct mail, a cheaper alternative, requires that you flood your target demo in the market. For outdoor or transit, you must first have enough inven-

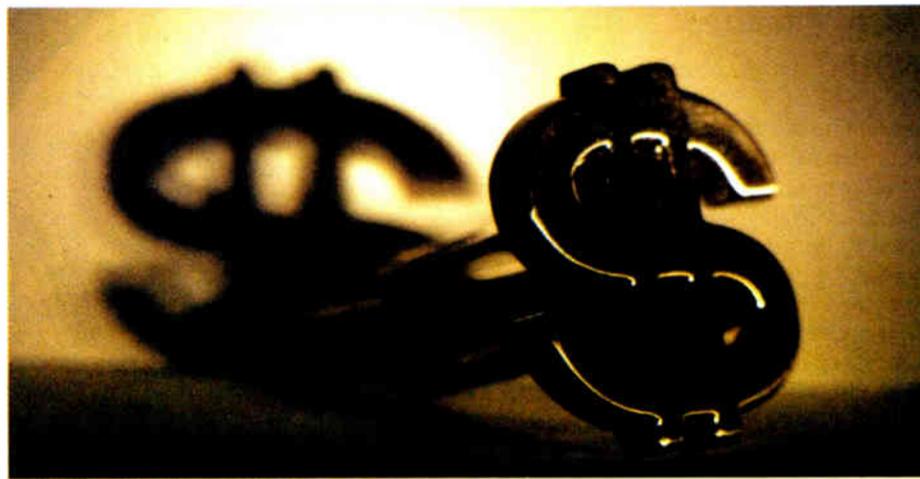


Photo by Carla D.C.

You have to spend it to make it.

tory in your marketplace and then have enough budget to be everywhere with an impressive showing.

3) Determine the medium to be used not just by cost, but by the message that you wish to convey. Packing an emotional punch in a direct mail piece is often difficult, but informative material can be clearly presented. Communicating the power of music is simple with television.

4) Once done, test the creative! There's no question that it takes nerve to test campaigns. Few people want to look like idiots when target audiences don't understand what they're attempting to get across. Suck it up and take the plunge. Do your best to get your whole brain trust on board — get them to see that whether or not the test succeeds, it's much better to re-create than to waste money on a piece that simply doesn't communicate.

5) Understand the competitive marketing landscape for when you intend to run. Secrets about media placement are difficult to keep and if you're connected enough in your marketplace, you should be able to find out what's going on.

6) It's also amazing how many clusters compete with themselves for share of

If you're not able to buy enough reach and frequency with television over many weeks, select another medium.

voice. I've seen stations from the same cluster air in the same spot-set on TV. It's horribly confusing for a viewer.

I would be remiss if I didn't point out that our industry is not training, nor even hiring, the next group of marketing directors. We are relying primarily on program

Promo Power



by Mark Lapidus

directors who have not specialized in this area and don't even understand the commonly used terms for placement analysis.

When PDs run out of time and energy, we sometimes enlist promotion directors — who are chiefly event producers — without training or background.

Marketing radio stations outside of your own airwaves works. If you don't believe in the power of advertising, try running a telemarketing campaign in which you leave messages on answering machines saying that one of your DJs will be giving away \$5 bills to the first 100 people who show up at a client location at a specific time.

I love the advertising business because it does indeed produce results.

If you don't believe in advertising, what are you doing in commercial radio?

The author is president of Lapidus Media. Contact him at mlapidus@cox.net.

German

► Continued from page 35

est news. The letter took up to five days, but Müller told himself, "Old news is better than no news."

Like other minority programs, his was financed through advertising. Support came largely from local German businesses and delicatessen stores.

No home

The biggest problem for radio hosts such as Müller was rapid format changes.

For a while, these hosts had dedicated weekend spots. However, commercial stations are in the business of making money; when stations failed to bring in revenue, sometimes the format would change overnight. At such times, all programs might be cancelled. This happened to "Schlager Cocktail" when Müller's station in Fremont was sold. He tried another in San Francisco, but it was also sold after only a couple of months.

Frustrated, he gave up after four years in the radio business.

In the early 1970s, German radio programming across the United States reached its peak. I believe more than 100 programs were on the air, serving a large German immigrant community with music, news from abroad and information from within the community. Soccer results from the professional Bundesliga were a must for every program.

In 1974, Peter Buhrmann moved to San Francisco. Two years later he started the "Peter Buhrmann Radioshow." It

would become the longest-running German radio show in California. In 2006, Buhrmann celebrated his 30th anniversary with a special dinner event and surrounded by longtime and dedicated listeners.

Over the years Buhrmann became the voice of the German community in the Bay Area, broadcasting on an AM station that reached far beyond the city limits. Buhrmann mixes his music with information and current events from Germany; the latest news is read live on air by journalist Hans-Werner Lange from Germany via telephone.

Buhrmann's success over the years is the result not only of his dedication and the support of his longtime listeners, but also the demand for a German-language program in the area.

With demographics and technology in flux, there appears to be an end in sight to radio programming geared to a German immigrant community. Both audience and hosts are getting older, with the majority having come to the U.S. in the 1950s and '60s. There is no new wave of German immigrants; and those younger immigrants already here listen to German stations via the Internet.

Today, only about 20 German-language programs remain on air in the country, and most of them are likely to end in the foreseeable future.

Arndt Pelner is a freelance correspondent for German radio and newspapers. He is the producer and host of the syndicated radio program "Radio Goethe" and lives in Oakland, Calif. This article appeared in slightly different form on the Web site www.radiogoethe.org.

STATION SERVICES

Grapevine Is Online 'Network'

"It's About You" is a new online talk show hosted by Mary Wilson-Burkett.

The show is part of the Grapevine Talk Radio Network, an online site begun in 2005 based in Orem, Utah; it is operated by marketing firm Power Strategies. Kim Power Stilson is owner and founder of Power Strategies Inc. and Healthy Wealthy Wow Grapevine Marketing.

Host Wilson-Burkett is president and owner of Coaching Associates Inc., which helps people make positive changes in their lives. Also new on the network is the weekly show "Abundant Living," hosted by Rebecca Linder Hintze, a self-help author.

Grapevine describes itself as "the first Internet radio network to push and pull knowledge across the Internet through talk radio."

For information visit www.grapevineradio.com.



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Johenning: Radio Should Be Flexible

by Ken R. Deutsch

Sue Johenning is executive vice president and director of local broadcast for Initiative Media. She and her staff of more than 150 place millions of dollars of radio and TV ads on behalf of some of the biggest clients in the country.

Any station that wants to earn its share might want to listen carefully when she suggests that radio needs to change the way it sells advertising.

"In TV we have product placement. In fact we were able to get the writers of 'The New Adventures of Old Christine' to work Home Depot into a storyline," she said.

"In radio, the most effective approaches come from stations that come to us prepared with well-integrated packages. It's not just about buying a bunch of spots."

Johenning wants to bring her advertisers together with listeners via personalities and promotions. But there is more.

"Remotes are fine but we need to go beyond that," she said. "How can we get a customized promotion that is relevant to our advertisers? We need to extend the connection the radio station has with its listeners."

"This may involve text messaging, online ads, on-air spots or any other way we can reach people. The most effective sales people are the ones who can bring together all the assets the station has."

Using shorter commercials is one approach with which Clear Channel and others are experimenting.

"The use of shorter spots is a good move for radio, but it took a long time for this to gain traction," said Johenning. "Stations need to be flexible. The 'Jack' format has been willing to work with selected advertisers to give clients customized spots, read by the station image voice, during an otherwise commercial-



Sue Johenning

free hour."

For Johenning, radio is an important part of the media mix.

"It does an excellent job with immediacy, helping us deliver a call for action, a weekend sale or an announcement about a product in stock," she said.

"Radio also works well to build brand identity. But unless you're talking about Radio Disney, it doesn't work too well with kids. Also, in the case of teenagers, radio has to compete for its share of listening with other platforms like iPods, streaming and cell phones. But radio is finally getting better at integrating these media to allow people to interact with the station in different ways."

Lonestar brings it back

One radio station willing to take a chance on "less is more" advertising is former classic rocker KZPS(FM), part of the Dallas-Ft. Worth Clear Channel cluster. This April, the station was reborn as

"Lonestar 92-5," playing a blend of indigenous country and rock. The station's official voice is Willie Nelson's. J.D. Freeman is president and market manager.

"I went to Kelly Kibler, our vice president/director of sales, and asked her this: 'If you could do something different for our clients, what would you do?' said Freeman.

"She came up with what I call the sponsorship integration model. It's category-exclusive and it doesn't involve 60- and 30-second spots. Here's how it might work. We have this very popular concert in Austin called South by Southwest. So

model and its potential to develop into something exciting. Ratings aside, it's the environment, the integration, the message. If you can connect with the audience on a different level, that is more important than shooting the message out over the heads of a million people. It's a different level of engagement. We think a message delivered this way is more powerful than a cookie cutter commercial in a cookie cutter environment."

The station can be heard at www.lonestar925.com. It is too early to tell if this Dallas station is a harbinger of the future or a glance to the past. But according to Sue Johenning, it is up to radio management to keep the medium vital.

"We're strong supporters of radio," she said. "However, stations can earn more business from existing clients and non-

**The most effective sales people
are the ones who can bring together
all the assets the station has.**

— Sue Johenning

our announcer might say, 'If you love this music, you ought to get online right now, book tickets with Southwest Airlines and get down there. And now here's another half-hour of uninterrupted music brought to you by Southwest.'"

It is almost a throwback to a time in radio when "The Jack Benny Show" was what audiences tuned in to hear each week. Announcer Don Wilson would casually walk in on Jack and Mary Livingstone in their kitchen to share a bowl of Jell-O, which the cast would remark upon for several minutes. It was sponsor-exclusive and definitely integrated into the show.

"We might not bring in the same ad dollars with Lonestar 92-5 right away," said Freeman. "But we believe in this

radio clients by thinking in cutting edge ways about integrating advertising into the program content."



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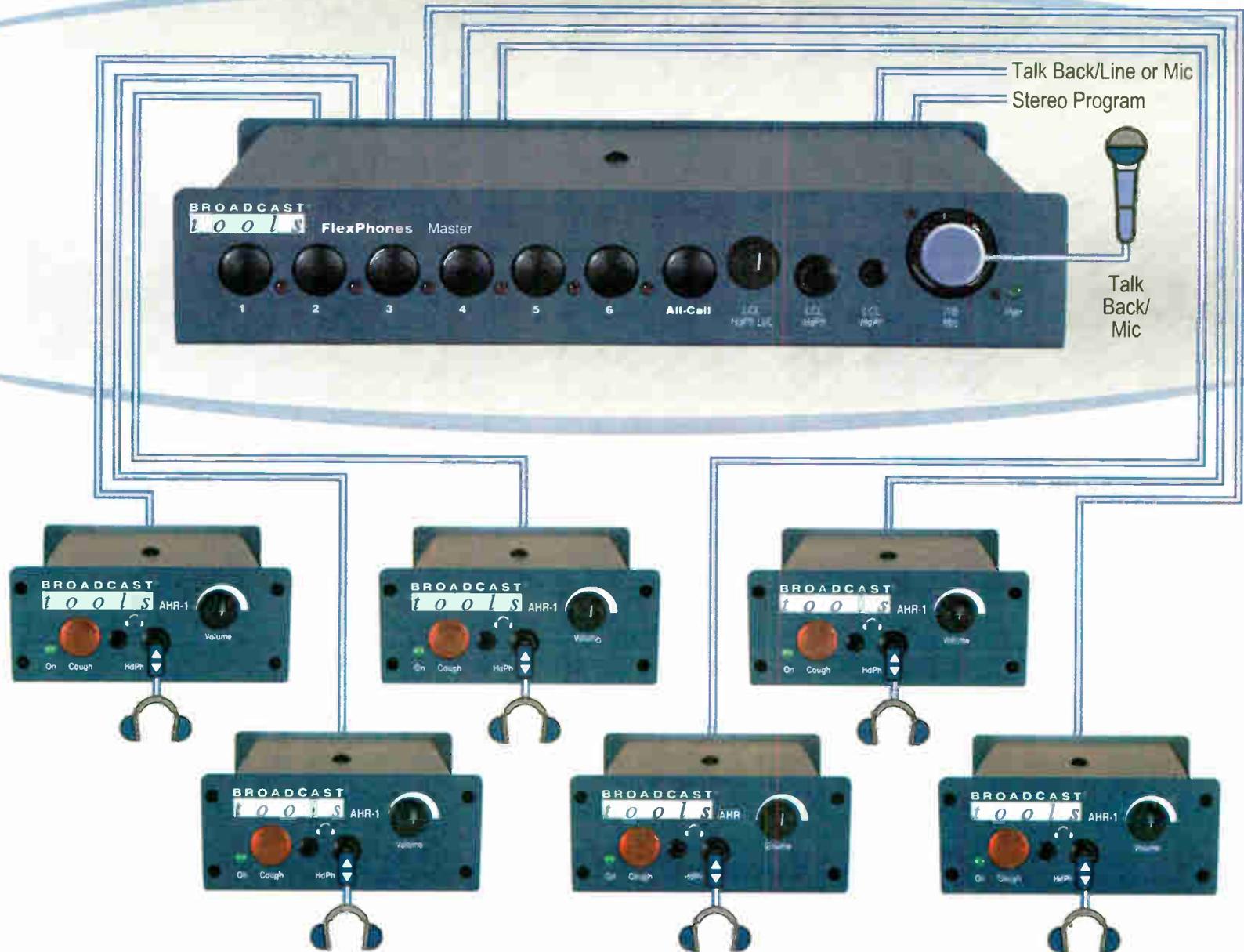
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The FlexPhones Master is equipped with inputs for stereo program and talkback audio. Rear panel program and talkback trimmers are provided to pre-set maximum input levels. The microphone/line level talkback input is available via a rear panel plug-in euroblock connector, while the front panel XLR connector facilitates the use of a user-provided gooseneck microphone or headset. The front panel is equipped with a level control for local headphones with both 1/4" and 1/8" stereo headphone jacks. The six front panel talkback switches allow the user to independently communicate with each AHR-1 listener and can be configured to insert talkback audio into only the left or both ears and dim either or both program channels. Any combination of switches may be pressed, while the "All-Call" interrupts all listeners. The Talkback function can be remotely controlled. Six RJ45 jacks are provided to distribute audio and power via CAT5 cable to the AHR-1's, which conform to the Studio Hub+ format on this and all other FlexPhones products.

Low-Z balanced audio distribution is used to preclude audio degradation with long cable runs.

AHR-1 Active Headphone Remote

The Active Headphone Remote (AHR-1) contains a stereo amplifier designed to work with any combination of high-efficiency headphones with impedances between 24 and 600 ohms. The AHR-1 is equipped with 1/8" and 1/4" headphone jacks, level control, user-configured utility momentary pushbutton and LED indicator. Two rear panel RJ45 jacks are provided for connection via CAT5 cable to the FlexPhones Master.

The AHR-1 may be desktop mounted, under counter or with the optional HR-1/MP or HR-1/MP-XLR mounting plates, which may be turret or counter-top mounted.



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The Short/cut Replacement

Doing the 360 at Chicago's Q101

Emmis Outlet Seeks to Break Traditional Bonds With '360-Degree Marketing'

by James Careless

Today, 30-second radio spots are not enough. That's the conclusion of Emmis Chicago's WKQX(FM) sales and promotion departments.

To compete against TV and the Web, Q101 is betting on "360-degree marketing."

In simplest terms, 360-degree marketing uses every promotional option available — print, TV, the Web, and of course radio — to promote an advertiser's product.

But that's just the beginning, says Marv Nyren, regional vice president of Emmis Radio.

"In today's market of media-savvy youth, product placements and integrations are much more effective than old-fashioned 'Buy Me!' advertising. What works is for our jocks to weave products legitimately into their on-air conversations, to make them into cool, hip items that Gen Xs and Ys want to buy into."

In action

The concept is embodied in a campaign that Emmis Chicago is conducting this summer.

To understand how 360-degree marketing works, go to Q101's Web site at www.q101.com/top. There you will find a major Web presentation for the alternative band Treaty of Paris, a Chicago group that Q101 is promoting.

Actually, "promoting" is an understatement. Using its own resources, Q101 has created an interactive Treaty of Paris mini-site, where fans including Q101 listeners can hear the band's music, learn about their daily lives and ask them questions through blogs.

In addition, Q101's Treaty of Paris mini-site is full of videos covering concerts, band member on-camera narratives and "You are there" reality TV-style events. Fans can sign up for text alerts

360 and Interactive

Emmis Chairman Jeff Smulyan mentioned 360-degree marketing as part of his quarterly comments to financial analysts in May:

"The other thing I want to talk about briefly is the remarkable rise of our interactive group.

"You will notice that we've allocated a number of dollars to invest. Probably one of the things I've been most gratified by is the vision of our interactive group, led by [Davis Sayen] and [Ray Mana]. They are really redefining the relationship between American radio listeners and our audiences, and doing it in many ways, what we call the 360-degree model.

"The Radio Advertising Bureau board asked them to present last week, and it's one of the more gratifying experiences I've had to see how really far ahead of the curve our interactive group is. We've been contacted by a number of other companies to help develop that not only for our own stations but for others in the industry."

Transcript source: SeekingAlpha.com



The mini-site, with station banner at top, client ad at right and unique interactive content front and center.

A six-month marketing campaign in Chicago uses some non-conventional strategies to benefit a big client.

about Treaty of Paris, and of course there's merchandise.

Emmis announced the campaign in April. "For the first time in any U.S. radio market," it stated, "Q101 and program sponsor Verizon Wireless are bringing listeners the musical journey of an up-and-coming Chicago alternative rock band through fully integrated media channels." The marketing program runs to the end of September.

In a move that will surprise many radio veterans, the Treaty of Paris videos were shot by Q101's own videographer. That's right: This radio station has its own videographer on staff.

"To fully execute our 360-degree plan for Treaty of Paris, we need to have lots of video on our site," says Lance Richard, Emmis Chicago director of sales for WKQX and WLUP(FM). "YouTube has proven how much the 18-34 demographic demands video. By shooting our own and posting it, we are not only meeting that demand, but fitting within the cultural context of our audience."

Cool

Promoting Treaty of Paris seems strategically smart for Q101. The band fits the youth demographic's musical tastes and has the added bonus of being local.

However Q101 isn't just doing this for attention; Treaty of Paris is also a major eye-catcher for the client. Emmis created the Treaty of Paris mini-site with the goal of helping Verizon get a step up on the competition, at least when it comes to the key 18-34 crowd.

"Verizon wanted to position themselves as the coolest and hippest of wireless

providers," explains Nyren. "That's why they are sponsoring Treaty of Paris and placing banner ads on their site. But our promotional strategy goes much further for Verizon. For instance, when Treaty of Paris plays onstage, they have their Verizon cell-phones with them. They even use them during the performance to call members of the audience, and to let the audience contact them."

Over the air, Q101 jocks work Verizon products into their conversations wherever possible, but do so without beating the product to death.

"Our listeners have pretty good built-in BS meters," says Richard. "They know what a lame commercial is, and what has credibility. As long as we respect their intelligence and weave product placements into the shows logically, without being too overly intrusive, they have no problem with it."

What else might 360-degree marketing entail?

Marketing and ad programs developed by the Chicago staff include the broadcast radio format as well as podcasting; audio streaming; music e-commerce; customized Web content; event marketing; "affinity" programs such as listener databases; and mobile marketing such as text messaging interaction. WKQX and sister station WLUP(FM) also are working with the parent company's new-media arm, Emmis Interactive.

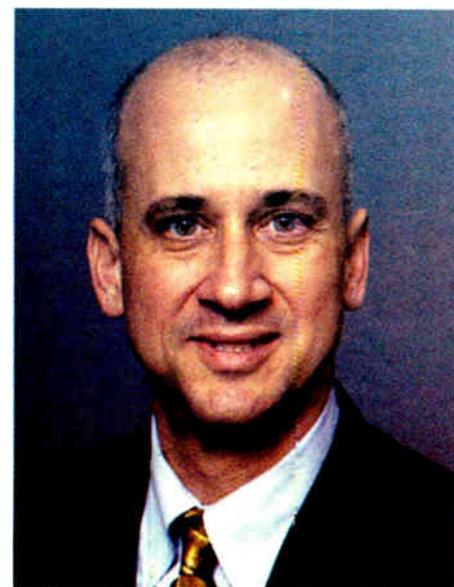
(The company thinks it is onto a good thing and wants to promote it. In fact the Chicago stations recently hired a PR firm — and issued a press release announcing that fact — to promote its managers as leading strategists for the industry. The idea is to push the executives as thought leaders in areas such as 360-degree marketing as well as PPM radio technology.)

Marv Nyren and Lance Richard still see a place for traditional radio spots in the 360-degree marketing universe. However, they expect the actual amount of minutes dedicated to spots to decline, as more advertisers pay for on-air product integration and promotion.

"The beauty of this approach is that you can lower spot loads, resulting in a better listening experience for your audi-



Marv Nyren



Lance Richard

ence," Nyren tells RW.

Richard adds, "At the same time, you can boost your advertising revenues, because product integration allows to you drive value from potentially every minute of airtime."

In the grand scheme of things, on-air product integration is just an element of 360-degree marketing. This is because radio itself is only an aspect of this broad advertising approach.

"It's all about the money," said Nyren. "In radio, the Chicago market generates \$525 million in revenue annually. For all media, the total is \$2.3 billion. So what would you want to be a part of? Radio-only or the entire market?"

"Myself, I'd prefer to go after the \$2.3 billion pie, rather than limit myself to a \$525 million slice." 🌐

STATION SERVICES

ESPN Deportes Radio Expands

ESPN Deportes Radio added three new markets.

The service calls itself the only around-the-clock national Spanish-language radio network in the United States. It is now heard on KNIT(AM) Dallas-Forth Worth; WADB(AM) in central New Jersey; and WKCE(AM) in Knoxville, Tenn.

"The affiliate in Dallas will be managed and operated by ESPN Inc., making it the first Spanish-language radio station to be fully managed by the company," it stated.

Network officials said the additions means ESPN Deportes Radio can be heard by 45 percent of the Hispanic population in the country; it has affiliates in 12 of the top 25 Hispanic markets.

The network separately announced a deal with Hugo Sánchez, the head coach of the Mexican National Soccer team; he joins Jorge Ramos and Hernan Pereyra to co-host the show "Hugo Sánchez en Estado Puro." It airs four days a week.

The contract gives ESPN Deportes Radio exclusive one-hour interviews with Sanchez before and after matches featuring the team.

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GUEST COMMENTARY

We're Here to Help

Broadcasters Foundation Outreach Campaign For 2007 Is Its Most Aggressive Ever

by **Gordon Hastings**

The theme of the Broadcasters Foundation of America's financial assistance program for 2007 is "Because Bad Things Can Happen to Good People."

This is not a cliché but rather the foundation's motivation to work year-round to provide a safety net for broadcasters and their families who are in acute need.

This year, under the direction of Chair Philip J. Lombardo, the foundation's board of directors has launched its most aggressive outreach campaign ever to ensure that any broadcaster who needs help is aware of the foundation's financial assistance program. "Because Bad

Example #1: A married couple, both having worked as successful sales executives in the broadcasting industry, find themselves in an unimaginable situation. The wife, mother of two small children, was diagnosed with Lou Gehrig's disease in 2005.

This rare and paralyzing disease has robbed her of the life she knew in a very short time. She is fed intravenously and relies on breathing support to survive. This young woman is aware of her surroundings. She can see and hear her children but cannot hold or speak clearly with them.

Her heartbroken husband is now raising the seven- and 10-year-old children, coping with the cruel reality that confronts them

You can be our eyes and ears. We need to make sure that broadcasters who need our help are aware that we are here for them in a most compassionate way.

Things Can Happen to Good People" is a most appropriate theme because it delivers a message of compassion, understanding and hope.

Healing hands

A series of outreach advertisements are being scheduled on a pro-bono basis by the radio and television trade press throughout this year. Many state broadcasters associations also have placed the outreach campaign in their monthly newsletters. The Broadcasters Foundation of America is running the campaign in its own magazine, "On The Air."

In 2007 the foundation will distribute in excess of \$400,000 to broadcasters throughout the 50 states. It is expected that grants will reach the \$500,000 mark in 2008. The foundation's board of directors works year to ensure that the funds necessary to meet this growing demand will continue to be in place.

The following two stories of new Broadcasters Foundation of America grant recipients vividly testify to the urgency or making sure that no broadcaster in need of help is unaware of the foundation's grant program:

every day. The Broadcasters Foundation of America provides the critical financial assistance for this family to survive.

Example #2: A broadcast personality and industry entrepreneur is receiving our help. This individual was in the forefront of the community as a founder of a national publication dedicated to the industry. He later pursued several independent entrepreneurial ventures, unfortunately to no lasting financial success.

In December of 2006, he suffered a massive stroke resulting in brain damage to a serious degree. This dynamic communicator now contends with short-term memory loss and is at this time critically delusional. Fighting for his life, he has made enough physical improvement to be transferred to a local rehabilitation center, where his present condition is complicated and unstable. Known as a bold risk-taker, he is now in the unfathomable position of being unable to manage his own life.

His health problems are compounded by a dire financial need. He is without health insurance, pension or other resources mandatory to afford the high-level quality of health care he needs to survive. His two daughters, working closely with the foundation, have found an acceptable health care facility in which to place their father. This would have been impossible without the Broadcasters Foundation of America.

Think of how desperate these families would be if they had not heard about the Broadcasters Foundation of America. The message is simple. You can be our eyes and ears. We need to make sure that all broadcasters who may need our help are aware that we are here for them, always in a most compassionate way.

Gordon Hastings is president of the Broadcasters Foundation of America. E-mail him at ghhbcast@aol.com.

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7	Comrex Corporation	www.comrex.com
40	Danagger Audio Works	www.danagger.com
4	Electronics Research, Inc.	www.eriinc.com
31	Global Security Systems	www.gssnet.us
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40	Gorman Redlich Mfg	www.gorman-redlich.com
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21	Orban	www.orban.com
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18	Sabre Communications	www.sabrecom.com
11	SCMS	www.scmsinc.com
22	Sine Systems	www.sinesystems.com
38	Sonifex Ltd.	www.sonifex.co.uk
13	Telos Systems - TLS Corp.	www.telos-systems.com
24	Thum & Mahr GmbH	www.yellowtec.com
10	Titus Labs	www.tituslabs.com
48	Vorsis	www.vorsis.com
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Next Issue of Radio World September 1, 2007

Next issue of Engineering Extra August 22, 2007

For address changes and subscription renewal, please visit www.radioworld.com and click on "Subscribe to RW." To submit letters or story proposals, to request writer's guidelines, or for other editorial matters, e-mail the editor at radioworld@imaspub.com.

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Radio World Founded by Stevan B. Dana

Radio World (ISSN: 0274-8541) is published bi-weekly with additional issues in February, April, June, August, October and December by NewBay Media LLC, 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 Emily Wilson, P.O. Box 1214, Falls Church, VA 22041; (703) 998-7600; Fax: (703) 998-2966. Copyright 2007 by NewBay Media, LLC. All rights reserved.

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 NewBay Media

Unbundle, Rebundle

A New Approach Could Help Radios Proliferate on Cell Phones

The FCC recently announced that in its upcoming auction of analog TV spectrum for telecom use, it's considering setting aside a portion for what it calls "open access."

While specifics remain undetermined, the premise is as follows: Under today's wireless rules, a licensee can unilaterally determine the devices and services that can be used over its spectrum. This is why U.S. wireless users typically have to change handsets when they change service providers.

An "open-access" wireless environment would seem more like the post-deregulated world of *wired* telephony, in which any type-approved device can be connected to the network.

The open-access approach is how wireless service already works in the rest of the world. In Europe, it is common for consumers to buy a wireless phone or PDA first, then shop for a service plan, knowing that any device they can legally purchase will work with any wireless service.

Users of GSM-based wireless services in the U.S. can do this as an upgrade, if they purchase an "unlocked" phone from a third-party retailer and insert the SIM card they obtained on their original phone from their service provider. But few bother, given the two-step process and cost, particularly since the third-party seller of the unlocked phone typically charges its real price, not the subsidized price that a service provider does in return for a contract with the user.

How would moving to this "European model" affect radio? Note another big difference between U.S. and European cell phones: Few if any include FM radios here. Many, if not most, in Europe do.

Consumers like the feature (and it adds little cost), but service providers don't, because while you're using the phone to listen to the radio, you're probably not generating revenue for the service provider — making calls, surfing the Web, downloading files. When the providers rule, they determine the features and capability of the handsets that can be used on their networks — and no FM radios, please.

Similar limitations might apply to other future features like wireless Internet radio reception on these devices.

The open approach would give consumers more choice in wireless devices and decouple this choice from their selection of wireless service provider. Terrestrial radio receivers then could proliferate on one of the most actively purchased devices by U.S. consumers.

We often hear that most radios are purchased as part of something else — cars, clocks, MP3 players, etc. So why not include the wireless phone on the list? It would make a nice incremental addition. Unbundle the phone from the service, and re-bundle the tuner with the phone.

There's much to do before auction rules are finalized, by which time the open-access idea may be so full of loopholes that its potential will remain unfulfilled. Or licensees may be able simply to sit on these portions of their spectrum acquisitions without developing them. We hope the rules are crafted to avoid such problems and that wireless devices can operate in a free market — at least in some part of the spectrum. If so, consumers and broadcasters will benefit.

—RW

◆ READER'S FORUM ◆

Getting HD Where It Needs to Be

Thank you, Paul! I know we have agreed on this for over a year ("HD Marketing: Time to Go 'Big League,'" June 20). Thank you for telling it like it is.

As you know, I have long been slamming the smug "we can sell HD on radio only and make it successful" attitude. I've been very public about my belief and advocated the use of a multimedia — including new media — advertising and promotional blitz to get HD Radio where it needs to be.

Paul, all radio needs to do is to dump the current "HD Czar" they have, hire me, follow my advice or let me loose to promote HD properly and then reap the benefits of my efforts.

Of course they must have the desire to spend some "real money" ... not just the "bogus bucks" of unused inventory to sell this technology to the masses.

*Ernie Belanger
 Armstrong Transmitter
 Marcellus, N.Y.*

I have some HD Radios. The main reason I got into it is the fact that the transmitter can send 60 dB of stereo separation and the frequency response.

None of my analog radios at home have had an antenna hooked up since audio CDs came out. On FM, if the bit rate goes under 48 kbps I stop listening. I'm in the Indianapolis market, where there are five good streams to listen to. If the bit rate goes low or the digital gets over-processed, I will go back to CDs.

My sister's factory Sirius radio does not sound as good as my car JVC HD Radio!

On one station, I never listened until it went digital. Now I find it has one of the best-sounding signals and is not in the top 10 in the market.

What will make HD Radio take off is a good demo from its favorite station. Everyone that hears my HD Radio says "wow."

*Gary Day KA9ZYL
 Plainfield, Ind.*

RF Control

A thought on the article "KKOL Fights to Keep Transmitter Site" (June 20):

When I was in tech school we were taught that if you wanted to control RF exposure, make the facilities you wanted to protect "seem" to be underground, electrically. This should be fairly simple to accomplish using the same approach that is used to de-tune cell phone towers.

By building peers out in the water, stringing wire between them and a set of matching poles/towers on the land side and then tuning the whole thing, couldn't you make an RF neutral zone?

I remember working at a station where the lights went out when you signed off and shut down the transmitter, and you could hold up a test lead of a VTVM (remember those?) and read a 500 volts AC! We got RF burns on our fingertips and forearms when we lightly brushed up against a cart machine or console. And believe me, we had to get real creative to get RF out of the phones.

Having said that, I'd think the physical size of the plumbing and equipment in question would make it more impossible to draw an arc because they don't normally match any multiple of the wavelength of the broadcast in question

(unless it was long wave!).

I've noticed the size of the plumbing used in the pharmaceutical and Dow chemical plants up here, and I know how huge they are. Granted, jet fuel is about (or more than) 200 octane, but vapor emission should be controlled when transporting these. The hoses they use have steel webbing throughout mainly because dragging the hose around on the ground can cause

We got RF burns on our fingertips and forearms when we lightly brushed up against a cart machine or console.

static; and for structural support for 100 psi or so of fuel. Electrical connection is made when the line is connected before the valve is turned on (unless you like getting sprayed with fuel) because the coupler also is metal.

This is just as absurd as the idea that a 250 mW cell phone is going to ignite while you're pumping gas at the 7-Eleven. It has never happened, yet it is law in some areas to not use your cell phone while pumping gas. They need a nice big box of ferrite cores to run their sensor wires through a few turns.

*Jason Walther
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Networked



Independent



This D-75N Console is BOTH

OUR DIGITAL D-75N is a full-featured standalone mixing console that can also be seamlessly integrated into the AUDIOARTS DISTRIBUTED NETWORK along with other D-75N consoles. Designed specifically for the broadcast industry, the D-75N is intended for on-air and production applications that demand a lot of function and performance. It's got all the features you need: four stereo program busses, dual caller Superphone module, line selector modules, control room and studio modules, plus additional accessory positions.

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