

◆ NEWSWATCH ◆

FCC Seeks Input On NRSC-5...

WASHINGTON So how do you really feel about the new IBOC standard, including whether codec details are an important omission? It's time to tell the FCC.

The commission is asking for public comment on the IBOC transmission standard developed by the National Radio Systems Committee. Since it opened the DAB proceeding, the commission said it has supported "a public and open DAB standard-setting process" and said it would consider the DAB standard when developing rules for IBOC.

Members of the DAB Subcommittee of the NRSC approved the standard, dubbed NRSC-5, at the spring NAB; soon after, NAB and CEA submitted the standard to the FCC.

Some 360 stations are transmitting analog/digital signals on an interim authorization. Those that are splitting their digital signal into several streams are doing so with experimental authorization.

Issues still to be decided and expected to be included in the commission's final IBOC rules include AM nighttime operations; multicasting; superpowered FMs and permission for various antenna implementations.

Proponents hope the agency can turn

around the final rules by summer, but others are betting the end of the year is more likely.

The commission seeks comments on the NRSC-5 standard (DA No. 05-1661) and the DAB issues relating to its adoption. Comments are due to Docket 99-325 by July 18 and replies by Aug. 17.

... And Payola Stories

WASHINGTON The FCC is encouraging the public to tell the commission about broadcast violations of the payola rules.

"Like a Neighborhood Watch program, putting viewers on alert will help us enforce the law and deter future abuses," said Commissioner Jonathan Adelstein. "It serves as another reminder that there is an unequivocal, legal obligation — up and down the chain of production and distribution — to disclose all forms of payola."

The FCC issued a fact sheet about its payola rules and placed them on its Web site, instructing the public how to file a complaint via e-mail, letter or phone.

In April, as reported here earlier, the FCC issued a Public Notice on Video News Releases in response to public and congressional inquiries about broadcast licensees and cable operators who failed to disclose the sponsorship of certain "prepackaged news stories."

Public comments were due June 22.

Viacom Split Is Official; Infinity to Be Part of CBS Corp.

NEW YORK Viacom said earlier this year it would explore the idea of splitting the company to maximize the long-term business potential of divisions with similar growth patterns. Now its board had decided to proceed and determined in broad brush strokes how the split will be accomplished.

Viacom will create two publicly traded companies through a tax-free stock spin-off to shareholders. The new companies will be called Viacom and CBS Corp. Chairman/CEO Sumner Redstone said the board believes the transaction will result in "two strong, focused and nimble companies."

Infinity Broadcasting would be part of CBS Corp., which would also include CBS and UPN networks, Viacom Television

See NEWSWATCH, page 5 ▶

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What Now for Canada Pay Radio?

Regulators Approve All Three Proposed Systems, Raising More Questions

by Leslie Stimson

OTTAWA Reaction to Canada's approval of all three applications for pay radio has been mixed.

The government approved license applications for three subscription radio proposals, one each involving Sirius Satellite Radio and XM Satellite Radio, a third from Canadian broadcaster CHUM. It also imposed tight domestic content restrictions on the providers.

The two groups proposing satellite services are pleased; and Canadian car and receiver retailers are gearing up to manufacture and promote Sirius Satellite Radio and XM Satellite Radio.

However Wall Street analysts predicted that Canadian content restrictions could slow satellite radio's entry; and some put the odds that XM and Sirius would move forward at 50-50 at best. Analysts said the companies might choose to let the so-called "grey market" continue to grow. Canadian radio experts believe thousands of their fellow citizens are using U.S. addresses to get satellite radio.

The third group pushing pay radio in Canada is proposing a terrestrial-repeater-based service. It is not happy that all three applications were approved, and may appeal.

In June, several other entities were considering whether to appeal to federal court or the cabinet. One of the groups is a talent union, the Alliance of Canadian Cinema, Television and Radio Artists. It said approval of satellite radio "gives the green light to dump pre-packaged U.S. programming in Canada to the detriment of Canadian content."

Not equitable?

"It should have been more equitable," Paul Ski, executive vice president of radio for CHUM, told the Globe and Mail after the announcement of the decision by the Canadian Radio-television and Telecommunications Commission. "We've got to go back and review it."

CHUM, in partnership with Astral Media, has said its service could be operational in about a year. In contrast with the other applications, this partnership proposed a service consisting entirely of Canadian-originated content; its subscription rate would be the equivalent of approximately \$10/per month.

Sirius expressed pleasure with the decision; it said it needed more time to study the Canadian content conditions associated with the license before commenting further. Kevin Shea, chief executive officer of Sirius Canada, told

Macleans the company would see how the Canadian content conditions would

Canadian Pay Radio Applications			
	Canadian Satellite Radio	Sirius Canada Inc.	CHUM/Astral
Ownership	John Bitove 100%	CBC 40% Standard 40% Sirius USA 20%	CHUM 80.1% Astral 19.9%
U.S. partner	XM Radio	Sirius USA	N/A
Delivery system	Satellite/terrestrial	Satellite/terrestrial	Terrestrial
Spectrum	S-band	S-band	L-band
Service area	National	National	60-75% of population (by end of 1 st term)
Proposed Canadian channels	1 English music 1 French music 1 English comedy 1 French talk 1 Ethnic	Radio 1 (Eng) Prem Chaine (Fr) Radio 3 (Eng) Bandeapart (Fr) The Wave (Eng)	35 English 10 French 5 Ethnic
Proposed monthly fee	\$12.99	\$12.95	\$9.95

Source: CRTC

affect the business plan, but overall, "We think something is there."

XM was pleased with the decision; its partner GM Canada hopes to have factory-installed satellite radios in more than 50 brands in calendar 2006.

'Unique opportunity'

The chairman of the CRTC, Charles Dalfen, said in the announcement that the decision met the objectives of Canada's Broadcasting Act and balances the needs of consumers, the radio industry and the music industry.

Specifically, the CRTC approved license applications of Sirius Canada and Canadian Satellite Radio, partner of XM Satellite Radio, for digital satellite radio services, as well as the application of CHUM and Astral Media, which proposed its subscription service using terrestrial repeaters. Astral is based in Quebec and is noteworthy in part because it brings a French-Canadian presence to that proposed system.

Sirius Canada is a partnership between Sirius and Toronto-based Standard Broadcasting and the Canadian Broadcasting Corp.

Canadian Satellite Radio is a Toronto-based entity to air XM; it is owned by former Toronto Raptors owner John Bitove Jr.

"XM currently features a wide range of Canadian artists and our partnership with CSR offers a unique opportunity to expand the reach of Canadian music and culture in Canada and in the United States," said XM President/CEO Hugh Panero.

XM and CSR will work to address the differences between the content standards described in the broadcasting license and what was proposed in the license application.

Can-con

The Canadian government said the two satellite-based services must adhere to several content requirements:

- At least eight channels of original Canadian content;

- No more than nine non-Canadian channels for each Canadian channel;
- At least 85 percent Canadian content on the Canadian music channels;
- One French-language channel for every three English-language channels;

months; and

- A further 25 percent of the music choices on the Canadian channels must be the work of artists who have not yet had a hit.

Both satellite companies have proposed \$12.99 per month subscription rates.

They have 150 days to notify the Canadian government whether they will accept the conditions, according to the CRTC.

Repeater-based

The CRTC also approved the application of CHUM and its associate, Astral Media Radio Inc., to offer a service comprising 50 channels produced in Canada, 20 percent of which would be in French. This licensee also intends to offer five channels intended for the Aboriginal, Chinese, German, Italian and South Asian communities.

The music broadcast by these channels must respect the minimums required by CRTC regulations: notably, for popular music, 35 percent Canadian content, and, in the case of French-language channels, a minimum of 65 percent of musical selections in French.

Also, CHUM/Astral must contribute 2 percent of its gross annual revenues, and the satellite radio licensees at least 5 percent, to initiatives for the development of Canadian talent. 🌐

- At least 25 percent new Canadian content on the music channels, with work produced by artists within the last six

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Correction:

The Kenwood HD Radio referred to as the HDR100 in the multicasting article (June 22) is the KTC-HR100, vs. the new KTC-HR100MC, which is for multicast receiving.

Paul's Vacation in Radio City

by Paul J. McLane

I'm in a New York state of mind these days ...

In this issue, you'll read Scott Fybush's account of the recent special broadcast commemorating Major Armstrong's public demonstration of frequency modulation in 1935. The event was held on the grounds of the Alpine Tower in New Jersey, not far from the New York state border.

Not detailed in his story about the Armstrong bash is the interesting background of the tower itself. Tower and radio buffs can learn more about the historic Alpine structure via Scott's Tower Site of the Week site at www.fybush.com; click on Site of the Week Archives.

★ ★ ★

While Scott was doing Radio World work at Alpine, I was taking some long-needed time off with a vacation at a B&B in Manhattan (yes, there is such a thing). During my week of exploring restaurants, Central Park and the fabulous Intrepid museum, I enjoyed a few hours with two friends, Tom Ray at WOR(AM) and John Lyons, who manages the rooftops for the Durst Organization.

Both are familiar to Radio World readers through past articles. Ray's byline has been in RW a lot lately, for he's had a lot to write about: Buckley's big-city studios moving to lower Manhattan after 76 years in midtown; WOR's early adoption of AM IBOC; and now the project to relocate its tower array to make way for development. In this issue Tom Ray discusses the station's experience as New York's first user of Livewire switched Ethernet audio routing infrastructure from Axia Audio.

He showed me with pride around the station's lovely new studios, which had been wired by Creative Studio Systems and only switched on a few weeks before. He entertained me with anecdotes of WOR past and present. I was a happy visitor to the station on which my grandmother listened to John B. Gambling, and which my mother still tunes to every morning.

But as a reminder that some things in

radio never change: I noticed a small sign tacked onto a restroom door in the office area of WOR. Upon closer inspection I could read: "Do not flush any hour between



FM inventor and pioneer Edwin Howard Armstrong.



From the top of 4 Times Square, John Lyons need only glance south for a spectacular view of Empire.

:00 and :07 after. They can hear it in the newsroom (which means they can hear it on the air)."

★ ★ ★

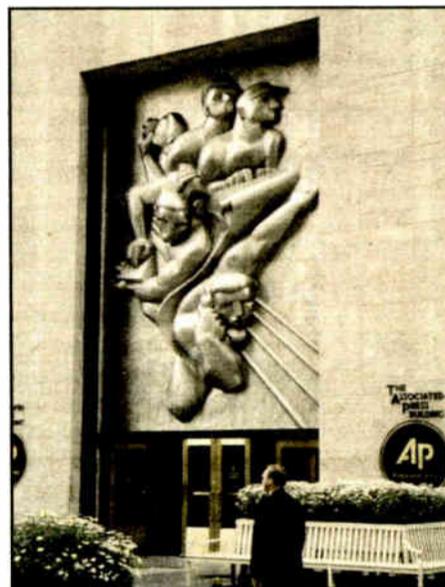
John Lyons was kind enough to give me a behind-the-scenes tour of his aerie atop the half-billion-dollar skyscraper at 4 Times Square, aka the Condé Nast Building.

As we've reported here, Durst would like to attract a full complement of transmitter tenants to its multi-floor broadcast

suite and has modified its rooftop tower to accommodate those needs. The building now has five TV and 10 radio station tenants, most of which use the building as a backup site. Lyons says he could accommodate all of the city's digital and analog TV and FM stations; and after seeing the floor space, HVAC, infrastructure support



Tom Ray's Axia SmartSurface at WOR is connected to the rack room via a single Cat-6 cable.



'News' by Isamu Noguchi welcomes visitors to 50 Rockefeller Center.

and detailed planning that have gone into that place, I believe it.

But being a fan of New York rooftops, I most enjoyed our walk on the roof itself — looking out over the city where I was born,

ogling the Empire State and Chrysler buildings, looking down at the roofs of all those cabs, peering up inside the 4TS mast.

Also from that level, the southern tip of Manhattan is easy to see. Despite the pleasure of a romp around the rooftop, one can't look over there and not think of the World Trade Center, or what the last minutes must have been like for six broadcast engineers and thousands of others who died there on 9/11.

As reported on page 29 of this issue, those six have been inducted into the New York State Broadcasters Association new hall of fame. Lyons, whose own office is some 800 feet in the sky atop a conspicuous building, still wears a lapel pin on his jacket as his own tribute to them and other friends.

★ ★ ★

And I spent a lot of time in New York walking. One part of my rambles was through Rockefeller Center, admiring its art deco appointments and architecture. This was, after all, the real estate development originally conceived as "Radio City."

Typical of the artistic beauty found here is the stainless steel sculpture "News" by Isamu Noguchi that welcomes visitors to 50 Rockefeller Center. Commissioned by the Associated Press in the late 1930s, the sculpture stayed at 50 Rock after the AP moved its nerve center last year. Landmark regulations forbid a move of the sculpture when the news cooperative left.

The work depicts figures using the tools of that era's journalism: telephone, teletype, camera, wire photo and pen and pencil. (No mics, though.) If we were to commission a sculpture about journalists today, I wonder what it would look like.

An interesting footnote is that artist Noguchi also designed the Zenith Radio Nurse, a mass-produced 1937 baby monitor.

It was a delightful visit. I only passed through this time. Next time, perhaps I'll dig deeper into New York's broadcast history.

Meantime a Radio News article from 1933 reports on what journalists saw when they first visited "the world's greatest broadcast metropolis." Visit AntiqueRadios.com, click on Features and scroll down to "NBC Builds Radio City." 🌐



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Newswatch

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Group, Viacom Outdoor, Paramount and King World television production operations, as well as Showtime, Simon & Schuster and Paramount Parks. Co-President/Co-COO Leslie Moonves would lead this company.

The new Viacom will consist of MTV Networks, which includes MTV, VH1, Nickelodeon, Nick at Nite, Comedy Central, CMT: Country Music Television, Spike TV, TV Land and other networks, as well as BET, Paramount Pictures, Paramount Home, Entertainment and Famous Music. Co-President/co-COO Tom Freston will lead this group.

The spin-off is expected to be complete in Q1 of 2006. Redstone will serve as chairman and will be the controlling shareholder of the companies.

Viacom's board named Sumner's daughter Shari to the newly created position of non-executive vice chairman of the board. Shari Redstone, president of National Amusements Inc., has been a member of the board since 1994.

Pollin Thanks Broadcasters for Partnerships

WASHINGTON Washington sports businessman Abe Pollin has used local

Ownership Rules Back to FCC

WASHINGTON The Supreme Court has declined to review appeals on several of the FCC's new rules for media ownership, so the onus is back on the commission to recraft them. A lower court said the agency needed to rework its justification for many of the rules, including local radio limits and the move to either loosen or eliminate the cross-ownership ban.

Coming to an agreement on all of the points is likely to be difficult, now that the agency has only four commissioners, evenly divided between Republicans and Democrats.

New FCC Chairman Kevin Martin said he was looking forward to working with colleagues as they re-evaluate the rules.

Commissioner Michael Copps welcomed the decision, saying the FCC has a "fresh opportunity" to develop rules that encourage localism, competition and diversity in media.

"This decision is a rare victory for the public over some of the most powerful corporations in America," said Commissioner Jonathan Adelstein. "We better get it right this time. We need to be very careful because once we allow greater media concentration, we can't put the toothpaste back in the tube."

Mindful of "backlash" from 2003, Adelstein said the FCC needs to involve the public and Congress more as it reviews this issue. He called for more public hearings in other parts of the country.

The Supreme Court in June declined to review appeals filed by several broadcast and citizen groups. A lower court had remanded the bulk of the rules back

radio and TV stations countless of times to raise money for charitable causes. Giving a keynote address at the annual Service to America Summit in Washington, he said he once raised a quarter of a million dollars in two days for the poor in Africa after airing video and audio from that country on local stations.



Pollin, chairman of Washington Sports and Entertainment, entered his 40th year of National Basketball Association ownership in 2004-05; he's the longest-tenured owner in the NBA. As majority owner of his company, he oversees operations of the Washington Wizards, Ticketmaster Washington/Baltimore and the management of MCI Center and the George Mason University Patriot Center.

Pollin also is known for his community service and spoke about his partnerships with radio and TV stations to help philanthropic and humanitarian endeavors.

After an appeal on WTOP(AM), Pollin said he raised nearly \$3 million for a Washington homeless shelter to keep it running. He's auctioned off seats and sports gear signed by players to help various causes, he told attendees at the NAB Education Foundation lunch.

Also at the lunch, 18 graduates of the

to the commission for better numerical and other justification. The high court offered no explanation for declining to take the case.

NAB opposed the new radio market definition, saying the move to an Arbitron Radio Metro would not solve the occasional problem of a long-distance signal being counted in a market. The definition replaced the old contour-overlap method for determining the number of signals in a market.

The new radio rule also counts JSAs toward local ownership caps.

Another rule appealed by several groups involved the easing of cross ownership restrictions; the agency had passed a rule lifting a ban on one company owning a newspaper as well as a TV or radio station in a market.

Commissioners in 2003 passed rules that eased ownership limits but those were put on hold by a federal appeals court, which said the FCC needed better justification for the numerical limits. That court allowed the FCC to implement some rules, including the new radio market definition.

The FCC's rules would have increased the number of households a single television corporation could reach with its broadcasts, and the number of media outlets a company could own in a market.

NAB declined comment on the latest development.

"We aren't treating the Supreme Court's decision as an end in and of itself, but it does add fuel to our burning desire to make more room for local voices in our corporate-dominated media landscape," said Hannah Sassaman, project organizer for the Prometheus Radio Project, another petitioner against the rules.

—Leslie Stimson

fifth class of NABEF's Broadcast Leadership Training Program were honored. One attendee of the program to help broadcasters get into ownership, Maria Elena Llansa, president and chief operating officer of New Radio Ventures in Miami, purchased two stations before graduating with her class in June.

A total of 94 executives have gone through the training, NAB said.

PRI President To Depart

MINNEAPOLIS Public Radio International President Stephen Salyer will leave in the fall to become president and chief executive officer of the Salzburg Seminar, based in Middlebury, Vt. and Salzburg, Austria. Salyer led the public radio program distributor for 17 years.

Board Chairman Doug Carlson credited Salyer for helping the company find cost-effective ways of reaching audiences on-air and online. A search committee has been formed to fill the position.

Salyer joined PRI in 1988 from WNET(FM), New York where he had been a senior vice president. When Salyer joined PRI, Garrison Keillor, air talent for its flagship program, "A Prairie Home Companion," had recently left for Europe and the network's future was uncertain.

Over Salyer's tenure, PRI has grown from fewer than 300 affiliates and a budget of about \$3 million in 1988 to more than 700 affiliate stations and revenues of \$26 million in 2004, said the distributor. During

Salyer's presidency, PRI has helped create, fund, market and sustain several programs such as "Marketplace" to PRI's "The World," and "This American Life."

The organization is the U.S. producer and distributor for the BBC World Service and owns Public Interactive LLC, a public broadcasting supplier of Internet tools and services, based in Boston.

PRI's stable, however, is a couple of programs lighter now. "World Café" produced at WXPN(FM), Philadelphia left to be distributed by NPR as of July 1 and Minnesota Public Radio now distributes "Marketplace."

Field Is New NAB Radio Board Chair

WASHINGTON Entercom Communications Corp. President/CEO David Field is the new NAB Radio Board chairman. He was elected at the board meeting in June.

Russ Withers, owner of Withers Broadcasting Companies, was elected vice chairman. Jerry Hanszen, owner/general manager, Hanszen Broadcasting in Carthage, Texas, won the second vice chair radio board executive committee seat.

Eddie Fritts was re-elected as NAB president and CEO for what he has said is his last term. Bonneville International Corp. President/CEO Bruce Reese was elected NAB Joint Board Chairman, succeeding Susquehanna Media President/CEO David Kennedy, who's leaving the board after serving eight years.

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Podcast

► Continued from page 1

demand among the reasons for their decision to delay implementation.

Recent announcements by Clear Channel and Infinity to incorporate podcast capabilities into their operations are an indication that traditional broadcasters are moving ahead with plans to use podcasting as a supplemental tool to reach listeners, analysts say.

Managing the pods

Michael Leventhal, an attorney who specializes in entertainment and new media, said it's just a matter of time before most major groups launch podcasting efforts to help reach the coveted young adult demographic.

"I'm not sure if (broadcasters) know exactly how it will work, but they have to be in the field. If it does work, the company who has done it the longest will have the most experience," Leventhal said.

"As it is with any technology-driven product, they often fail for reasons that are not about the concept, but because no one knew how to manage it."

Leventhal said he expects news and talk radio stations to benefit most from podcasting, because providing music programming is fraught with all kinds of rights issues.

"The last thing broadcasters want to do is put capital at risk by violating some rule within the intellectual property realm. They'll have to figure out how not to get sued by the RIAA," Leventhal said, referring to the Recording Industry Association of America.

Leventhal envisions an "advertiser supported" business model for broadcasters, but doesn't rule out a hybrid of some sort, combining subscription fees and advertising.

"Since radio programming has always been considered free, it may be a tough sell to have people pay for it. That depends on what potential customers por-

tend the convenience to be worth," Leventhal said.

Infinity Broadcasting has been an early podcast adopter. The Viacom-owned broadcast group launched the "world's

business headlines this month.

"The goal is to give our radio stations new and additional ways to connect with listeners," said Harvey Nagler, CBS News vice president for radio.

The screenshot shows the website for Z100 New York's #1 Hit Music Station. The main navigation includes 'Listen LIVE!', 'Now Playing' (Cubby), and 'ZVIP'. A search bar is present with the text 'Enter Z100 Keyword or Search Term:'. Below the search bar is a 'PODCASTING' section with a brief explanation of podcasting and links for 'Download Phone Tap Audio' and 'Click here to get your Phone Tap on the radio!'. The 'Phone Taps' section features three audio clips: 'Brooklyn Pizza Theft', 'Burger King Fatty', and 'Ruined My Wedding Album', each with 'Listen', 'Download', and 'Podcast' buttons. At the bottom, there are sections for 'Z Morning Zoo Interviews' (Shakira) and 'Celebrity Sound Files' (Backstreet Boys).

The Web page of Clear Channel WHTZ(FM) in New York promotes its podcast presence including 'Phone Taps.'

first podcasting radio station" in May, called KYOURADIO.COM. The station features content submitted by podcasters and aired on KYCY(AM) in San Francisco.

Infinity Broadcasting Chairman/CEO Joel Hollander said in the announcement, "We are increasingly living in an on-demand world, where listeners want to receive their content via alternative means. Podcasting is a perfect complement to our business model."

Infinity's nine all-news stations planned to begin offering free daily podcasts of news, sports, entertainment and

Clear Channel Radio began its podcasting initiative in March, said Jeff Littlejohn, vice president of distribution development.

Low costs

"As content producers, we need to do our best to fulfill the needs of our listeners," Littlejohn said, "and make content available by any means possible."

That includes AM, FM, streaming, cellular phone and podcasting, he said. Cost for implementing podcasting is not much of a consideration.

"It's actually quite inexpensive. A dig-

ital audio workstation, some software and your Web site is all you need to get started," Littlejohn said.

Premiere Radio Networks, syndication arm of Clear Channel, is delivering podcasts of the "Rush Limbaugh Show" and other syndicated programming like "Bob & Tom" and "Coast-To-Coast."

Clear Channel unveiled podcasts of features from WHTZ(FM) in New York earlier this summer and plans to expand that service to other markets throughout the year, Littlejohn said.

Meanwhile, three podcast business models are being considered by Clear Channel, Littlejohn said. "A subscription service, give it away with commercials or just give it away as a listener benefit that further strengthens the connections with listeners."

Even though some broadcasters are sitting out, the prevailing sense is that podcasting eventually will be successful, said several observers.

National Public Radio is providing podcasts of selected shows and even the BBC has said it will eventually distribute more than 20 of its programs as podcasts.

Some individual non-commercial stations are experimenting with podcasting, such as KQED(FM) in San Francisco.

Emmis Radio President Rick Cummings said it's "becoming most likely" that the group will begin podcasting.

"We do not feel compelled to be first with this stuff. It's why we still aren't offering, to any degree, the ability to buy music on our Web sites or text messaging yet. When we do offer (podcasting) we want it to be the most logical offering for us and our audience," Cummings said.

Gregg Lindahl, vice president of Cox Radio Interactive, said, "Listener demand for podcasting still has yet to catch up with the 'podcasting hysteria' that the mainstream press is reporting. Our listeners are not clamoring for it. However, we believe that creating additional publishing platforms allows our listeners to hear our product in a number of ways."

Lindahl said when Cox Radio decides to add podcasting, using RRS (Really Simple Syndication), it will be a relatively simple process.

Talk works

"We are already audio archiving through a number of our Web sites. We have strong brands in our local markets and eventually (podcasting) will likely be important to the overall success of the stations," Lindahl said.

Cox Radio expects to run several subscription-based podcast tests around the country this year, Lindahl said.

Greater Media Vice President of Engineering Milford Smith said, "Greater Media is closely following developments in the podcasting area, but has yet to decide to commence podcasting at any of our stations." Smith noted that the vast majority of Greater Media's stations are music-oriented formats "without a lot of content that would be optimal for a podcasting situation," he said.

"We will certainly initiate the service when it makes sense to do so."

Journal Broadcast Group has a major Internet effort under but doesn't expect to be podcasting anytime soon, said Andy Laird, the 38-station group's chief technology officer.

"We have a number of things we want to do in the next 12 months, but podcasting is more at the bottom of the list at this time," Laird said.

The advertisement features a photograph of a 2WCOM CO2 DSP Encoder. The device has a green LCD display showing 'Press 1 DSI PS=RDS PS BK=0 DK=0' and 'Enter 1 FFFF RDS=219a/1pp URF=0h'. It includes a CD-ROM, a front panel with a speaker, and various control buttons and ports. The background is a dark blue with a globe graphic.

Over 1000 RDS encoders sold in the US

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Davis

► Continued from page 1
technical issues facing radio.

RW: You're juggling lots of new duties. What are those and what is your new title?

Davis: Officially, senior vice president, engineering and capital management. I have taken on Jeff's former engineering administration duties: primarily, management of the regional engineering VPs and leadership of the radio group's engineering efforts.

Some other duties that I've taken on include review of studio and tower leases, working with other group chiefs on cooperative deals such as mutual tower projects and interfacing with tower space vendors. ... I work with our engineering VPs on identifying signal moves and upgrades and helping to determine which are worth pursuing, and tracking these through finality.

I provide guidance and set technical standards for our stations, funnel suggestions to manufacturers for meeting our technical requirements; and evaluate equipment for suitability for our use, typically in cooperation with our regional VPs of engineering. I also work with various FCC attorneys in preparing, editing, approving and signing pleadings, responses, petitions and other similar documents of a technical regulatory nature that are to be filed with the FCC.

RW: What duties do you retain, which ones are passed on?

Davis: I have passed day-to-day administration and oversight of the capital budget to the 10 regional VPs of engineering. I still provide general oversight and guidance, and monthly budget tracking, forecasting and reporting to senior management.

But each RVPE has a budget to work within; and as long as they're hitting that I generally don't interfere with them. I still put together the overall capital budget every year and adjust it as needed, and during the year I'll move funds between the regions to respond to emerging critical needs, emergencies, etc.

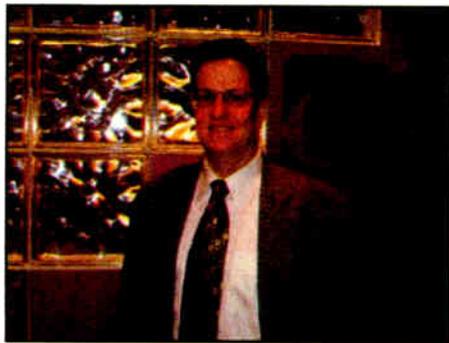
Drawing upon the submissions of the RVPEs and Jeff Littlejohn's needs for distribution development, I present a consolidated three-year capital plan to senior management. So what used to be my sole responsibility is now a collaborative task.

Also, I used to handle negotiations with vendors for equipment, and purchasing/bidding of capital equipment. The lion's share of that, except for certain new or critical technologies, is now handled by a new hire, Lucas Wrenn, our capital purchasing coordinator.

I continue to have responsibility, in partnership with our RVPEs, for regulatory compliance, making sure that projects are constructed before permits expire, STAs are timely filed, etc. I oversee a team based in Tulsa that checks our stations' public files and helps them stay compliant.

I have involvement in the original stages — such as budget development, real estate broker selection and negotiations, determination of needed square footage, lease evaluation, site selection, recommending whether or not a project should proceed, and when, of studio consolidation projects — but I have passed the day-to-day project management responsibilities for those projects, once approved and property has been secured, to our RVPEs. ...

RW: Do you and Jeff Littlejohn work together on some projects, such as IBOC projects, at all?



Steve Davis

Davis: Absolutely. I report to Jeff, he's my boss. Our company has realized that rather than just being in the "tall towers in big fields" business, we're in the content and distribution business. Jeff is the visionary who is exploring new and innovative ways to distribute

compelling content to end users.

I was promoted mainly to take the load of day-to-day engineering administrative matters and personnel management off of Jeff's shoulders, so he would be free to explore new ideas, meet and negotiate with other parties who can partner with us in distribution of our content to the widest possible audience, and generally visualize and paint the "big picture." I'm in charge of executing Jeff's vision, putting the people and capital resources in place to achieve that.

For example, Jeff tells me what stations to roll out IBOC on, and assigns the priorities. I make sure we have the personnel and materiel to accomplish that.

RW: Now that the company has committed to a speedy IBOC conversion of most of its stations, how has that changed your job? How many stations have converted so far?

Davis: I've had to spend a fair amount of time learning, getting up to speed, with the technology and the challenges inherent in implementing it. There's much more to it than just a new exciter or second transmitter.

One change in my job is the sheer magnitude of transmitter and antenna projects due to IBOC. We always had some of these each year, to maximize our signals and uptime and stay competitive. But when you add the normal volume of RF upgrade projects, to rolling out HD Radio on over a hundred stations in a year, the project management piece, scheduling and purchasing equipment, lining up installers, etc., becomes a significant challenge.

Our RVPEs are the driving force behind the HD rollout and are working very hard to meet a very aggressive schedule. We

See DAVIS, page 8 ►



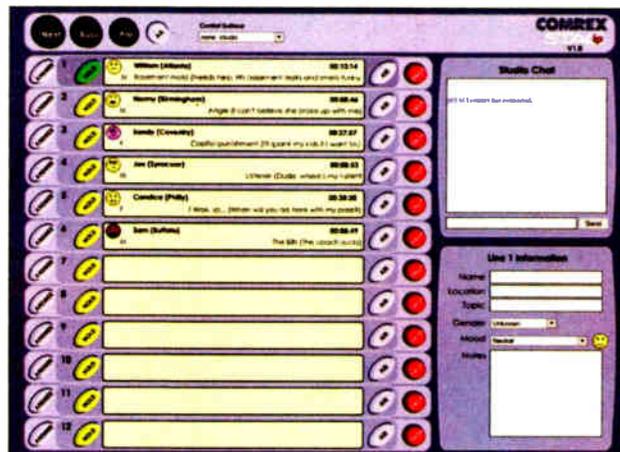
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COMREX

Davis

► Continued from page 7

have had a bit of a learning curve; and in many cases the manufacturers' equipment was not quite "ready for prime time." The equipment, and our understanding of the challenges involved in properly deploying it, continues to improve.

Additionally, beyond the installation and alignment of the HD equipment itself, there is often a need for significant improvements to our existing transmitting facilities. A lot of things that didn't matter too much, such as group delay in the output network of a transmitter (especially important with mid-level or "split-level" combining), or load symmetry through plus and minus 10 kHz for an AM station, can have a significant impact now.

It's not just the magnitude of the variation of the load with frequency that matters now, we're looking for Hermetian Symmetry in the load for AM HD. Our monthly engineering management conference calls are a lot more exciting and interesting than they once were, as there are numerous new issues brought to light, discussed, and often resolved.

Our projection (shows) we will have converted 197 radio stations as of July 1. ...

RW: What goodies to go along with IBOC implementation is CCR considering, such as multicasting, surround sound, other kinds of data initiatives ...

Davis: We are actively investigating, pursuing, and at times testing, many of these sorts of technologies. Clearly multicasting and surround sound have promise. I'd like to see the surround sound format/coding debate resolved soon.

RW: How does the fact that the company may implement those in some markets affect you?

Davis: We will have to become much better versed in data connectivity and other issues traditionally thought of as "IT." With program-associated data and our RDS/Traffic Message Channel data project, we already are.

We're looking at bi-directional connectivity to transmitter sites as an option, and

how to ensure quality of service by partitioning bandwidth between studios and transmitter sites. So, for example, a PC at the transmitter site surfing the Internet doesn't cause loss of quality of more critical data in the pipeline. ...

RW: Tells us about the part of your job that involves FCC filings. Are you coordinating the engineering portion of those?

Davis: Prior to the Jacor and AMFM mergers, when I was VP/engineering for the "pre-merger" Clear Channel, one of my duties was to personally prepare most of our FCC filings, especially applications for construction permits (station moves and upgrades), and licenses, and multiple ownership studies required to support station acquisitions. Initially I did this start to fin-



Davis sets an Optimod processor in 1987.

ish: the engineering portion, technical exhibits and maps, and the legal/applicant portions.

After Congress passed the Telecommunications Act in 1996, the volume of filings, especially ownership studies related to station acquisitions, just became too much to handle. So I hired a broadcast engineer, Troy Langham, who had done some FCC filings and was a bright individual as well as a seasoned broadcast engineer, and brought him on board to help

with the load.

Now Troy heads up our FCC filing department as FCC engineering supervisor, with a recent hire, Jeff Frey, brought on recently to handle AM 302s, FM auxiliary 301s, antenna structure registrations, FAA 7460s and other filings under Troy's guidance. Troy and Jeff do all the engineering applications and exhibits, much as a consulting house would do, and we now use attorneys based in D.C. to complete the legal and ownership portions and file these for us.

We also have Steven Slocum doing Part 101 coordination and 601 applications as required under the new Broadcast Auxiliary Services rules. Given the volume of BAS filings we do, it just made a lot more sense to bring this in-house.

I still do some FCC filings, ownership studies and applications, to handle heavy workloads or if the situation is particularly challenging. And I usually provide quick evaluations to senior management of the ownership rules and whether we can own a station we may be seeking to acquire, under the new media ownership rules. ...

RW: The FCC is due to come out later this year with its further notice on IBOC. What do you hope is included in that?

Davis: Different modes of operation, including multicasting, permitted without "experimental authorization."

The ability to use separate antennas as a means of transmitting HD, without having to request special temporary authority, and renewing that every six months.

Codification of the AM HD mask.

And approval of nighttime AM IBOC operation, and along with that, a definition of "unacceptable interference" — so we have a bright line by which to determine whether or not a nighttime IBOC AM operation is in fact causing interference to another station. ...

RW: A while ago CCR reorganized its engineering structure and named several regional engineers. How is that system working out?

Davis: Actually Jeff Littlejohn brought the concept of regional engineering managers with him from AMFM, where he was the VP/engineering just prior to merging with Clear Channel. So when we merged, Jeff was responsible for managing them.

He augmented his former AMFM team with engineers from Clear Channel, and built the team I'm fortunate to have now. So Jeff did all the heavy lifting on that. I continue to fine-tune and adjust that team,

their geographic areas of responsibility, etc., as needs change.

Two years ago we elevated the regional engineering managers to the regional vice president level. I think it's helpful that they have that status when dealing with station general managers and program directors. It is reflective of the importance Clear Channel, and our senior management, including John Hogan (chief executive officer of Clear Channel Radio), attach to engineering, and top engineering talent.

With over 1,200 radio stations in the group, each of our 10 regional engineering VPs has an average of 120 stations under his purview — more stations than I had responsibility for when I was director of engineering for all of Clear Channel prior to 1996!

The RVPEs are primarily there to provide guidance, and mentor, engineers in the various markets. They have been instrumental in providing help, including hands-on installation assistance or management as needed, with the IBOC rollouts, and they certify that each IBOC signal launched is within the spectral mask and compliant with emissions requirements. Usually once they've helped a market engineer to do this, that engineer is able to do subsequent installs with little or no assistance. ...

RW: You're in Tulsa, Jeff is in Cincinnati, and the company is based in San Antonio. Is that an issue?

Davis: Not really. We all have heavy travel schedules. ...Tulsa, Oklahoma was the one of Clear Channel's first three markets (the other two are San Antonio and Beaumont/Port Arthur, Texas). I've worked on studio and transmitter projects in a great many markets in the 23 years that I've been with Clear Channel, much of that hands on.

In Tulsa, I have a team that I've built over a number of years that can be divided into basic groups: Invoice review, processing and payment; capital budgeting and management; and FCC/regulatory filings and review. (*The FCC/Regulatory filings team was named earlier.*)

Every invoice paid against a capital project is scanned in at the local markets and is routed to Tulsa for approval. My accounting team, headed up by Melita Townsend, reviews these to confirm that they are for items we approved for purchase, qualify for capitalization under accounting rules, and a variety of other criteria. ... Increasingly, Lucas will be the person our accounting team circles with when they have questions about invoices, rather than I.

Our capital management team consists of Lucas Wrenn and Liz Chandler and handles interfacing with vendors, administering corporate purchases and orders, evaluating competitive bids for equipment, fine-tuning makes, models and specs, and handling the logistics of getting product where it's needed, when it's needed. Lucas and Liz are the primary conduit of information between Clear Channel Radio as a group, and our vendors.

Bill Barney heads up our public file support team. Bill and his Tulsa-based team review station public files and help the stations to stay compliant with the FCC's public file requirements. This is a crucial function with license renewal upon us in many of our markets.

RW: Who makes equipment-buying decisions?

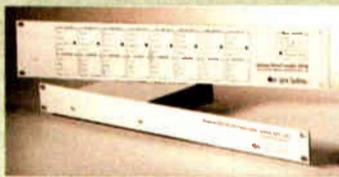
Davis: Equipment buying is a collaborative effort. At the corporate level we set some guidelines as to what equipment

See DAVIS, page 10 ►

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Routers are OK... but a network is so much more modern. With Axia, your ins and outs are next to the audio, where they belong. No frame, no cards, no sweat.

Scalable, flexible, reliable... pick any three.

An expensive proprietary router isn't practical for smaller facilities. In fact, it doesn't scale all that well for larger ones. Here's where an expandable network really shines.

Connect eight Axia 8x8 Audio Nodes using Cat-6 cable and an Ethernet switch, and you've got a 64x64 routing switcher. And you can easily add more I/O whenever and wherever you need it. Build a 128x128 system... or 1024x1024... use a Gigabit fiber backbone and the sky's the limit.



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There's a better way to get audio out of your PC. No more consumer grade 1/8" connectors — with Axia your digital audio stays clean and pristine.



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Nobody loves cable snakes. Besides soldering a jillion connectors, just try finding the pair you want when there's a change to make. Axia Audio Nodes come in AES/EBU and balanced stereo analog flavors. Put a batch of Nodes on each end of a Cat-6 run, and BAM! a bi-directional multi-channel snake. Use media converters and a fiber link for extra-long runs between studios — or between buildings.



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Scott Studios



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There are plenty of ways to control your Axia network. For instance, you'll find built-in webservers on all Axia equipment for easy configuration via browser. PathfinderPC® software for Windows gives you central control of every audio path in your plant. Router Selector nodes allow quick local source selection, and intelligent studio control surfaces let talent easily access and mix any source in your networked facility.



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"This sounds expensive." Just the opposite, really. Axia saves money by eliminating distribution amps, line selectors, sound cards, patch bays, multi-pair cables, and tons of discrete wiring — not to mention the installation and maintenance time you'll recover. And those are just side benefits: our hardware is about half the cost of those big mainframe routers. That's right... *half*. Once you experience the benefits of networked audio, you will never want to go back. AxiaAudio.com for details.



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Davis

► Continued from page 8

will generally be acceptable. But there are always multiple choices, i.e. we don't select only one transmitter or console manufacturer.

We have a computer database with a great many equipment makes and models already loaded into it. Lucas Wrenn updates that constantly, as needed.

We also have an "other" category, which permits local engineers, or the RVPEs, to input any make/model of equipment they feel is necessary to their operations. The annual capital budget requests are submitted by local market personnel, usually engineers, in June-July, for the coming fiscal year. Then

the RVPEs are given budget numbers to hit, and they review the requests with the markets and help make the hard decisions with regard to what to approve, and what not to, given the total funds they have available.

I consolidate that all together, and put together the budget proposal for the major tower and consolidation projects, and coordinate with Jeff Littlejohn on radio's overall capital plan for the coming year. Then it's reviewed in San Antonio.

Once we know what's been approved, we go out to vendors and manufacturers for competitive bids. We will at times substitute the equipment requested for equipment for which we were offered a particularly attractive deal, but in every case before we do this at the corporate level we coordinate with the RVPE and the market chief engineer. 🌐

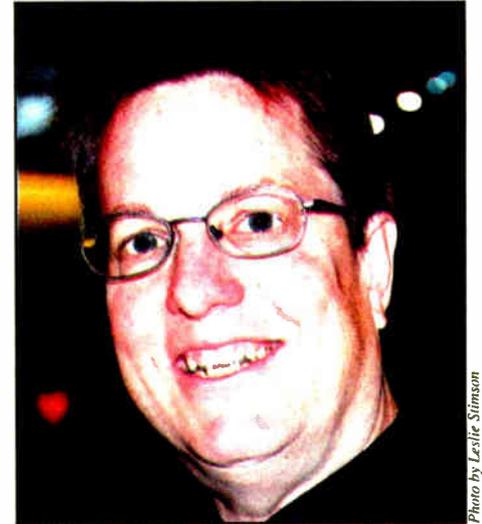
An AM Directional Kind of Engineer

Stephen Davis started his broadcast career as an engineer at KAMR(TV) in Amarillo, Texas in 1977. There he made friends with an engineer who worked at a radio station who introduced him to the GM. Davis began moonlighting as an engineer and DJ at station KIXZ(AM) — a station Clear Channel now owns.

He moved through TV jobs in Pueblo, Colo., and Tulsa, Okla., and in 1982 signed on as chief engineer at a Tulsa AM/FM combo owned by a small company known as Clear Channel Broadcasting, which at that time owned six radio stations and was privately held.

Davis' first task was to install a new four-tower AM array in Tulsa on 1300 kHz. Soon came Docket 80-90. Clear Channel started adding stations and building towers to move them in. The broadcaster went public in 1984.

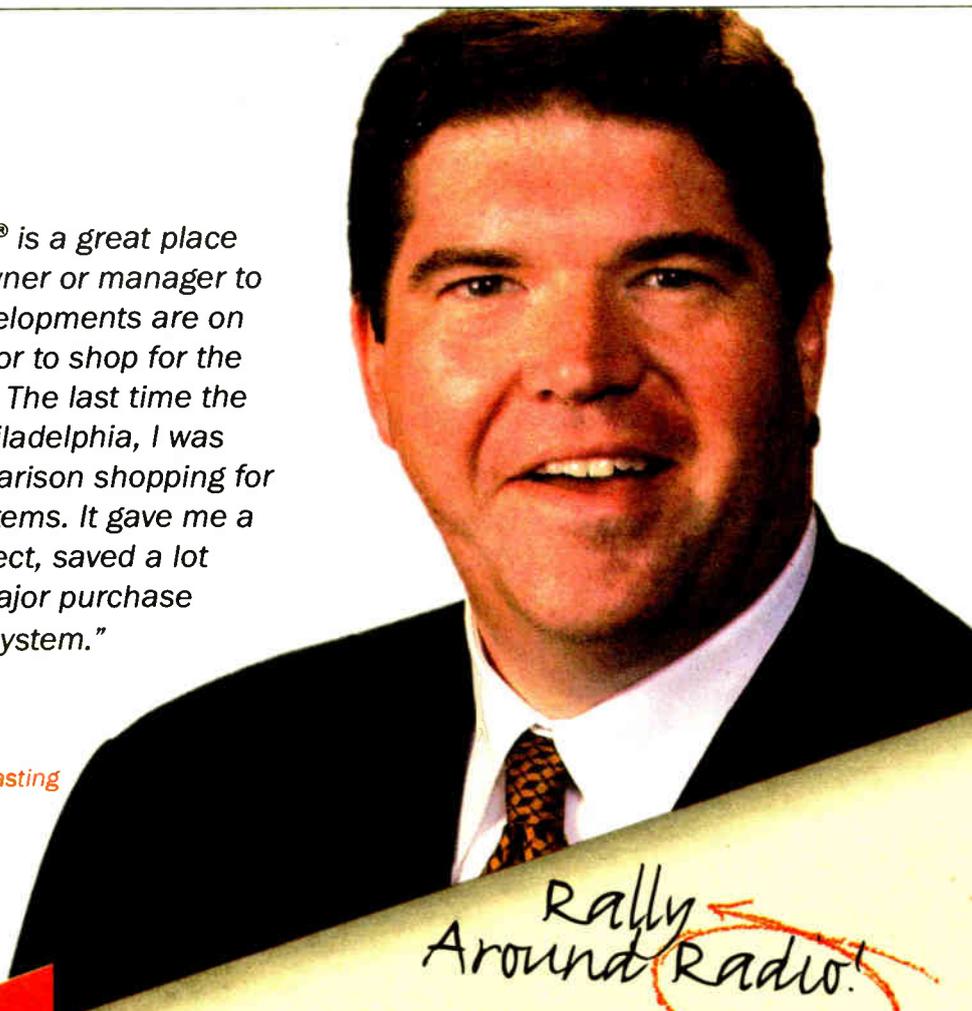
He oversaw design and construction of a new multi-station tower site and began to go on the road helping engineers in the growing company to build transmitter facilities, and move/upgrade their signals. He was promoted to corporate director of engineering while still retaining local DOE responsibilities.



Steve Davis at a recent meeting at the FCC.

"The NAB Radio Show® is a great place for the busy station owner or manager to find out what new developments are on the technical horizon, or to shop for the broadcast necessities. The last time the Radio Show was in Philadelphia, I was able to do some comparison shopping for digital automation systems. It gave me a head start on our project, saved a lot of time and led to a major purchase of our new operating system."

Steve Newberry
President/CEO
Commonwealth Broadcasting
Glasgow, KY



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2-FOR-1
REGISTRATION

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After the 1996 Telecom Act, Clear Channel joined other groups in acquiring stations at a breakneck pace. He was promoted to vice president of engineering and played various roles in the budgeting, design, and oversight of close to 100 studio projects since.

The 49-year-old Davis says he is proud of a project management database he developed for the company's internal intranet, where project descriptions, budgets, timelines, schematic designs, a record of all invoices paid against the project to date, and correspondence are posted and updated.

"Everyone can see only projects in his or her area, whether a region, a state, or a single market or station," said Davis. "If we order equipment at the corporate level, we log that so the station knows it. If there will be a cost overrun or delay, our architects log it so everyone is in the loop."

He said he's always looking for ways to improve company systems, to make the stations' interaction with them easier and less time-consuming.

Davis and his wife reside in Tulsa and have two daughters, both in college. He enjoys motorcycle riding, sound recording/engineering and mixing a live band on a local radio show on Friday mornings.

For a while, he was the chief engineer at Natura Digital Recording Studios in Natura, Okla., owned by former Bob Seger drummer Dave Teegarden. Davis also enjoys model railroading.

Davis is an SBE Certified Senior Radio Engineer, and holds a lifetime FCC General Class License (converted from the old First Class License). He has served as president and treasurer of the Northeast Oklahoma SBE Chapter 56 and on the NAB's FM Transmission Committee, having a part in formulating a position on the FM directional antenna rules. He serves on NAB's Engineering Program Committee.

— Leslie Stimson

Tieline **G3** Vs Telos Xport...

You Decide.



Telos has recently published comparisons between their Xport POTS Codec and the Tieline Commander **G1** Codec which has been obsolete since November 2004. Here is a comparison with the current Commander **G3**.

Tieline Commander **G3** Vs Telos Xport

Feature	Tieline Commander G3	Telos Xport
POTS to POTS connection	Yes	No - POTS to ISDN only
POTS Audio Delay	100 Miliseconds	>600 Miliseconds
Maximum POTS Audio Quality	15kHz	15kHz
Low bit rate audio quality over POTS	7kHz as low as 9.6kbps	Telephone quality below 16kbps
15kHz Bi-Directional Audio over POTS	Yes	No - 15kHz 1 way only
POTS Compatibility	Yes Comrex/Musicam	No
Intelligent Gain Control	IGC + AGC	AGC
Warranty	2 Years	1 Year
Expansion Ports	2	1
12 Volt DC portable power options	Yes	No
Simultaneous duplex Comms and Talkbalk*	Yes	No
Remote Control Talent's audio Inputs	Yes	No
Stereo 15kHz over POTS*	Yes	No
Dual Mono 15khz POTS*	Yes	No
Bonded POTS* Up to 48kbps mono	Yes	No
Audio Over IP Codec to Codec *	Yes	No
Weight	4 lbs	7 lbs
Dimensions	8.5x8.5x2.9 inches	9.25x12.75x3.5 inches
GSM 7.5kHz Wireless *	Yes	No
ISDN Options	Mono, Stereo, J-Stereo	Mono
ISDN Algorithms	Mpeg Layer 2, G.722, G.711, Tieline Music	AAC+, AAC LD, G.722
15kHz stereo/dual mono over 1 x 64K channel	Yes	No
User Remote Profiles	98	30
Configurable Macro Function Options	Hundreds	No
User configurable program/monitoring/comms	built in 11 x 6 cross point audio router*	No
Split Phones - Monitoring/Comms	Yes	No
List Price per pair **	\$5,750 (2x G3)	\$6,850 (Xport / Xstream)
Link Renegotiation	1 second	5-6 Seconds
Control Inputs and Outputs	2 in 2 out (Exp to 16 in/out)	3

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** Refers to base MSRP without ISDN option for POTS Codecs and MSRP for Telos Xstream as of 4/1/2005. The Telos logo, Zephyr, Zephyr Xstream, Zephyr Xport are all registered trademarks of TLS Corporation, © 2004. aacPlus (TM) Coding Technologies. Comrex, Musicam and Telos and associated trademarks are property of their respective owners. Product specifications quoted from the manufacturer's manual listed on the website 5/11/2005 * Requires additional POTS, ISDN, GSM, IP modules for operation.

Workbench

Radio World, July 20, 2005 Past columns are archived at www.rwonline.com/reference-room

Sparkling Remotes Make an Impression

by John Bisset

It's the season for remote broadcasts, and I thought I'd share some ideas from Market Engineer Jon Bennett and his staff at the Cox facility in Richmond, Va.

chief engineer — get a summer intern or paid summer help. The efforts will return many dividends. Where do you find someone like this? Try an auto mechanic's school or a car dealership. Just like you are "in love with radio," this person

remote rack was bolted to the roof supports of the van. This got the rack up off the floor, freeing storage space below.

The Mackie mixer is even on hinges, and can be folded up into the bottom of the rack for transport, then lowered into

Jean Coleman for sharing how they do remotes "down south." Jon Bennett can be reached at jon.bennett@cox.com.

★ ★ ★

Here's a neat addition to an equipment rack: lights that go on automatically when the rear door is opened.

You can now buy white LEDs that are



Fig. 1: Make a good first impression with a clean remote van. Wayne Coleman, here with his spouse Jean, maintains seven vehicles.

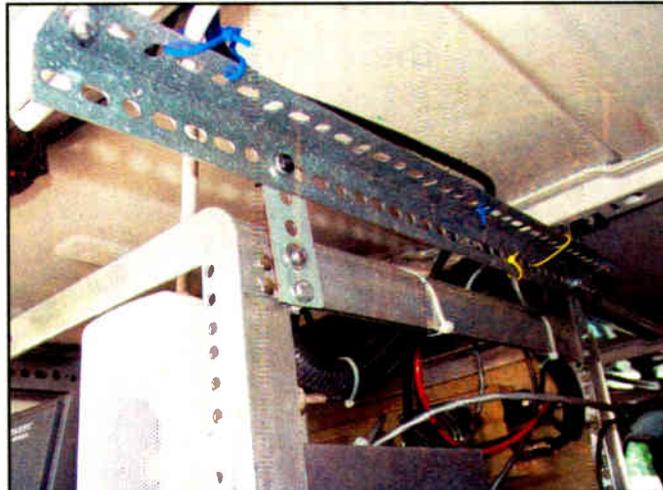


Fig. 2: Secure the rack to the roof and free up storage space underneath.



Fig. 3: The folding Mackie Mixer provides additional storage space.

Perhaps the group's best asset is the team of Wayne and Jean Coleman. Wayne is the remote events coordinator for the four-station group. He maintains seven vehicles, often with Jean's assistance.

Want to make a great impression on the client? "Show up with a sparkling station vehicle!" says Wayne. Just as the receptionist is the "director of first impressions" who influences any callers or visitors, a station vehicle pulling into the remote location can spark enthusiasm for the client.

If you don't have someone to maintain the remote vehicles — and this is not the

should be "in love with vehicles."

Jon Bennett's cluster in Richmond has Wayne. He not only maintains the vehicles — changing oil, maintaining fluid levels, license renewals and registrations — but he also keeps track of the remote gear. Checking out cables and equipment before each remote, Wayne's efforts minimize DOA equipment, which would cost the station money in lost remote revenue. It's quick to see that his services are not an expense, but more like insurance that the remote will run without a hitch.

When it comes to maintaining remote vehicles, it helps to be organized and space-conscious. Fig. 2 shows how the

operating position once at the event; see Fig. 3. To the right in that photo is a folding utility table that can be transported easily now that additional storage space has been created.

Wayne also recommends a supply of different length bungee cords; they do a great job of keeping everything secure.

If you're planning a new vehicle, keep in mind how it will be used. The Cox crew in Richmond moved the hydraulic mast control components from the center of the van to the side wall, thus creating additional storage space. There's even more space under the equipment rack.

Thanks to Jon Bennett and Wayne and

so bright they are visible in sunlight. Paul Sagi, a contract engineer in Kuala Lumpur, writes that a string of these can be run along the inside of the equipment rack and tied to a door-mounted magnetic proximity switch, the kind used in alarm systems.

The LEDs are powered with a low-voltage AC/DC adapter. They provide a low-cost, do-it-yourself light system that produces almost no heat but plenty of light.

If you can't find the string of LEDs, home-brew the lighting fixture by drilling holes through the rack molding for the

See WORKBENCH, page 14 ▶

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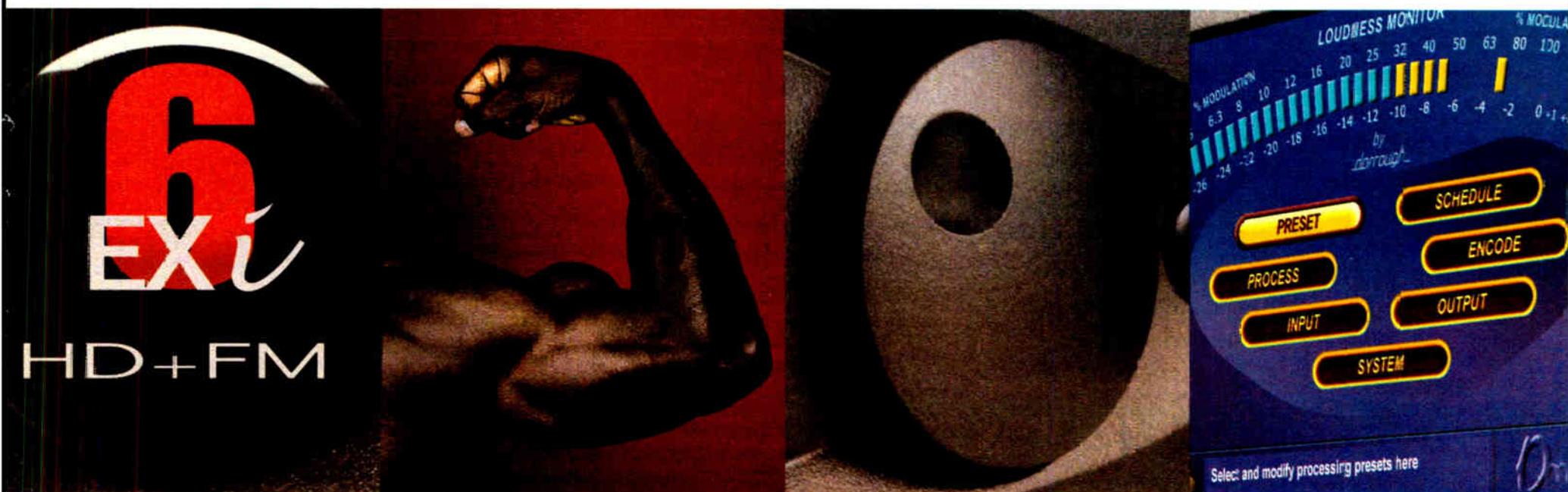
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A lot of muscle? You bet. No wonder the competition is running scared.



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MILE STONES

The FCC Proof of Performance

by Charles S. Fitch

I was introduced to the international world of broadcasting when I worked at RCA in the 1970s. The experience brought to my attention how many second-tier nations use the U.S. FCC's technical regulations as a foundation for their communications regulatory systems.

The lag between rule making here and acceptance there can span many years — as can the removal of regulations from the books.

Several fellow international engineers recently told me that their regulations still require a complete annual "proof of performance."

Detail work

During the tube's reign as the ubiquitous active device, the challenge for broadcasters here in the States was to control and minimize the contribution in noise and gain variation of each audio and RF stage. We hoped that the total system could meet at least a minimum performance specification and be viewed as an uncolored, linear reproducer.

Not only did your radio station have to meet this spec, practically from the bolts on the toilet to the beacon on the tower;

but you had to prove it by an annual measurement: the FCC proof of performance.

Frequency Response and Distortion Tests												
		Distortion in % Response in dB relative to 1000 Hz										
CIRCUIT	TEST	FREQUENCY Hz										
		20	50	100	400	1K	5K	7.5K	10K	15K	20K	
STUDIO BOARD	Dist	1	0.8	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8
	Resp	-1.5	-0.3	-0.2	0	0	+0.1	+0.2	0	-0.6	-3	
ABOVE + TELCO LINE	Dist	1.3	1.1	1	1	1.2	1.2	1.7	2*	*	*	
	Resp	-5	-0.5	-0.3	0	0	0	-5	-10.2	*	*	
ABOVE + PROC FLAT	Dist	1.4	1.2	1.2	1.2	1.2	1.5	1.9	2.2	*	*	
	Resp	-5	-0.5	-0.3	-0.1	0	+0.2	-5.2	-10.5	*	*	

A sample of the author's proof form for KHLO(AM) in Hilo, Hawaii. The raw response and distortion data were usually taken in tabulation form. The telco STL (see asterisks) needs some work here before this station will pass — probably a patched-out equalizer at one of the telco COs.

So every year, at about the same time, the station engineering staff would schedule "the proof." Part troubleshooting, part measurement, part adjustment, it usually took most of the experimental period to accomplish, depending on the complexity of the sta-

tion. The experimental period is that time between midnight and 0600 local when you are allowed to work on your station with both day and night powers and all other stations must accept any interference this might cause. When done, you had to carefully and

a part of the station's FCC records for years to follow.

The prescribed evaluation path was from the lowest level point — normally the control room microphone input — to the sample audio output of the modulation monitor. Everything between would

Workbench

► Continued from page 12

LEDs to peek through, and conceal the wiring inside the rack's hollow molding.

Reach Paul Sagi at psagi92@yahoo.com.

In addition to offering this tip, Paul asks our readers for assistance. He writes, "How do engineers in the United States deal with jocks eating and drinking in a control room?" Apparently, his management doesn't want to crush fragile egos by forbidding food and drink in the studio; the result is almost daily equipment problems involving spillage.

My thought: tie the GM's bonus to the cost of repairs! I know, I know, wishful thinking. E-mail me your ideas, please, to jbisset@bdcast.com. Remember, printed submissions qualify for SBE recertification credit.

★ ★ ★

It's common to come across those little silica gel packets when you open a product that has a long shelf life. The silica gel absorbs moisture and guards against rusting or other moisture damage.

Frequent *Workbench* contributor and Modulation Sciences Vice President of Engineering Joe Stack suggests tossing a few into your tool box. The dessicant will guard against moisture damage to tools.

I have tin containers of bolts and nails, and I put one in each. We'll see how it works. The idea

is sound, though, and could be extended to any equipment that gets stored for periods of time, including van-stored remote equipment. Thanks, Joe, for the great idea on recycling the gel packs. Remember, though: don't eat them!

Joe can be reached at jstack@ieee.org. John Bisset has worked as a chief engi-



Fig. 4: Use silica gel packs to ward off moisture damage.

neer and contract engineer for more than 30 years. He is the northeast regional sales manager for Broadcast Electronics. Reach him at (571) 217-9386, or jbisset@bdcast.com.

Submissions for this column are encouraged, and qualify for SBE recertification credit. 🌐

neatly graph the distortion and response as a function of frequency at several modulation percent levels and record the overall signal to noise. The complete document, including a description of the procedure, test equipment used and the qualifications of the signatory, was made

be considered, including all the circuitry in the studio, the telephone or radio link to the transmitter, linear audio processing stages, the transmitter and even the influence of the antenna.

Except for modulation extremes, the standard for AM was -45 dB of noise and +/- 2 dB from reference response overall.

In the all-copper world of the wireline companies, telco STL circuits were notorious for the noise and loss of high-end response. "Making proof" often meant hours measuring and swapping telco lines for the lowest noise and flattest response. If you couldn't achieve it via this optimization, often you had to hand-select the tubes in each and every station circuit until the needle on your distortion/response analyzer fell below that magic number.

Modern circuitry has no great difficulty with achieving these numbers; and, as a cost measure, the proof requirement has been dropped. Now we use higher-tech tools to proof stations: our golden ears and the ratings book.

Share with us your proof of performance recollections. E-mail radioworld@imaspub.com.

The toughest proof the author had to make included two discrete STL hops and the selection, by hand, from a box full of General Electric Phasitrons to get under the FM noise specifications. 🌐

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Some Issues Surrounding Surround The Big Picture

How Should Radio Carry Multichannel Audio to Listeners?

by Skip Pizzi

One of the most hotly debated elements in digital radio is how (or whether) HD Radio should carry surround ("multichannel") audio. No less than four separate proposals have been floated to the industry by their respective vendors, and Ibiquity Digital, as good stewards of the HD Radio technology, are evaluating them as they come along, without stating any preference for any particular system or systems. Instead, Ibiquity has left these choices to broadcasters, just as much of the rest of the HD Radio format exhibits flexibility for the applications desired by individual stations.

For broadcasters to make appropriate choices, they will need to fully understand the potential breadth of impact of these decisions, however. This requires a deep examination of the issues, across all the possible permutations that exist in an environment that will likely remain unsettled for some time.

Fundamental differences

All proposed formats share an interest in providing a multichannel audio service that maintains compatibility to stereo and mono listening, which is a clear requirement for any broadcast audio system. But there the similarities end, and just how (and how well) this compatibility to all listening modes is achieved varies widely among the systems.

The major distinction among the formats is how the multichannel audio is compatibly encoded in the signal. Of the four proposals to date, three take what can be called a composite approach, while the fourth uses a component method. Traditionally, this nomenclature is used to distinguish systems in which multiple signals are embedded in a single path from those that use separate paths to send multiple signals. In compatible surround, the SRS, Dolby and Neural systems use the composite style, while the MPEG Spatial Coding system chooses a component approach.

The latter uses a data channel (~5 kbps) for communicating parametric steering information to the receiver (separate from its coded audio signal), while the composite systems embed surround information into a stereo audio signal. This implies that composite systems can travel along the same stereo audio paths currently used by broadcasters — or can they?

Thinking it through

If composite surround encoding is used at the broadcast studio for the main channel audio of an IBOC station, this allows it to use the existing STL, as well. However, this also means that both the analog and digital broadcast signals will include the surround encoding.

While this provides the ability to add surround capability to legacy FM, there may be reasons why this is not desirable (and why it hasn't been done before — which it could easily have been). Here's why:

The intrinsic mechanisms of all composite surround systems almost always

involve the addition of some out-of-phase material in the stereo signal (beyond that which may be present in the plain stereo version of the same signal, of course). When applied to the FM stereo multiplex, this translates to higher average modulation of the L-R subcarrier, which in some cases can increase the audibility of multipath distortion. In extreme cases, it may also lead to reduced relative loudness of the mono signal.

Moreover, multipath's effects on the

phase of the received signal can wreak havoc on the subtle phase relationships of a composite-surround signal's encoded steering data, making the decoded analog surround signal suffer from poor and/or unstable surround imaging. An analog FM receiver's stereo blend feature kicking in can further add to image inconsistencies, if not their outright elimination.

Thus it may be desirable to add composite surround encoding only to the digital signal, keeping the FM analog signal in stereo. But if this course is taken, it puts the composite systems in the same situation as a component approach, i.e.,

See SURROUND, page 22 ▶

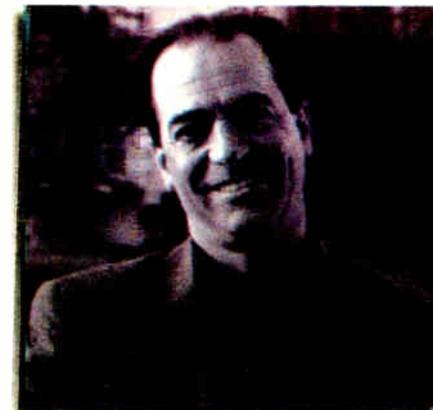


Photo: Garry Hayes, BBC

by Skip Pizzi



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Armstrong Celebration Honors FM Pioneer

'Somewhere Up There, the Major's Looking Down and Saying Woo-Hoo!'

by Scott Fybush

No, it wasn't a ghostly voice from beyond echoing into the New York metropolitan airwaves at 42.8 megacycles. It was the voice of WINS(AM) morning

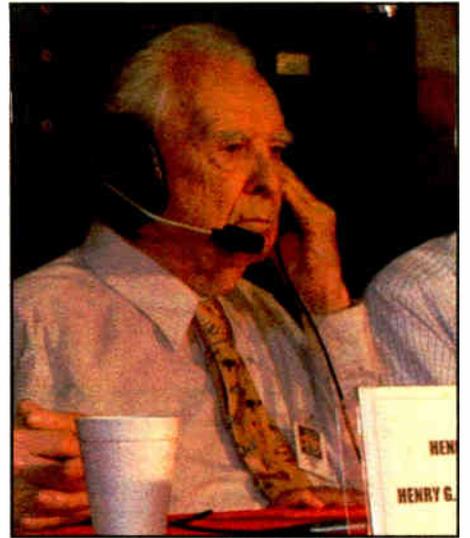
than half a century:

"Somewhere up there, the Major's looking down and saying, 'Woo-hoo!'"

DeAngelis was expressing a sentiment shared by 130 people who packed the historic Alpine, N.J. tower site built by

company that has owned the distinctive triple-masted Armstrong tower for decades. The organizers even had to implement a waiting list for the event.

And while the ostensible purpose for the get-together was to mark the 70th anniversary of Armstrong's first FM broadcast tests in 1935, it was really a long-delayed overall honor for one of America's true radio inventor-heroes.



Armstrong associate Jerry Minter visited the building for the first time since signing off KE2XCC 51 years ago.



The original Armstrong building enjoyed plenty of attention. The commemorative broadcast can still be heard online at www.cscmgmt.com.

news anchor Judy DeAngelis, testing the microphone just before noon on Saturday, June 11 for the first broadcast on the old 42-50 MHz FM band in more

Major Edwin Howard Armstrong in the 1930s.

The invitation-only crowd was assembled by CSC Management, the tower

Major fans

Confessions: I've been a fan of Major Armstrong for years, and as the 50th anniversary of his death approached in February 2004, I harbored more than a passing thought about driving the six hours to Manhattan and carrying a candle in front of the East Side apartment build-



Armstrong associate Henry Dietz talked with attendees in the museum within Armstrong's original W2XMN building.



Armstrong's original Empire State Building master oscillator circuit, from his 1935 FM tests, was on display.

Application Deadline
August 12, 2005

(((FCC NEWS)))
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ing where Armstrong committed suicide in 1954.

Other events got in the way, but it turns out that if I had made the drive, I wouldn't have been alone. I later learned that a small crowd had assembled on East 52nd Street that night, candles and all, and among them was Philadelphia engineer Steve Hemphill, owner of Solid Electronics Laboratories.

You've seen Steve in these pages before, most notably for an honorary "Cool Stuff" Award he received for the replica Phasitron FM exciter he built and displayed at NAB2002. And while the Phasitron wasn't an Armstrong invention (and indeed, was never used on the old FM band), the little memorial gathering that night inspired Steve to start building a Phasitron that could be used down the dial at Armstrong's original frequency.

Another stroke of luck brought Steve together with Charles Sackermann Jr., president of CSC and another huge fan of the Major's.

Sackermann and his crew at CSC provided Steve with space at Alpine to install the transmitter and to mount an antenna high on the tower. It also didn't hurt that the old FM band had, by the turn of the century, been largely vacated by the two-way users who occupied it after FM was kicked "upstairs" to its present 88-108 MHz band, thus providing room on the dial for the FCC to grant a Special Temporary Authorization for a little bit of broadcasting to return to the old band.

A few lucky engineering types learned about Steve's project during a meeting of New York City's SBE Chapter 15 held at

See ARMSTRONG, page 18 ▶

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Armstrong

► Continued from page 16

the Alpine site last winter, when the sounds of classical music could be heard wafting from an old Stromberg-Carlson console radio at the back of Armstrong's building, tuned to 44.1.

"Aha," I remember thinking when I

tion work — and over the Tivoli Model One table radio that Steve had cleverly modified to tune the old FM band as an air monitor. (It was also undoubtedly the first time an Optimod had been used on the old FM band. Somewhere in California, Bob Orban might also be looking east and saying woo-hoo.)

Flash forward, then, from that frigid January night to a sweltering June afternoon.



The Alpine Tower

saw the radio, "someone's cleverly hooked a CD player up to this radio. Sounds nice!"

It was, of course, far more clever than that; and by the end of the night a cluster of engineers had assembled around the Phasitron transmitter, in one of the rooms of the new transmitter building built at the base of the tower, ooh-ing and ah-ing over Steve's incredibly detailed construc-

The STA for 44.1, under the calls W3XXE, had been replaced by 42.8, after appropriate clearances had been obtained from the public-service users still on the channel elsewhere in the country. Armstrong's original calls, W2XMN, were in use by the Armstrong Memorial Radio Club, but the appropriate calls "WA2XMN" had been obtained in their place.

Instead of the crowded meeting room on the second floor of the Armstrong building, the activity had moved out to a tent on the lawn, with big-screen monitors showing the dais that had been set up inside the building for an hour-long panel discussion of Armstrong's legacy.

A few minutes before noon, Steve flipped the ceremonial switch to put the 42.8 signal on the air, and the memorial was underway.

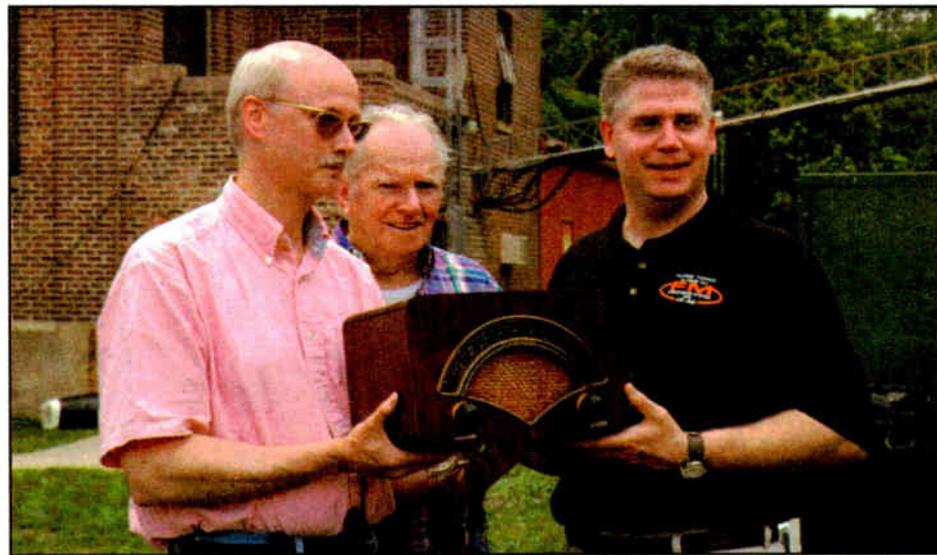
For an hour, DeAngelis talked with veterans of Armstrong's era, including Renville McMann, who began working for the Major when he was 13; Henry Dietz, who worked for Radio Electronics Labs, which made receivers and other equipment for Armstrong; Jerry Minter, who was present at Alpine when the station (by then operating as KE2XCC on 93.1) signed off for good in 1954; and Robert Brecht, an Armstrong family descendant.

the grounds, admiring the shrine to early radio that the Sackermans have built inside the original W2XMN building. For the day, the displays included some very early Armstrong gear, such as the master oscillator used in the Major's earliest FM tests from the Empire State Building.

There was barely a moment when someone didn't have a camera pointed at the tower, the building or at a grinning fellow guest standing on the steps of the building.

"This is like a wedding reception for radio people," said one attendee.

By 3:45, the crowd had begun to thin, as a relaxed Hemphill stood on the lawn talking with McMann and other guests about the earliest days of FM. As the WA2XMN broadcast wound down with the final moments of the "Empire of the Air" radio drama, eyes moved towards the tower as a recording of the final sign-off of KE2XCC played.



Site owner Charles Sackermann Jr., right, is presented with a Zenith dual-band FM radio for the museum at the Armstrong building.

Also taking part in the broadcast were Hemphill, Sackermann, engineer Gilbert Houck, a nephew of Armstrong's colleague Harry Houck, and Mike Katzdorn, who created a comprehensive Armstrong Web site. The program was simulcast on WFDU 89.1 MHz, the Fairleigh Dickinson University station that transmits from Alpine.

It was an emotional broadcast, never more so than when Hemphill spoke of his admiration for the Major.

"As we prepare to pull the switch and shut the station down, we salute the memory of Edwin Howard Armstrong."

Just as KE2XCC had done a half-century before, WA2XMN went silent, but with less of a sense of finality. With FCC authority to operate until September, it's likely that 42.8 will be active again, at least on occasion, this summer. Better yet, there's talk about what might be done in a few years to commemorate the 75th anniversary of FM radio — perhaps

The ostensible purpose was to mark the 70th anniversary of Armstrong's first FM broadcast tests in 1935, but it was really a long-delayed overall honor for one of America's true radio inventor-heroes.

"Every dime I've made, every project I've done has come from him ... and I owe him a great deal," Hemphill said.

WA2XMN remained on the air for three more hours that afternoon, carrying interviews with other Armstrong relatives and with Tom Lewis, author of "Empire of the Air," the definitive story of Armstrong's rivalry with David Sarnoff and Lee DeForest.

While the broadcast played, the engineers and other Armstrong fans roamed

even a recreation of Armstrong's FM networking experiments from mountain peak to mountain peak in New England.

"It's nice to finally see some recognition go back to Armstrong," said Sackermann after the event.

Scott Fybus "lives, breathes, sleeps and eats North American radio and television." A long-time contributor to RW, his many projects include an annual Tower Site Calendar and North East Radio Watch. 🌐

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FIRST PERSON

You Won't Find Multipair Here

WOR Tries Out a Different Approach to Wiring With the Axia Ethernet System

by Thomas R. Ray III

When we started discussing moving the studios of New York's WOR(AM), it was clear that our Pacific Recorders System One consoles would not make the move. They dated from 1978 and had been in the same positions since. Parts were getting scarce.

WOR needed a state-of-the-art facility that was digitally based. I looked at the systems available and settled on the Axia SmartSurface and Livewire system.

After I placed the order, it occurred to me there would be no audio at all passing through the consoles. I thought, "My God, what am I about to do?" After all, consoles pass audio through, right?

Well, they used to.

Once the space on the third floor of 111 Broadway was built out, Creative Studio Solutions started running cables to our studios. What was really weird was knowing the number of audio paths into and out of the WOR studios, and not seeing a big, fat multipair cable anywhere near the nine Axia rooms in the facility.

The connection between the rack room and the Axia SmartSurface in a studio is a single Cat-6 cable. This cable provides a Gigabit connection and runs between the Cisco Gigabit "core switch" in the Master Control room and the 100 megabit "edge" switch in the studio. This cable runs not only audio information but data such as audio source names and contact closures to and from anywhere in the system.

One cable, smaller around than my pinky finger. This was definitely getting strange.

In the Master Control room, we placed eight of the Axia Analog nodes in a rack on the "radio" side of the room, along with the core and edge switches for Master. The other three nodes went into the ENCO racks on the other side of the room. A Cat-6 cable connected each node to an edge switch across the room. We also placed a GPIO (General Purpose Input Output) node on each side of the room.

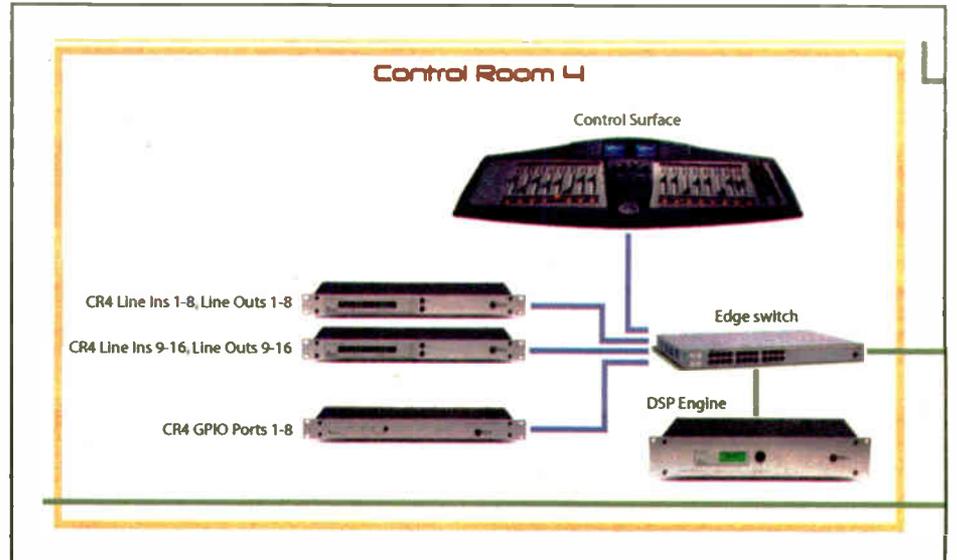
Each piece of Axia gear has a built-in Web site for configuration. It is here that we entered the name of a source (WOR 1 Downlink), or the name of a destination (Studio 1 ENCO 1 In), adjusted input gain if necessary, and decided if a given stream would be a "live" stream with very little latency, or if we also needed to add a "standard" stream, which could be played via Windows Media Player anywhere in the system.

That's another strange thing. Once the audio is input to the system, it becomes a stream. No more audio.

The WOR newsroom and edit booth use Axia Selector nodes. These allow any audio in the facility to be selected

into the analog consoles we chose to use in these rooms. They have eight "hot buttons" on the front that can be programmed much as you would a car radio, so you can put your eight most-used channels onto these buttons.

These nodes also have one stereo See AXIA, page 20 ▶



Detail of WOR's Axia block diagram shows one of its four control rooms.

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Axia

► Continued from page 18

input, which becomes available anywhere in the system. There was no need to take program audio from the analog consoles outside the rooms. Just put them into the Axia selector node and it was done.

Building a room

While CSS was putting together the main studios, I decided to try my hand at putting together an Axia production room.

The time mentioned does not include things like cutting the hole in the counter for the console or hanging

speakers, things like that. I used standard off-the-shelf Cat-6 patch cables purchased from Dalco Electronics; because the Axia system is configured to the Radio Systems Studio Hub standard, I used Studio Hub XLR dongles. Once all the cables were run to and from each piece of equipment in the room and connected to the Axia nodes, it was a simple matter to configure the nodes with my laptop. The room was complete. Time: six hours.

This configuration meant we were also able to save time and trouble by using the Studio Hub headphone amplifiers. Besides the wall-wart power supply, the only other connection is a Cat-6 cable to the microphone node. Some quick configuration makes a particular output a headphone output

that will contain talkback from the console.

Our operators have taken to the Axia SmartSurfaces in a big way.

They like the fact that they can start using the generic console configuration we gave them and set up their console the way they want it. They can move sources around to their heart's content. Once their board is set up, we can take a snapshot of it, and every time a particular operator walks into the control room, they can select their profile and have their own personal configuration available.

Another thing the ops like is the mix minus ability of the Axia system. In our old facility, they had to stop and think about mix minus. Forget doing a double mix minus; it just didn't happen. With the Axia system, every ISDN

codec has mix minus assigned, and we can put multiple codecs up on a console, each one getting its own mix minus feed. And there's no thought involved. Punch up a source that is supposed to have mix minus, and it gets mix minus.

For the most part, talkback is a breeze in the Axia system, as the operator can put any source in preview (cue), and, if it is configured correctly, can talk to that source. For example, a guest mic in the studio is configured such that the headphone at that location is "attached" to the mic. If the op puts the mic in preview, he can talk to the person sitting at that microphone.

Some cool things can be done with the Axia system through their Pathfinder program. Using Pathfinder and scripts, we have built-in studio switching that also routes data. In our old facility, we used internal subaudible tones to generate cue pulses for the WOR Radio Network feeds. With Pathfinder, we simply route the button press for an affiliate local spot closure to the correct GPIO port that feeds the Network cue encoders.

Tweaking

We have had a couple of hiccups, as can be expected when you're deploying the first large-scale deployment of any system.

We found a couple of software bugs. The first involved the GPIO modules. We discovered that, if a change was made in a pathway of any GPIO in the system, all of a sudden we had no cues going out over the WOR Radio Networks, regardless if the change was supposed to affect the network. This drove us nuts for several days until we identified that a change in the system triggered the disconnect. Axia had a software fix for us within 48 hours.

Another bug involved a fight over the GPIO facilities available to a given source if it were brought up on two separate consoles. This was also resolved quickly.

One other problem was a console that was a bit "funky" out of the box. After looking at the problem, Axia sent us a new SmartSurface. Oh, great, you say. What a pain to have to replace a console. Well, the SmartSurface has only three connections. Once you download the console configuration and source definition files to a laptop computer, it becomes almost plug-and-play to replace the console, and took us under 15 minutes.

The decision to install the Axia SmartSurface and Livewire system has proven to be a good one. The system worked out of the box. Installation time was cut way down. Connections are simple. The system, coupled with Pathfinder, is powerful. All the data switches used are top line off-the-shelf items.

I haven't been able to find a single point of failure in the system as configured yet. The operators love it. And it sounds almost too good on the air.

The WOR analog signal sounds great. The WOR-HD signal sounds fantastic. It appears that the Axia SmartSurface and Livewire system was a good choice for WOR. So far we've been happy with our decision.

Thomas R. Ray III, CPBE, is vice president/corporate director of engineering for Buckley Broadcasting/WOR Radio in New York City.



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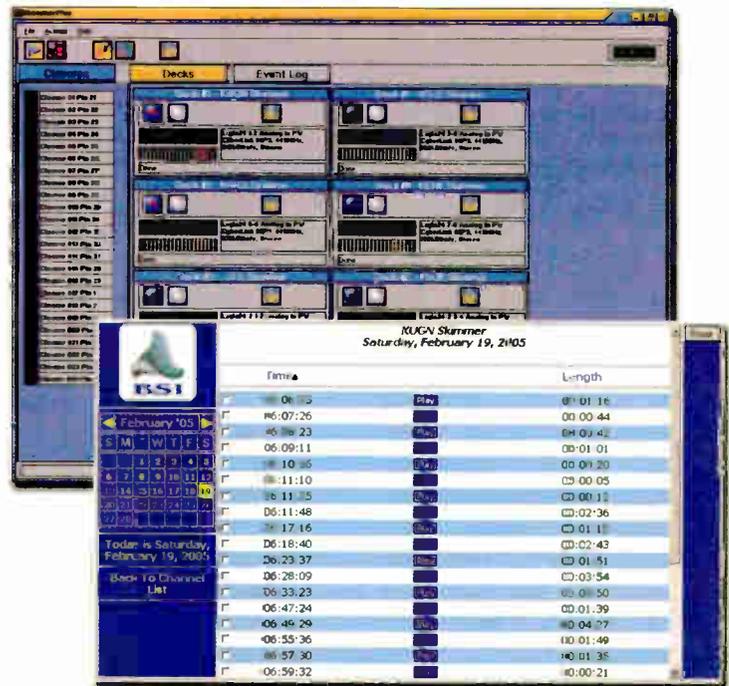
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Surround

► Continued from page 15

two separate audio signals — stereo (2.0) and surround (5.1) — must be generated and managed by the broadcaster.

This means that, unless a station chose to add surround purely as a full-time automatic upmix (with dubious value), both component and such “separate composite” methods would require dual audio signal paths around the station, and that surround encoding would most likely take place at the transmitter site. For non-collocated stations, dual STL paths also would be needed (one for 2.0 and the other for 5.1, the latter possibly in compressed digital form).

The impact on stations routing and

storage systems could therefore be considerable, regardless of the methodology used to transmit surround content. So stations should understand that “going surround” is not as easy as it might initially appear, and it is a step that should not be taken lightly.

Solution space

That said, there are some existing systems that can simplify and reduce the cost of these requisite steps. Using Dolby-E or an IP audio distribution system can allow stations to route 5.1+2.0 audio signals in real time on a single path, using largely existing wiring infrastructures. Those solutions could also be applied to a single digital STL path (either AES-3 or IP-based).

Meanwhile, the cost of hard-disk storage continues to drop, and storage capac-

ities per unit of physical space continue to increase. Existing or newly proposed file formats also will allow straightforward and efficient storage and management of surround+stereo audio.

Stations should understand that ‘going surround’ is not as easy as it might initially appear

When content is aired that only exists in stereo form, automatic detection and switching systems are being

developed that can insert a (pseudo)surround upmix that the station can control — either in real time during broadcast, or when the content is stored to hard disk.

A further advantage of taking the separate 5.1/2.0 approach is the ability to apply audio processing independently and optimally for the two signals (although a single device could provide both functions in the same chassis).

The other path

Of course, with a component surround approach, no such decision on whether to apply surround to analog FM is required. The need for a separate steering data channel means that the surround will only apply to digital signal. (Of course, a station could choose to matrix-encode its analog FM independently.)

Originally in this scheme, it was thought that the analog or non-surround digital receiver would simply receive a stereo downmix of the 5.1 audio sent to surround receivers. However, the latest revision of the MPEG Spatial Coding specification allows original stereo to flow to stereo (analog or digital) receivers while parametric steering data is used by surround receivers to decode a 5.1-channel output from the same audio signal.

This even works when the original stereo and 5.1 mixes are significantly different. If this seems impossible, you’re not alone. So next time we’ll dig a little deeper into how the MPEG Spatial Coding system works.

Skip Pizzi is contributing editor of Radio World.

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TFT’s product lineup includes the 5290 transmitter and 5291 receiver, which will be available this summer for 944-952 MHz use in the United States and this fall in other frequency bands for international use. With a list price for transmitter and receiver of \$4,695, TFT says the 5200 Series is ideal as a spare for clustered stations or for stations with smaller budgets that need only a basic STL package.

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Clear Channel Tries Selling With Sound

by Ken R.

Jell-O, Lucky Strike, Ford and Pepsodent are national brand names that were built primarily on early radio. So were most of Procter & Gamble's biggest products.

But since the waning of network entertainment programs in the 1950s and the expansion of local market advertisers such as car dealers, furniture stores and malls, radio has had a more difficult time creating effective commercials. Too often this task is handed to an untrained continuity person or a salesperson busy with other duties.

While national radio ads usually are professionally produced by agencies, many local spots are poorly thought out and rushed through production, yielding less than wonderful results. Or so goes the logic behind a recent venture at Clear Channel.

Starting with seminars

Last summer John Hogan, Clear Channel Radio CEO, launched the widely reported initiative "Less Is More," under which stations would begin playing fewer and shorter commercials.

Then in October, the broadcaster announced the formation of a Creative Resource Group, which it describes as part of its effort to improve radio's quality for listeners and its value for advertisers.

The new group's mission is to act as "a resource to advertising agencies and local stations, assisting them in creating engaging and memorable radio ads, offering creative coaching, online toolkits and ongoing direction in the creation, writing and production of compelling ad spots."

In the announcement, Clear Channel said the group also would conduct training of station staff to ensure that

sales and creative employees "are indispensable resources in the quest for more compelling content." Clear Channel says its creative effort is unprecedented.

The company appointed three executives to help lead the initiative.



Robert Summers, left, sells with sound as Bob Case and Jim Cook look on.

Programmer Bob Case was promoted to managing director; Robert Summers was hired as a managing director; and producer Yaman Coskun joined as creative coordinator and senior producer. The creative group was also charged with playing a role in aiding the transition to more 30-second spots. It has seven employees total.

"John asked me to put together a group of people that could fill in the hard part of this task," said Jim Cook, Clear Channel senior vice president of creative services. "That meant taking the commercials that were left and

making them better."

"Selling With Sound" was born.

Cook hired several radio ad "gurus" as consultants to help. They include Jack Trout, who in 1981 began to write about a new concept known as "positioning." The

"It's an intense day-and-a-half that begins at 8 a.m. with a talk from John Hogan, myself, then Orkin, Robert Summers, our creative director for the Creative Services Group, then former agency writer Terry Yormark followed by Bob Case, managing director of the



Photo: Anadi Hazelewood

Creative Services Group.

"At the end of the seminar we send all our people to breakout meetings with their regional senior vice presidents. We provide them with materials and online resources to work with," he said.

Attendees are given turnkey spec spots, ad copy written for specific categories, as well as video and audio, which is available on the Clear Channel intranet. They are asked to report back to management with local success stories.

"As human beings, the first sense we develop is hearing," Cook said. "We make emotional connections with sound. Too many radio commercials have become announcements lacking an emotional center."

Focus on the customer

Alex Kolobielski is president of First Media, a broadcast group based in Easton, Md., which owns a number of small-market stations.

"Clear Channel is correct," he said. "As an industry we have to put more focus on the customer and the ads themselves. Sales reps who are continuously updating client copy, writing and producing creative ads and thinking up new ways to use our medium for our customers are in good

See SOUND, page 25 ▶

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Success. Maybe It's in the Mail

"A little more to the left." "The logo needs to bigger." "These aren't the right ZIP codes."

"Maybe this whole card is just too darn small for the amount of art we're using. Let's get pricing for a bigger piece."

Direct mail: When it works, we love it. When it doesn't, we feel like we've just made a donation to the United States Postal Service.

We'll soon be gearing up for the fall book, and that may mean a direct mail campaign for you. Let's get back to the basics.

Shaping a winner

We all make assumptions about using direct mail to promote radio stations. But this is more art than science, so it may be useful to put aside your pre-conceived notions about how to use direct mail and start from scratch. Even if you fall back to what you think you know, at least you'll be assured that you're doing a campaign the best way possible — and that means examining every element.

Let's start with the size of the piece itself. Assuming you're creating a postcard, the first decision is size and shape.

Yes, I said shape. Several companies now offer direct mail pieces in various shapes. You may find that the odder you make the piece look, the more appealing it could be to your target audience. This is something you should test with a bunch of small focus groups that match your target.

Focus groups? I hear you saying two things: "I don't have time for focus

groups" and "I don't have money for focus groups."

Time, oh, time. It waits for no one. This just means you need to map out your fall campaign now.

important corporate feedback. It's not that unusual for the suits to kick an entire campaign back to starting from scratch. As part of your calendar, permit enough time for the possibility of a redesign. Of

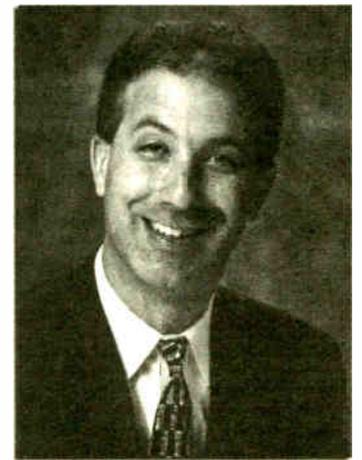


Two sample promotional postcards created by Clear Channel's Critical Mass Media subsidiary are shown above and on page 25. Unusual shapes are also an option, although they can add considerably to the budget.

When possible, give yourself five weeks from start date to the mail drop date. I know you've done these in two weeks. In fact, most people who do direct mail in radio do it that way. Is it the right way? No, it isn't. Two weeks doesn't allow enough time for testing, creative adjustments and, these days, the ever-

course, if you have already conducted a focus group, it's more likely that you'll have the support you need to defend your position — if you feel strongly about the

Promo Power



by Mark Lapidus

creative you've developed.

As to money for focus groups, all stations have listeners who want to offer opinions. It's pretty simple these days to build a database of opinion givers via your station Web site. You'll find that if you offer listeners a tour of the station, free pizza for dinner and a warm welcome, the word will spread and you'll have more people available for focus groups than you know what to do with.

I have written on the topic of focus groups many times. The bottom line is that if you're looking for emotional trends common to each of the groups you test, don't take what any one person says too literally. However, if you notice that each group picks the same shape and creative content, you've likely got a winner on your hands.

See DIRECT MAIL, page 25 ▶

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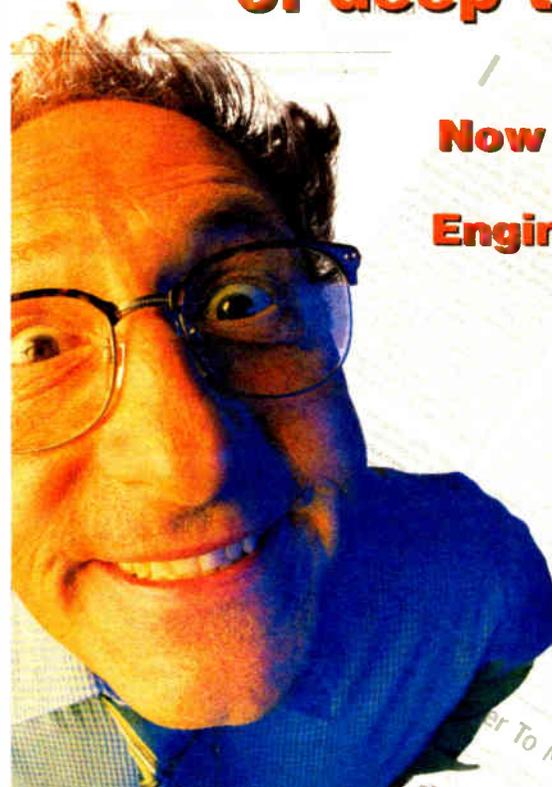
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Direct Mail

► Continued from page 24

Now, on to "creative" — you know, the actual message.

The key question: Is this creative simple enough to understand, yet attractive enough to grab a potential reader's attention at a glance? You bet this is the tough part. Take a shot at several pieces of similar creative, and test with your focus groups, or at least with normal people (read: people not involved in radio marketing).

Don't be afraid of color. Don't be afraid to use people's faces. One amazing fact is that in print advertising, people are drawn in by other people (usually extremely attractive people, as in models or stars).

We've now nailed the size and the creative. Next step is tackling the actual mailing list.

Most radio folks will tell you that so called "hot" Arbitron ZIP codes are the way to go. While there's no question that the best fishing will occur in these ZIPs, you might also try to get more ratings out of an area that it's not yet a "hot" ZIP code,

Sound

► Continued from page 23

shape, and their clients are in good shape. Unfortunately that's less than half of all reps in the country."

He said radio doesn't need the same copy that was written 10 years ago.

"We need fresh ideas; and a \$15,000 per year continuity person can only write a piece of copy like a \$15,000 per year convenience store employee."

Does it work?

Asked by Radio World for examples of the effectiveness of its initiative, Clear Channel offered these.

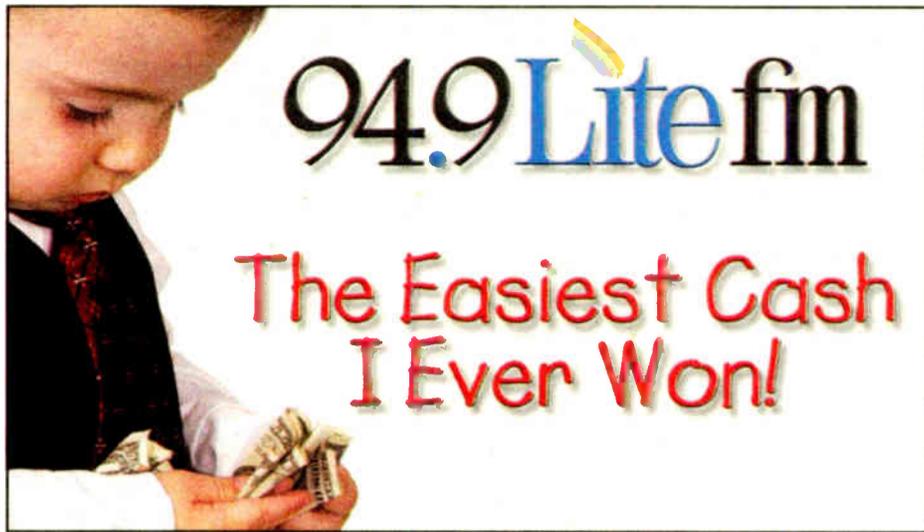
Doug McAllister, general sales manager of WMJJ(FM)/WQEN(FM) in Birmingham, Ala., wrote Cook to say that a mortgage company that ran a series of two-voice 30-second spots was happy with the results. This client sent an unsolicited letter to the station thanking Tenille Smith, senior account executive, by name.

Barbara Scott Sherry, commercial production director for Clear Channel in Atlanta, reported that she used the Creative Work Plan to educate her client, ERA Sunrise Realty, as to the best ways to use radio. Then the station created a 30-second spot called "Protecting Your Dream," the first in a series.

"In the commercials we use the station Web site and keyword as a contact rather than phone numbers no one remembers," Scott Sherry said.

The Dayton cluster wanted to get a reluctant car dealer on the air. This client didn't want to be perceived as a "sleazy, plaid jacket-handshake" store, so the station grabbed the "Business People" spec campaign from the Clear Channel Web site. Production director Jim Hausfeld was able to put the commercial together in less than an hour and reported that the client loved it.

"This opened a door which was firmly shut before," said Hausfeld. "He still hasn't bought, but is excited about finding a way to get the creative on the air."



but which you feel has the potential to become one. This type of forward thinking may put some points on the board where they never landed previously. While I

wouldn't recommend this approach for an entire drop, you should consider using 10 to 15 percent of the mailing to an area.

Finally, remember to proofread the piece. As simple as this sounds, many direct mail pieces have silly mistakes in them. Often people who work on a piece through several weeks and many drafts are too close to realize that they've made a typo or used an incorrect e-mail address or phone number.

Unfortunately, I have seen more than 100,000 pieces of paper go straight into the trash thanks to this kind of error. You don't ever want to put yourself in that position. Make sure you've got several sets of eyeballs looking over your masterpiece before it goes to print.

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

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Site Airs 'Subversive' Broadcasts

ClandestineRadio.com Offers Anti-Government Broadcasts From Global Outlets for Political Analysis

by James Careless

Log onto www.clandestineradio.com and you will enter a world few people know exist — a world of “subversive radio and TV broadcasts” where the activities of everything from the U.S. government’s anti-Castro Radio Martí to the Al Qaeda-linked Radio Al Tajdeed are detailed for all to see.

Even more bizarrely, Al-Tajdeed, which recently sold cassette tapes of Osama Bin Laden on-air and online, is

broadcast by European satellite into Saudi Arabia. Apparently even terrorist-linked organizations can get Western airtime, as long as they pay their bills.

Such is the strange world of clandestine broadcasting, one that ClandestineRadio.com authoritatively documents each day. “Our goal is to archive open and primary source data on clandestine broadcasting outlets, validate it and then use the information to develop analysis on the broader

political context,” says Nick Grace, the site’s Washington managing editor.

“Since 1996 we have quietly landed a number of exclusives relating to Iraq, Afghanistan, North Korea, Iran and a host of other countries, including audio of Taliban Radio at the moment it was blown off the airwaves, and analysis of covert coalition psychological warfare

ety of sources. Some of these are created by government agencies, such as Radio Martí and Radio Free Asia. Others are funded by expatriate dissident groups — London-funded Al Tajdeed, which broadcasts to Saudi Arabia, is a good example — and broadcast into their target territories either by satellite, or using foreign transmitters that reach into the target country’s airwaves.

Occasionally, some stations take the risk of broadcasting from within the country they are targeting; while the U.S.

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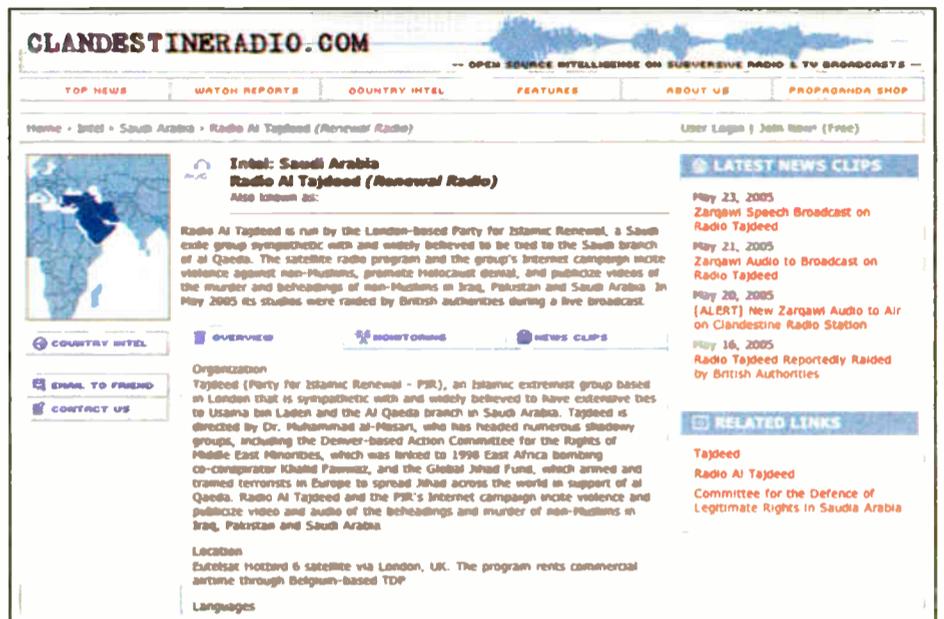
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ClandestineRadio.com’s ‘intel’ page on Radio Al Tajdeed, or ‘Renewal Radio.’

strategy in Iraq,” he said.

Not surprisingly, ClandestineRadio.com has become a popular site for journalists, propagandists and intelligence officers. Such is the quality of the reporting that ClandestineRadio.com “is a required source on the syllabus of at least two university-level communications courses,” Grace says. “Our data has directly served as background for products developed by CBC, NPR, PBS Frontline, CBS News’ ‘60 Minutes’ and BBC Radio and TV.”

The “subversive radio and TV broadcasts” tracked by ClandestineRadio.com are produced by a stunningly wide vari-

military has even broadcast radio programs into Iraq using airborne 10 kW transmitters mounted inside converted C-130 Hercules aircraft.

What all of these broadcasts have in common is that they are combatants “waging a war of ideas,” says Grace, a Web producer and one-time shortwave radio hobbyist who volunteers for ClandestineRadio.com. It’s a conflict that goes back to the 1930s, when clandestine broadcasters pumped their views into Spain’s Civil War; one that was honed during World War II by the BBC and Japan’s Tokyo Rose, and

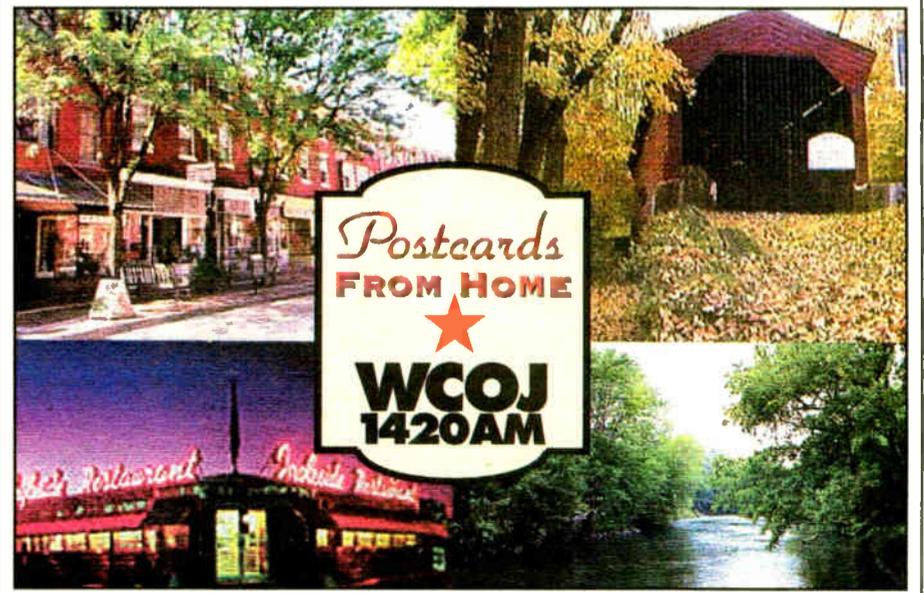
See CLANDESTINE, page 27 ▶

WCOJ Postcard Campaign Is Honored

An AM station in Chester County, Pa., was the winner of the Pennsylvania Association of Broadcasters award for the best public service campaign.

WCOJ’s submission was “Postcards From Home.” The campaign encouraged listeners to submit the name of a friend or relative deployed overseas. The station aired hundreds of PSAs and worked with area sponsors to distribute postcards that depict scenes of area landmarks; the cards were then sent to overseas bases and ships by the American Red Cross.

Michelle Witkowski organized the campaign for the 5 kW news and information station.



Clandestine

► Continued from page 26

raised to a high art form during the days of the Cold War and Radio Liberty/Radio Free Europe.

Today, this "war of ideas" is raging not just on radio and TV but the Web as well, and ClandestineRadio.com is doing its best to track and report it all.

"Our data is acquired through open source research (published materials), monitoring of actual broadcasts and also interviews with participants and/or knowledgeable individuals from academic, NGO and intelligence communities," Grace says.

What's on

The site could be called a TV Guide of subversive broadcasting. It's an apt comparison. Click on the "Latest Schedule Matrix" at ClandestineRadio.com and you can see which clandestine stations are broadcasting into which regions, at specific times during the day.

In radio alone, the North Korean-targeted "Echo of Hope" broadcasts from South Korea daily at 0300-0559 UTC (10:00 p.m.-12:59 a.m. EDT). The Voice of Iranian Kurdistan, which wants a separate Kurd state in Iran, is on at 0200-0500 UTC. Closer to home, the anti-Castro station Foro Militar Cubano broadcasts to Cuba from Miami's WRMI 000-0100 UTC, while another anti-Castro broadcast, Entre Nosotros, is on WRMI 12030-1300 UTC.

Add in the Voice of Tibet, Radio Free Vietnam, Minivan Radio (Maldives), Radio Free Asia, Radio Free Syria, Voice of the Democratic Path to Ethiopian Unity and the New York-based Sound-of-Hope Radio Network, whose anti-Communist broadcasts are heavily jammed in mainland China, and the world's radio bands (mainly shortwave) clearly are jammed with clandestine broadcasts around the clock.

ClandestineRadio.com also offers a country-by-country breakdown of clandestine broadcasts — who the broadcaster is, who is behind them and which

country they are targeting. For instance, as of June, the United States was being targeted by the Iranian government's own clandestine radio station. Heard in English, its call sign is, "This is the Voice of Justice broadcast from the Islamic Republic of Iran."

"The Voice of Justice also can be accessed online" at www.irib.ir/worldservice/englishRADIO/default.htm, says Grace. "Note the Voice of Justice banner with the burning WTC graphic." But at press time that link was no longer valid.

Today, the Voice of Justice is the only clandestine station aimed at the Americas, but there have been others in years past. For instance, in 2000-01 the right-wing Kentucky State Militia Radio, or KSMR, urged listeners "to 'Take Back Kentucky' and, if need be, secede from the United States," says

ClandestineRadio.com.

In 1962-64, the Cuban-based AM station Radio Free Dixie featured "pro-violence black activist" Robert F. Williams telling civil rights protesters to replace peaceful "sit-in" demonstrations with "kill-ins." After his broadcasts ended, Williams subsequently moved to Beijing, where he reportedly grew close to Mao Tse-Tung.

A dangerous job?

The insightful and sometimes astounding information offered by ClandestineRadio.com doesn't come without risk. Not only does the Web site get more than its fair share of hate mail — "people often assume that because we mention a certain clandestine station, we therefore support its views," says Grace — but station personnel have received death threats. For instance, "in

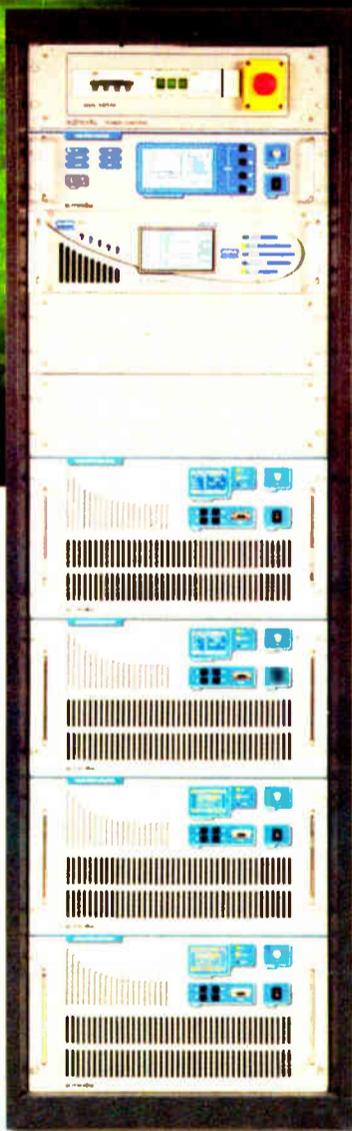
2001 an individual who I personally interviewed that broadcast anti-government broadcasts within the U.S. and later aired threats against me wound up on the ATF Top 10 fugitive list," Grace says.

Nevertheless, ClandestineRadio.com has expanded its activities to include a bi-weekly e-newsletter and is about to launch a regular 30-minute webcast/podcast that will be offered to broadcasters as well.

"Through the power of VoIP (Voice Over IP) our virtual recording studio will span from St. Paul, Minn., Washington, D.C. and Eisenach, Germany," says Grace. "Confidential guests are located in Egypt, Australia, U.S., U.K., Sri Lanka and the Gambia. Not bad for zero budget."

James Careless is a frequent contributor to Radio World. 🌐

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The Cross and the Star of David

Volunteer-Run Beth Shalom Center Radio Reaches Russian-Speaking Christians in U.S., Moscow

by James Careless

Its target audiences are in New York, Chicago, Sacramento and Moscow. Its programming is in Russian, but its studios are in Brooklyn. Its logo has both a Cross and a Star of David.

Beth Shalom Center Radio is a broadcast organization run by the Ministry of Beth Shalom Center, a Russian Christian non-denominational church founded in 1996 and based in the Big Apple.

Hundreds of thousands, perhaps more than a million, Russian speakers — legal and illegal immigrants — live in the areas of the United States reached by its programming, according to the person responsible for running it.

"New York is the gate of Russian immigration," said Andrey Nekrasov, general manager and program director of Beth Shalom ("House of Peace") Center Radio. Sacramento, Calif., he added, is "the capital of Russian Christianity" in the United States.

"Only radio can reach such a vast audience."

The center has about 600 members, immigrants from the former Soviet Union. "We truly believe that God did not forsake the nation of Israel," the center's Web site explains, "and we believe that Israel will be the center of all major events in the last times we are approaching."

Nekrasov is the founder, general manager and program director of Moscow's Radio Center 1503 AM, which he continues to run. He ended up in New York at the request of the Rev. Juri Popov, pastor of the Ministry of Beth Shalom.

"I was invited here in 2001 to set up the Brooklyn studios and to train radio workers," said Nekrasov. "Today, our broadcasts are produced by 12 very talented and professionally trained volun-



From left: Pastor Rev. Juri Popov, co-producer Alex Shilovsky and General Manager/Program Director Andrey Nekrasov

teers." Nekrasov also is a volunteer. The station is funded by the church out of its \$200,000 annual budget.

Getting to air

As a volunteer-run station, Beth Shalom Radio can't afford to produce full-time programming, nor own a radio transmitter. It airs programs in Sacramento on KJAY(AM) weekdays in the station's Russian morning show, and Friday nights/Sunday mornings on KLIB(AM), which can be heard in San Francisco. Beth Shalom Radio also makes occasional Saturday night appearances on KLIB. Nekrasov said local Russian churches pay for the airtime on

those stations.

In New York, Beth Shalom is heard on WPAT(AM) out of Paterson/Jersey City, N.J., while Radio Center 1503 broadcasts

Beth Shalom's programs in Moscow. That station covers much of the European part of the former Soviet Union with a 20 kW signal.

Given that Beth Shalom Radio doesn't have the money to rent a dedicated satellite uplink, Nekrasov has to be creative in getting its programming out of Brooklyn. To do the job, he uses ISDN, satellite phones, regular phones and even Voice over IP (VoIP) phones to transmit live programming.

"We have one hour weekly live-to-air programs that we air from Brooklyn in Moscow, and similar 30-minute live broadcasts from our studio to Sacramento," Nekrasov said. Consisting of Rev. Popov's preachings, Bible study and live interviews with guests, the shows are meant to spur feedback from Beth Shalom Radio's far-flung audience.

"We can receive phone calls from our Moscow listeners thanks to our arrangement with the local Moscow phone company and the New York VoIP carrier IP Telefonica. They forward all calls from the Moscow phone exchange over the Internet to our New York phone number," said Nekrasov.

Beth Shalom Radio also produces four 15-minute short programs for both Sacramento and Moscow. "These pro-

grams are about people's lives before and after they came to Christ," said Nekrasov. "We also have received orders to record Russian-language Bible readings, and 140 one-hour Russian programs for the U.S.-based Christian Mission organization."

Working with basics

Beth Shalom Radio's programs are produced in a single studio, inside the Ministry of Beth Shalom Center's church office.

"We're using a mix of analog and digital equipment," Nekrasov said. "We have a 16-channel Behringer mixer console feeding a computer loaded with Sound Forge and Lexicon Studio software. We use some Shure and AKG microphones, and source audio to and from Sony MiniDisc and Marantz CD-RW recorders. We also have a Roland V880 portable digital studio for off-site broadcasts."

Despite this barebones setup, Beth Shalom has big plans for increasing its reach. Specifically, the station intends to use Digital Radio Mondiale, the digital shortwave radio transmission medium, to try to attract a younger generation of Russian-speaking listeners.

"We have arrived at the conclusion that DRM is the future of the shortwave radio so loved by Russian immigrants," Nekrasov said. "This is one of the main reasons that we want to adopt DRM and shortwave broadcasting."

To achieve this goal on its tight budget, Beth Shalom Radio has joined the National Association of Shortwave Broadcasters. As an associate member, it can take part in NASB DRM transmissions covering the Americas and Europe.

Beth Shalom Radio also is talking to Ecuadorian religious broadcaster HCJB, whose high-powered shortwave transmissions blanket the Americas, about joint ventures. Given Beth Shalom Radio's Moscow airtime, it hopes swapping airtime might prove attractive to HCJB. Beyond this, Beth Shalom Radio is planning to apply for a low-power FM license in Brooklyn, and is hoping to rebroadcast some of its programming over U.S. campus radio stations that provide airtime to ethnic groups.

"Immigrants from Russia have brought their problems with them: (drugs), prostitution, broken families and other social risks specific to the citizens of the former Soviet Union," Nekrasov said. "Through our Church, the Lord miraculously touches these people and gives their lives back to them. But in order to bring people to the Church, it is necessary to tell them about the importance of Christian values, and this is exactly what we do through radio." 🌐

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Crystal Winners

NAB this spring named 10 winners of its Crystal Radio Awards, which recognize radio stations for outstanding commitment to community service.

Accepting the awards were, from left, rear: Paul Tinkle, WCMT(AM), Martin, Tenn.; Joel Oxley, WTOP(AM), Washington; Ric Schmidt, KNOM(AM), Nome, Alaska; Chuck Tweedle, KOIT(FM), San Francisco; Francis Nash, WUGO (FM), Grayson, Ky. Front: Nelkane Benton, KLOS (FM), Los Angeles; Janae Jontry, WJBC(AM), Bloomington, Ill.; Drew Horowitz, WTMX(FM), Chicago; RosAnna Salcido, KBBX(FM), Omaha, Neb.; Julie Koehn, WLEN(FM), Adrian, Mich.



credit: Photo ©NAB

NYSBA Names First Hall Members

The New York State Broadcasters Association has established a Hall of Fame and named the first 32 members.

Included are six broadcast engineers who died at the World Trade Center on 9/11. "Their bravery was shown in the up-to-the minute reports to their respective stations as the event was unfolding," the association stated. "They will always be remembered."

The charter class:

Al Anscombe — Pioneer in radio, television and cable including work at WKBW Radio and TV and numerous broadcast and cable outlets.

Dr. William F. Baker — President/CEO of Educational Broadcasting Corp., licensee of Thirteen/WNET and WLIW21 New York, former president of Westinghouse Television and chairman of Group W Satellite Communications.

Walter Ranson Gail Baker — "Father" of electronics at General Electric, former chairman of the NTSC, pivotal in early federal standards for black and white as well as color TV.

Martin F. Beck — Partner in Beck-Ross Communications, which owned several radio stations; former president of the New York State Broadcasters Association and catalyst in changing it to a full-time professional association.

Philip R. Beuth — First employee that Tom Murphy hired in 1955 for Capital Cities' WTEN(TV), managed three of the company's television stations; former president of ABC Network's "Good Morning America."

Gerard "Rod" Coppola — Engineer, worked at WNET(TV) for 16 years. Died at World Trade, age 47.

Frankie Crocker — Personality DJ, program director at WBLS(FM) and WLIB(AM) in the early 1970s, Rock and Roll Hall of Fame inductee.

Walter Cronkite — The "most trusted man in television news," has spent 50 of his 60 years of broadcasting with CBS News.

James J. Delmonico — Vice president of GE Broadcasting and GE Cablevision Corp., VP/GM of GE's TV flagship station in Schenectady and WGY-AM-FM; NYSBA director and chairman of its Legislative Committee.

Donald DiFranco — Engineer at WABC(TV). Died at World Trade, age 43.

The Gamblings: John B., John A., John R. — "Radio's longest dynasty, spanning three generations. Since 1925 the voice of a Gambling has been on the air in New York bringing news, information and more in the early morning."

Don Imus — Host of "Imus in the Morning" on WFAN all-sports radio and simulcast on cable's MSNBC. Author and advocate for children's health charitable causes.

Steven Jacobson — 22-year engineering veteran of WPIX(TV), died at World Trade age 53.

Andrew A. Langston — Founder, chairman and CEO of Monroe County Broadcasting and WDKX(FM) in Rochester, one of the first black-owned radio stations in the state, now the only locally-owned commercial radio station in

that city.

George "Hound Dog" Lorenz — Founder of WBLK(FM) in Buffalo; in 1950s hailed in 27 states and parts of Canada as the granddaddy of rock 'n' roll.

Anthony C. Malara — General manager of CBS affiliate WWNY(TV) in Watertown, former weatherman and president of CBS affiliate relations in New York. Former president of the NYSBA.

Thomas Murphy — Iconic "father" of Capital Cities built the company into a telecommunications empire; engineered the 1985 purchase of ABC with backing of friend Warren

Buffett, later sold Cap Cities/ABC to Disney for \$19 billion.

William O'Shaughnessy — President & CEO of Whitney Radio, parent company of Westchester's community stations, WVOX and WRTN, major regional stations. Author of three books and First Amendment advocate, past president of the association, active in Broadcasters Foundation.

William S. Paley — The "father" of CBS and founder of The Museum of Television and Radio in New York.

Bob Pattison — Engineer at WCBS(TV), died at World Trade, age 40.

J. Leavitt Pope — President/CEO of WPIX(TV), one of the first stations in New York; gave it a strong news presence in the New York metropolitan area. Former NYSBA president.

Isaias Rivera — Engineer at WCBS(TV), had worked for CBS for 30 years. Died at World Trade, age 51.

Chuck Scarborough — WNBC anchor with NewsChannel 4 since 1974; has 28 Emmys and has authored three novels. Co-anchor with Sue Simmons.

Sue Simmons — Anchors WNBC "News Channel 4/Live at 11 p.m." and "News Channel 4/Live at 5 p.m." Co-anchor with Chuck Scarborough.

See NEW YORK, page 31 ▶

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The SBE announced AM Directional Specialist (AMD) certification for **Alan Alsbrook**, St. Augustine, Fla., Chapter 7; **Philip Alexander**, Indianapolis, Chapter 25; **Michael Fields**, Oklahoma City, Chapter 85; **Charles Fitch**, Avon, Conn., Chapter 14; **Jerry Massey**, Greenville, S.C., Chapter 86; and **Mark Persons**, Brainerd, Minn., Chapter 17.

Andy Laird was promoted to vice president, chief technology officer for the **Journal Broadcast Group**; replacing **Randy Price**. Laird had been VP, radio engineering.

Tony Scott Peterle was named technical support manager for **Audemat-Aztec**. Known as **Tony Scott**, the broadcast engineer brings

25 years of experience, SBE membership and certification as a senior radio engineer.

Drew Agnew joined **Clear Channel Radio** as director of engineering in the Lincoln, Neb. market. He will assist regional engineering manager **Allan Brace** with the HD Radio rollout in that market. He had been FM applications engineer with **Harris Broadcast**.

Dielectric Communications named **David J. Wilson** as its president. Prior to joining the company, he had been VP, business development for **SPX's Cooling Technologies** and



Tony Scott Peterle

Services business and **SPX's Edwards Systems Technology** business.

Orban/CRL promoted **Peter Lee** to VP, European operations. He had been general manager of **Orban-Europe, GmbH** and director of worldwide codec sales for **Orban/CRL**. ... **Rebecca Valdez** was promoted to VP, administrative operations for **Orban/CRL**. She had been human resources director.

Sennheiser Electronic Corp. added **Nathan Armstrong** and **Thom Salisbury** as sales managers in its Western region. **Armstrong** had been a sales account execu-



Drew Agnew

tive. **Salisbury** had previously run a Los Angeles-based audio/video/data company.

Hansel E. Tookes II was elected to **Harris Corp.**'s board of directors. He retired in 2002 from **Raytheon Co.**, where he served as president and COO, and then chairman of **Raytheon Aircraft**. ... **Brian McConnell** was named district sales manager, Western region, for **Harris' Radio Broadcast Systems** business unit. He is rejoining the company after working for the company from 1999-2002.

Chris Edmonds was appointed general manager of **Beasley Broadcast Group's** Atlanta cluster. He had previously held various positions, including operations manager.

Tyler Callis of the Southwest Sales Office of **SCMS** spoke in the **EAS Engineering Workshop** at the Louisiana Association of Broadcasters annual convention in **LaFayette**.

See PEOPLE, page 32 ▶

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New York

▶ Continued from page 29

William Steckman — Engineer, an employee of **WNBC(TV)** for over 35 years. Died at World Trade, age 56.

R. Peter Straus — Chairman of **Straus Communications**, owner of **WMCA Radio**, known for "the Good Guys" and as the "indie with a flair for public affairs." As station president, championed over-the-air editorials, which were not allowed by the FCC. Former director of **VOA** and president of **NYSBA**.

Shell Storrier — Past VP/GM of **WKTV** in **Utica**, co-founder and former VP of the **NYSBA**, active in charitable organizations in the **Utica/Rome** market.

Dennis Swanson — Executive Vice President/COO of the **Viacom Television Stations Group**, creator of the "Oprah Winfrey Show." He oversees operations of the division's 39 television stations; former president and GM of **WNBC(TV)** in **New York**.

E.R. "Curly" Vadeboncoeur — Former newspaper journalist joined **WSYR Radio** in **Syracuse**, became GM of radio and TV; became involved in expansion of owner **Newhouse Broadcasting** and helped develop its cable properties.

Nancy Widmann — President of **CBS Radio** from 1988 to 1996, "which became the largest radio broadcasting operation in the country during her tenure." Joined **CBS** in 1972 as an AE and was named VP/GM of **WCBS(FM)** in 1980, led station to success and profit in oldies format. Now a management consultant and author. Named an **American Broadcasting Pioneer** by the **Broadcasters Foundation**.

People

▶ Continued from page 31



Jim Godfrey

Premiere Radio Networks promoted **John Weber** to VP, network programs and services. He had been senior director of programming operations.

Jim Godfrey was named VP of **Tieline's** North and South American operations. His previous positions include president of **Marti Corp.** for nine years, and more than seven years at **Radio Computing Services** and

Decision Inc. developing broadcast products and distribution networks.

Andy Ioannou joined **DayPort** as VP, business development, broadcast solutions. He had previously developed and led the USA expansion of **Omnibus Systems Inc.**

OMT promoted **Jackie Tetlock** to manager, broadcast sales and marketing. She joined the company as an account manager in 2001.

Salem Communications Corp. appointed **Joe D. Davis** to executive VP and COO. He had been EVP of radio for Salem since 2003. ... **Jon Horton** was named a VP of operations for the company. He had been chief operating officer for **Mondosphere Broadcasting** for 11 years.

Rhea Zako was named manager of **Eastman Radio** in Detroit. Her most recent position with the company was as senior account executive in 1996 before leaving in 1998 to serve as national sales manager for

Infinity stations WWJ/WXYT(AM). ... **Mary Anne Kelleher** was appointed VP, sales manager with **Eastman Radio** in Boston. She had been with **Interep**, which she joined in 1986 and held various positions including overseeing the Boston office of **McGavren Guild Radio** for 18 years, and manager for **Interep's** NPR division for New England. ... **Robert Fabian** was named VP, regional manager with **Eastman Radio** in Dallas. He had been VP, director of sales for **D&R Radio** in 2003 after the merger of **McGavren Guild** and **Allied Radio** partners, of which **D&R Radio** is a sister company.

Liz Berger joined **Sirius Satellite Radio** as senior director of communications. She had been VP of publicity for **Miramax Films**.

Entravision Communications appointed **Aaron Scoby** to general manager of its **Monterey, Calif.** broadcast properties. Prior to joining the company he held a manage-

ment position at **Mondosphere Broadcasting.**

Wisconsin Public Radio named **Anders Yocum** associate director. He retired from a Chicago classical fine arts station in 2001 after serving as senior vice president, and in 2004 served several months as interim director of radio when 14-year veteran **Greg Schnirring** left WPR. ... Also at WPR, **Allen Rieland** was named director of technology and new media. He became a member of NPR's **Design Advisory Group** in 2001, which made the original recommendations for the **Content Depot** distribution system. He completed his objective of making WPR's talk and national programming available as web-based audio archives in 2004. ...

Steve Johnston was named director of engineering and operations at WPR. He shifted to public radio in 2000 when he became director of engineering and operations for **Boise State Radio**, and most recently served as its interim general manager.

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GUEST COMMENTARY

Shortwave Decline Doesn't Exist

Listener Research Shows the World Depends on Shortwave for Information, Local Programs

by Dr. Graham Mytton

This commentary is an excerpt from the presentation "International Radio Continues to Depend on Shortwave" given by Dr. Graham Mytton, former BBC audience research officer and now consultant to VT Merlin Communications. It was delivered at the CIBAR Annual Conference in London last fall and reprinted and revised for the 2005 National Association of Shortwave Broadcasters conference in Washington this spring.

I am often asked, "Where are shortwave listeners to be found?" or "Is shortwave listening in decline?" or "Are shortwave listeners migrating to FM?" The questions reveal a way of thinking that needs to be challenged.

There is in fact no such thing as a shortwave listener in the way that there is, for example an Internet user, aside from the very small number of dedicated DXer enthusiasts. Many people who use the shortwave bands on their sets every day do not know they are shortwave listeners.

What is new is a change in the media environment, not the technology. Where there were previously widespread state monopolies in broadcasting, now we see thousands of private services on FM and some on AM in many parts of the world where previously there was only a single radio service provider. But the changes are not principally changes in technology. They are changes in market availability of radio services.

Assumptions have, I believe, been made in this way. Because shortwave is an old technology it must be on the way out. In a world of the Internet and cable and satellite TV, surely shortwave is going to be squeezed out. Or the assumption is made that because shortwave is sometimes unreliable and often noisy, people will choose something clearer and easier to listen to.

This does of course happen, provided that the content available is what they want. But countless surveys will show that people often choose to listen to scratchy and difficult shortwave services in preference to or as additions to locally available services in good quality, provided what is available on

People don't look for different kinds of Hertz. Nobody listens to HF or shortwave, or for that matter, FM or AM. They listen to radio programs. They look for content. Technical quality always comes second to content.

If you ask them if they listen to shortwave they may say "No," and the same is true if you ask them if they have a shortwave set. They are no more familiar with these technical terms than most people are with, for example, the differences between VHF and UHF TV reception.

Most who use shortwave to listen to radio services they receive are unfamiliar with anything other than the place on the tuning dial where they can find a particular station.

Perceived demise

For about the last 15 years the predictions of the demise of shortwave have been frequent and persistent. It is as if it has been taken as an obvious fact that there would be decline. If the assumption had been made for market reasons, this would perhaps be understandable, although one would hope assumptions were based on real market data.

But we hear reasons given as being to do with technological advance and innovation. In fact changes in technology may not be the main driver with respect to what people choose to do, so far as radio is concerned.

FM is not a new technology. It has been around, even in parts of Africa and Asia, since the 1960s or even 1950s in some

shortwave is what they are looking for.

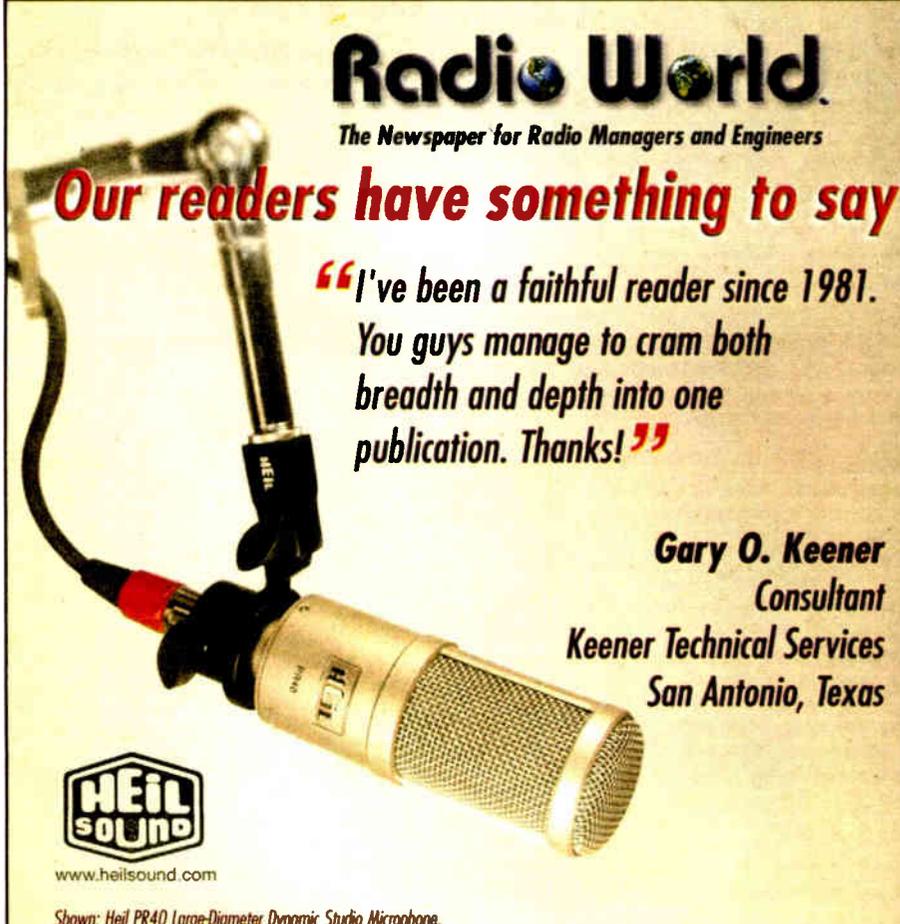
To give just one example, in the dying days of the Abacha dictatorship in Nigeria, when people in Kano had local FM state-owned and -run radio services easily accessible to them, they still listened in huge numbers to the BBC and other broadcasters in Hausa, all on shortwave. This was because they wanted what those services provided which were not being provided locally, no matter what the reception quality was like.

People don't look for different kinds of Hertz. Nobody listens to HF or shortwave, or for that matter, FM or AM. They listen to radio programs. They look for content. Technical quality always comes second to content.

Unfortunately this message has not been heard, or it has not been listened to, because I have said and written it often enough, as have others. Leading figures in broadcasting that ought to know better have said and done things that have not been based on realities.

For example, Richard Sambrook, now director of the BBC's Global News, and therefore in charge of the World Service, speaking when in a senior position in BBC News eight years ago at a conference in

See SHORTWAVE, page 37 ►



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Shortwave

► Continued from page 36

London, spoke of the "migration away from shortwave."

When I pointed out to him that there was no such migration, he expressed astonishment. He admitted that he had said this not on the basis of any evidence, but just that he assumed it was true. There have been too many assumptions like this.

The previous director of Deutsche Welle once spoke on similar lines when talking about the policy they had adopted of reducing shortwave services to, for example, Turkey. In fact, as research at the time showed, the only station to lose audiences over the period he was talking about was Deutsche Welle. I was convinced at that time that DW had lost listeners because it had cut back its availability on shortwave.

And I don't need to go over the painful experience of Radio Canada International in much detail. Between 1990 and 2000 it was subject to almost continual cuts and threats of cuts. Their audience declined sharply. Some used this fact to argue that listening to the station was in decline and that the cuts were an acknowledgement of that.

In fact, decline was almost certainly mainly the result of the cuts. Here and elsewhere we have seen the enactment of self-fulfilling prophecies.

The investment in shortwave

There is something very odd and rather ironic about the assumptions that have been made about shortwave. They came at the end of a period of massive investment in shortwave enhancement and improvement. In the BBC we had what we called the "Audibility Programme" that stretched from the early 1980s through into the early 1990s.

Not only were all existing shortwave facilities greatly improved and strengthened, at Singapore, Cyprus, Oman and Ascension, as well as in the U.K. at Rampisham, Wooferton and Skelton, but also new sites were opened in Hong Kong (later moved to Thailand), the Seychelles and most recently, Oman.

Shortwave became very good. Most major target areas were reachable by a first-hop service and with higher signal strengths than ever before and with much more efficient aerial arrays. And it was not only the BBC that made such improvements. RFI launched a huge investment program focusing on improvements at its main transmitter site in Issoudun.

VOA opened several new transmitter sites in Botswana, Sao Tomé, Morocco and elsewhere. Deutsche Welle also made several new investments in Germany and, despite many difficulties, in Sri Lanka.

The results of many of these investments in new, more powerful and better focused shortwave could be seen in larger audience reach in several parts of the world, most notably in Africa where audiences for all major international broadcasters grew impressively during the 1990s. The investment in shortwave has been vindicated and justified. It was a period of huge success, especially in sub-Saharan Africa.

Why then was there this extraordinary about-face in the policies of the major broadcasters? Was it simply because local FM relays and rebroadcasts became possible as a result of changes in the regulatory environment in several countries, and in

order to fund these, cuts had to be made elsewhere?

This was certainly the case at times, because I was present at some of the discussions in the BBC. But I always made it clear that FM could never be a replacement for shortwave, unless the local situation had changed so much that people in the entire target area had enough local choice and therefore no longer had any need to tune to shortwave. This is the case in Europe and parts of the former communist world. But the same cannot be said of Africa, or much of Asia.

I endorsed and supported the decision to stop broadcasting services in Portuguese and Finnish to Europe. It was also sensible to stop shortwave broadcasts in Polish, Czech, Greek and a few others. Indeed, I suggested that the need for these services to be continued at all was at least questionable. The BBC stopped broadcasting in Swedish, Norwegian, Dutch, Italian and

It is time for the big broadcasters to wake up, before it is too late and they find that their listeners have deserted them, not because they don't want the product, but because they can no longer reliably find it.

Japanese. Perhaps other languages should also be closed in favor of new services in new languages to people in greater need.

FM is no alternative

FM, by its very nature, cannot be a simple replacement for shortwave. Its reach is very limited.

I have just been in East Timor, where both Radio Australia and RDP Portugal have a local FM relay in the capital Dili. Neither can be heard far outside the town, and not only because of the power of the transmitters. Dili is hemmed in by hills.

Beyond these, you have to use shortwave to get either service. And to listen to the BBC or VOA or any other international broadcaster, East Timorese have to use shortwave wherever they are. And they do!

That is the first weakness of FM. Its reach is very limited, especially in hilly countries. There are five other serious weaknesses.

The second is that it is subject to local regulation and approval and both are at risk at any time. And they are at risk from the very factors that make the ability to listen to alternative voices important. The BBC and other broadcasters have had several problems with this; services have been opened then closed or restricted in both Congo, Nigeria, Ivory Coast, several former communist states and no doubt others. And this draws our attention to a grave risk inherent in over-dependence on FM.

When FM services are cut because of a change in government or a change in the political atmosphere and resort has to be made to shortwave, how does the audience know where to find you? Has an adequate shortwave service been maintained, and more importantly, has it been fully publicized?

Even when restrictions are not imposed

for political reasons when the government wants to restrict the flow of alternative news, it may be that the demands of the BBC, VOA, Deutsche Welle, RFI etc. have to take second place to the competing demands of potential commercial and other local broadcasters.

The BBC is not on FM in more than a very small handful of European cities. This is not because of political restrictions but because the demands of local broadcasters tend, understandably, to take precedence. The BBC boasts of its FM coverage in many parts of the world. In fact it is very thinly spread.

Now for the third weakness: FM is often unreliable. Breakdowns are common, as are problems with modulation and related technical difficulties. This is not because the medium is inherently faulty but because of weaknesses in local support services. The transmitters are not always properly or fully maintained.

Shortwave is more reliable and, by the way, it is often as good as FM in terms of its received quality. My wife and I were on holiday not long ago at a beach hotel just north of Dar es Salaam in Tanzania. The BBC is available locally on FM. It is also available on shortwave from Seychelles. The quality of both is equally good. In several blindfold tests my wife was unable to tell which was which. The shortwave was there every day. The FM was not.

If I lived in Dar es Salaam, as I did several years ago, I think I would always use shortwave. It is always there, always excellent and it provides a continuous service without breaks.

Moreover, and this is the fourth weakness: We could choose ourselves whether to listen to the Swahili or the English. Listening on FM, the decision was not mine to take. FM relays often switch between languages. Some carry the BBC, VOA, DW, RFI, etc. only for certain periods.

The fifth weakness is a connected one, and it is the fact that many relays and rebroadcasts are out of the control of the originator. Program or services from the BBC, VOA, DW or RFE, etc. are carried by an independent broadcaster, at times chosen by that broadcaster. The listener cannot tune to the BBC, VOA, DW, RFI etc. as a distinct station when he or she chooses.

The relationship of the broadcaster to the audience is completely different. There is no longer that close relationship whereby the listener is choosing the station that he or she wants to hear.

The sixth and final weakness of the FM strategy is its greatest shortcoming. It is never available where it is most needed and by those for whom shortwave is literally a lifeline. Let us just think of Dhafur at pre-

sent. There will be many caught up in that tragedy who have radio sets. If they are listening to anything at all, it will be on shortwave. There is nothing else available.

I mentioned East Timor earlier. I talked to people there about what had happened during the crisis of 1999 when they voted for independence from Indonesia in the referendum and the Indonesian militia trashed 90 percent of the buildings in Dili and elsewhere. People fled into the hills and they listened to the BBC, the VOA, Radio Australia and others on shortwave. Several people told me there is still an audience for these stations on shortwave throughout the country.

Let it be noted at this point that East Timor has never been surveyed. It is as if these listeners do not exist.

Bedrock of international service

Shortwave remains the main way in which most people continue to listen to international radio broadcasting. It will remain the case unless the major broadcasters continue their false assumptions about its decline, and make that decline come true by their actions.

I believe the research being done is not sufficiently reflecting the realities of international radio listening. I believe the obsession with performance in relatively easy to measure radio markets is blinding strategists to the wider realities in those many areas where research is difficult or where the societies involved are being seen as marginal or not a top priority — many of the most vulnerable and needy people in the world, who the international broadcasters have mostly served very well in the past.

And I believe a misguided obsession with the supposed rise of new technology has created an atmosphere in which the reality is ignored or understated.

John Tusa, director of the BBC World Service from 1986 to 1992, said during his tenure at Bush House that if the technology of shortwave were to have been invented or discovered today, people would be amazed by what it could do.

It can reach anywhere from anywhere, without the need for phone lines, local permission, local regulation, expensive equipment or subscriptions. But it is old, it was invented and its properties discovered by Marconi 100 years ago. Therefore surely it must be past its "sell by date."

This is utter nonsense as we all know, but it is time for the big broadcasters to wake up before it is too late and they find that their listeners have deserted them, not because they don't want the product, but because they can no longer reliably find it.

I have amazed myself by not mentioning DRM (Digital Radio Mondiale) until now. So I shall do so in closing.

DRM has all the advantages of shortwave with none of the disadvantages. It is an essential facility for the future. But it will succeed only slowly, possibly very slowly. Those in the world who most need the services of international broadcasters are most likely to be the very last people to have DRM sets. Just as they are likely to be the last people to have the Internet, satellite reception, FM services and all the other much trumpeted new technologies that are said to be transforming our world.

Analog shortwave will remain for a long time to come the bedrock of international radio service delivery. That remains true, unless the major broadcasters are foolish enough to ignore the facts of international radio audiences that I have outlined here. 🌐

◆ READER'S FORUM ◆

Brinitzer and the 5 kHz Debate

Most of us remember a game in elementary school: We sat around in a circle and told each other secrets, and by the time the original secret got around to the original party, everything had changed. The story was nowhere near the same as the original.

Though broadcasters have for the past 15 years transmitted up to 10 kHz, this has done nothing to convince the receiver manufacturers to decode what we have been broadcasting.

In the story "Brinitzer: Rising in His Radio Calling" (Feb. 16), WCHL(AM) is referenced as a Class C in Chapel Hill, N.C. Just to clarify, WCHL is actually a Class B. "C" and "B" sound similar when spoken through the phone.

I also need to clarify that James Davis did not teach at Duke University, I don't believe. I stated that he "worked" at Duke University and was a Ph.D. I think this was a translation breakdown. Jim worked in research under a grant on something called the "Sonomicrometer." The device was first-generation ultrasound, used to measure the thickness of the walls of the heart in animals for research. I remember helping make several of those from my career with Jim.

Regarding the reduced bandwidth for AM to 5 kHz, the benefits to the AM band are many. Among them is interference to first-adjacent channels. There has been much in the press lately regarding this. Many are quite upset that we're taking this step to reduce frequency response of a band that is suffering from losing listeners.

In my view, this move actually helps the AM band. I applaud Jeff Littlejohn for the courageous move. The reduction improves the coverage of existing stations by reducing adjacent-channel interference and moving currently undemodulated energy into the spectrum that is demodulated. Frankly, the receivers in the field currently do not demodulate frequencies above 4 kHz. This is a sad but true fact. Unless the receivers are older models in excess of 30 years, the energy is just not utilized.

So we have to ask the question, "Why

broadcast what they can't hear?" Though broadcasters have for the past 15 years transmitted up to 10 kHz, this has done nothing to convince the receiver manufacturers to decode what we have been broadcasting.

Receiver manufacturers saw no benefit in increasing the bandwidth of the receivers to decode frequencies above 5 kHz primarily because of cost issues. If anyone believes that continued efforts to broadcast those frequencies will change things, I have to ask,

"On what grounds?" There is an NRSC subcommittee researching the impact of making this reduction by sampling many receivers and the results on the listeners. We all await these results. This is a good move for the industry

I want to thank Randy Stine and Radio World for a well-written article.

*Benjamin Brinitzer
Regional Vice President, Engineering
Mid South Region
Clear Channel Radio
Charlotte, N.C.*

FMeXtra Implementation

The Radio World opinion in the May 25 issue ("FMeXtra: New Technology Facing a Rising Tide") recognized the introduction of DRE's FMeXtra digital FM subcarrier at NAB 2005. We were encouraged by the enthusiastic response from domestic and international broadcasters, both large and small, and we commend RW for covering this important new broadcast technology.

However, we disagree with RW's assessment of FMeXtra as only an interim step towards a so-called all-digital future. The market reality is that the shutdown of analog radio is at the earliest decades away, and by then radio will face a far different competitive landscape than today.

In fact, FMeXtra substantially provides the benefits of an all-digital system, and does

The debate over how broadcasters use so-called video news releases seems at first to pertain mostly to television. However any radio manager whose station airs news or even short headlines should heed the discussion. It is our experience that many radio managers too rarely, if ever, delve into questions of journalistic ethics and practices. This discussion of how to handle press releases packaged as news is one opportunity.

The FCC is looking at whether the use of VNRs complies with its sponsorship identification rules. It asked, among other things, how these video or audio packages are used, whether broadcasters receive compensation and whether there are mechanisms in place to ensure compliance with mandatory disclosure rules.

The Radio-Television News Directors Association says some stations have made mistakes in the handling of outside material but that using prepackaged stories or unidentified audio and video from government or corporate entities is not a widespread practice. It opposes any action the government might take to inhibit news sources or otherwise interfere with the editorial discretion of broadcasters.

We agree with these conclusions. But it's never been more important for electronic journalists to police themselves. Stations can benefit from reviewing and posting the RTNDA's recently issued guidelines for use of non-editorial video and audio, to help journalists "clearly disclose the origin of information and label all material provided by outsiders."

News managers and producers should:

- ✓ determine if the station is able to capture this audio itself, or get it through regular editorial channels, such as its network feed service. If the audio is available in no other way but through corporate release, managers should decide what value using the audio brings to the newscast, and if that value outweighs the possible appearance of "product placement" or commercial interests.

- ✓ clearly disclose the origin of information and identify all material provided by corporate or other non-editorial sources.

- ✓ determine if interviews provided with audio releases follow the same standards regarding conflicts of interest as used in the newsroom.

- ✓ before revoicing and airing stories released with all their elements and intended for that purpose, ask questions regarding whether the editorial process behind the story is in concert with those used in the newsroom.

- ✓ question the source of material that appears to have come from sources other than the network's news operation.

- ✓ consider how audio released from groups without a profit or political agenda, such as non-profit, charitable and educational institutions, will be used in newscasts, if at all.

Your station may not receive much in the way of packaged audio stories. Nevertheless, let this discussion prompt a wider one on how your newsroom accepts, handles and identifies outside material in any format. And be aware of the ever-more-sophisticated ways that any interest group — government or private — can package and manipulate the information it gives you.

For the full RTNDA guidelines see www.rtna.org/foi/finalvnr.shtml.

— RW

so immediately, without further authorization and solely at the broadcasters' discretion.

The digitization of the subcarrier spectrum (20 kHz to 100 kHz), preserving analog mono (0 kHz to 19 kHz), coupled with IBOC digitization from 130 kHz to 200 kHz provides more bits than the proposed IBOC all-digital solution referred to.

Implementation of FMeXtra requires no transmitter or antenna modification or expense. Digital radios will be software-defined, so FMeXtra can be incorporated into HD Radio at no additional hardware cost and, most importantly, will provide the significant additional bits to achieve the goal mentioned in the article.

FMeXtra is based on open aacPlus audio standards, and directly compatible with Internet streaming and cellphone aacplus implementations with no transcoding — perfect for podcasts and low bit rate audio. How, we must ask, has DRE failed to anticipate the future?

FMeXtra has not "...only a short time to prove its viability," as stated in the opinion. FMeXtra was conceived, and is now being implemented, as an integral part of radios' pathway to the digital future.

*Norman Miller
President
Digital Radio Express
Milpitas, Calif.*

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Radio World

Vol. 29, No. 18 July 20, 2005

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NEXT ISSUE OF RADIO WORLD AUGUST 3, 2005

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Radio World (ISSN: 0274-8541) is published bi-weekly with additional issues in February, April, June, August, October and December by IMAS Publishing (USA), Inc., P.O. Box 1214, Falls Church, VA 22041. Phone: (703) 998-7600, Fax: (703) 998-2966. Periodicals postage rates are paid at Falls Church, VA 22046 and additional mailing offices. POSTMASTER: Send address changes to Radio World, P.O. Box 1214, Falls Church, VA 22041. REPRINTS: For reprints call or write Emmily Wilson, P.O. Box 1214, Falls Church, VA 22041; (703) 998-7600; Fax: (703) 998-2966. Copyright 2005 by IMAS Publishing (USA), Inc. All rights reserved.

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