Mother Tongue
Are U.S. international broadcasting managers looking in the wrong place for VOA's English audience?

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When Calamity Hits
Engineering no-no's like the one shown here can lead to disaster. Are you prepared?

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Radio World

$2.50 The Newspaper for Radio Managers and Engineers April 7, 2004

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Saving Lives or Wrecking Radio?

Broadcasters Object to Systems That Would Warn Motorists of Emergency Vehicles

by Randy J. Stine

WASHINGTON Someday soon, if a handful of companies get their way, drivers around the United States will hear something new on their car radios: "Emergency vehicle approaching. Prepare to yield."

Emotions run high in the debate over proposed systems that would alert drivers to emergency response teams behind them that need to get through traffic.

Supporters of the technology argue that car interiors have become more soundproof and that louder audio systems make it less likely a driver can hear the siren of an approaching emergency vehicle.

Yet broadcast groups say the proposed systems override or jam AM and FM signals and would wreak havoc with local stations.

See ALERT, page 10 ▶

ADiCorp petitioned the FCC in 2003 for permission to sell its Radio Alert Transmitter and establish an Emergency Vehicle Signaling Service.

DIGITAL NEWS

Split Digital Idea Raises Questions

by Leslie Stimson

WASHINGTON By this fall, U.S. radio station managers could face a new choice: whether to split their digital signals and create multiple programming channels.

Discussion of this development so far has been limited mostly to public radio and technical circles, in part because the idea applies only to the digital portion of signals at the approximately hundred or so stations that have adopted digital HD Radio.

But some experts believe that the split-channel Tomorrow Radio concept could change the radio dial and that commercial stations, too, stand to gain a new tool in their programming and revenue strategy.

But for the idea to succeed, they say, commercial radio would have to take a greater interest in it. And that decision comes down to whether there's money in the concept.

National Public Radio has asked the FCC to allow FM stations to split their digital signals into two channels without requiring new licensing. The request

See SPLIT, page 8 ▶

FM IBOC Dual Antennas Get FCC Nod

WASHINGTON Stations officially may now use dual rather than single antennas for their FM IBOC operations. The FCC gave the go-ahead for broadcasters to use one antenna for a digital signal and another antenna for analog if certain conditions are met:

- The digital transmission must use a licensed auxiliary antenna.
- The auxiliary antenna must be within three seconds of latitude and longitude of the main antenna.
- The height above average terrain of the auxiliary antennas must be 70 to 100 percent of the height above average terrain of the main antenna.

Stations must apply for special temporary authority to use dual antennas at least 10 days before they begin IBOC transmissions.

Until now, stations have had to combine signals into a common antenna to broadcast a combined analog/digital signal.

NAB and several broadcasters championed the dual-antenna approach, saying it would allow a lower-cost IBOC implementation than high- or low-level combining.

"The use of separate antennas results in smaller transmitters, lower cost of equipment acquisition and operation and reduced floor space requirements in the transmitter room," NAB stated in a report submitted to the commission last year containing field test results of the concept.

Nearly all of the comments received by the commission supported the dual-antenna approach. "Most comments cited convenience, greatly reduced implementation costs and increased operating efficiency as major advantages of the dual-antenna approach," the agency stated in its March 17 decision.

Walden Honored By NAB

WASHINGTON Glynn Walden is the recipient of the NAB's Engineering Achievement Award for 2004, given to industry leaders for significant contributions that have advanced broadcast engineering.

The awards will be presented at the Technology Luncheon, Wednesday, April 21 at NAB2004. Recent winners include John Reiser, Paul Schafer, Arno Meyer, Geoff Mendenhall, John Battison, Bob Orban and Mike Dorrough.

The honoree on the TV side is Ira Goldstone, technology coordinator for the Tribune Company and vice president/chief technology officer for Tribune Broadcasting.

Walden, senior vice president of engineering for Infinity Broadcasting, was cited by NAB as "the visionary of the concept, technical design and economics of the AM and FM in-band, on-channel digital radio broadcasting system." He is former vice president of broadcast engineering for Ibiquity Digital Corp. In 1991 he helped found USA Digital Radio, a consortium of broadcasters developing IBOC technology; it merged with Lucent Digital Radio in 2000 to form Ibiquity. He also was vice president of engineering for CBS and Westinghouse Broadcasting and engineering manager for KYW(AM), Philadelphia.

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NEWS ANALYSIS

Will Canada Get Pay Radio?

As XM and Sirius Seek Licenses, CHUM Comes Up With a Twist

by James Careless and Leslie Stimson

OTTAWA, Canada The separate decisions by XM Satellite Radio and Sirius Satellite Radio to enter the Canadian market seem to make good business sense. They say selling their service into Canada is natural given that their satellites already cover the most populated and traveled portion of that country: the border area.

"The population there has similar tastes to our 1.5 million U.S. subscribers, and it should be no problem getting them up to speed on satellite radio technology," said XM spokesman Chance Patterson.

However, doing business in Canada is not the same as doing business in America. In particular, winning approval from the Canadian Radio-television and Telecommunications Commission, Canada's version of the FCC, will require the satcasters to submit to Canadian music quotas, which the CRTC imposes to keep the Canadian music industry alive.

Both companies have discussed adding two channels for Canadian service, one in English and the other in French.

The satcasters also would need CRTC approval to install terrestrial repeaters in Canada for their services.

The situation gets more complex. Before the CRTC proposal filing deadline in February, a third company submitted a bid for a Canadian subscription radio license: CHUM, a Canadian owner of radio, TV, Internet and music service. CHUM initially approached the other bidders about a partnership, then backed away, according to the Toronto Star (see sidebar page 5).

Cost of entry

The satellite radio companies would have a low cost of entry, as their satellite footprints cover much of Canada.

XM and Sirius have not said how many Canadian listeners or revenue they might gain. A spokesman for research firm BBM Canada said that, based on the results of its fall 2003 survey, some 25.3 million individuals age 12+ had some exposure to radio.

Sirius spokesman Jim Collins said, "Statistics show roughly 11.6 million Canadian households and 17.3 million vehicles in the country, which is about 10 percent of the U.S. market."

The CRTC will review the proposals and scrutinize the items that make up promise of performance, such as the percentage of Canadian programming (which must be 35 percent under Canadian content or "Cancon" rules), cultural benefits and whether these businesses are likely to succeed, said David Bray of Hennessy and Bray Communications.

Unlike the FCC, which lets the marketplace determine whether a licensee's business succeeds, the CRTC takes into account the financial strength of a proposal before issuing a license, he said.

The CRTC plans to hold public hearings on pay radio later this year, possibly by fall. "It remains to be seen how the commission will apply Cancon with respect to pay radio," said the CRTC's Philippe Tousignant.

"What we are focused on now is whether there really is a market for satellite radio in Canada, what impact it might have on the country's existing AM/FM broadcasters and what contributions pay radio will make to achieving the objectives of Canada's Broadcasting Act, which the CRTC exists to enforce." He made his remarks prior to CHUM's non-satellite proposal.

Unclear is how Canada's commercial AM/FM broadcasters will react to the intrusion of satellite radio onto their turf, especially when this competition includes a degree of American ownership. Yet some listeners seem to want satellite radio programming. Some Canadians are using U.S. Internet addresses to get satellite radio. By approving at least one of the proposals, the Canadian government could stem growth of the so-called "grey market," sources said.

The satcasters have made their forays into Canada in line with the country's foreign ownership rules. Broadcasters licensed here must be majority-owned by Canadians. As in the United States, "foreign" investors can have a minority stake, but not enough to exert effective financial or managerial control.

This is why XM and Sirius have aligned themselves with Canadian partners. XM has joined forces with Canadian entrepreneur John Bitove Jr., founder of the Toronto Raptors NBA team, to create Canadian Satellite Radio. Sirius has joined forces with Standard Radio and the Canadian Broadcasting Corp. (Radio World, Jan. 14, page 7).

Standard Radio is the largest private radio group in Canada, with 51 stations. CBC Radio is the nation's public broadcaster, with two English and two French radio networks.

XM and Sirius also have opted to direct the media spotlight to their Canadian partners, another savvy move. Should the Canadian Association of Broadcasters decide to play "patriotic politics" in opposing satellite radio, having strong domestic support in the form of Bitove, Standard Radio and the CBC could save the day for XM and Sirius.

An example of just how different Canadian broadcast politics are from those in the United States, consider the story of Country Music Television Canada. In 1994, this offshoot of Nashville-based CMT had built a loyal viewership in Canada. To appease the CRTC, CMT Canada played Canadian country music videos and contributed money to promote Canadian talent.

However, these efforts weren't enough to convince the CRTC to spare CMT Canada when a Canadian-owned company known as the New Country Network applied for a license. In line with Canadian broadcast law that allows Canadian channels to replace similar foreign competitors, the CRTC licensed NCN, then expelled CMT Canada from Canada's cable TV systems.

Only the threat of a trade war by the Clinton administration forced the Canadian government to relent, and even then CMT Canada wasn't allowed to reclaim the subscriber base it had built. Instead, the best that CMT got was a minority share in NCN. In a final flourish, NCN renamed itself Country Music Television Canada. It still operates under this name.

Cultural politics

As noted, the Canadian partnerships struck by XM and Sirius may shield them from CMT's fate. However, they still have to convince the CRTC that allowing U.S. broadcasters to share in Canada's airwaves will contribute to "Canadian culture."

Mindful of this reality, XM's application includes "English and French language channels aimed at Canadians, in

See CANADA, page 5 ▶

The FCC Is 70

Letter to Congress in February of 1934:

I have long felt that for the sake of clarity and effectiveness the relationship of the Federal Government to certain services known as utilities should be divided into three fields: Transportation, power, and communications. The problems of transportation are vested in the Interstate Commerce Commission, and the problems of power, its development, transmission, and distribution, in the Federal Power Commission.

In the field of communications, however, there is today no single Government agency charged with broad authority.

The Congress has vested certain authority over certain forms of communications in the Interstate Commerce Commission, and there is in addition the agency known as the Federal Radio Commission.

I recommend that the Congress create a new agency to be known as the Federal Communications Commission, such agency to be vested with the authority now lying in the Federal Radio Commission and with such authority over communications as now lies with the Interstate Commerce Commission — the services affected to be all of those which rely on wires, cables, or radio as a medium of transmission.

It is my thought that a new commission such as I suggest might well be organized this year by transferring the present authority for the control of communications of the Radio Commission and the Interstate Commerce Commission. The new body should, in addition, be given full power to investigate and study the business of existing companies and make recommendations to the Congress for additional legislation at the next session.

Franklin D. Roosevelt

Source: The New Deal Network

And the Trumpets Blow Retreat

Radio programmers whimpering for sympathy as they try to defend their recent practices shouldn't look here.

The winter just past was one of the darkest seasons of radio's discontent. The industry was socked by a blizzard of bad news.

The cold weather was of radio's own making.

What initiatives?

"NAB believes that voluntary industry initiatives are far preferable to government regulation when dealing with programming issues," says Eddie Fritts.

If the FCC simply would tell broadcasters *what* is indecent, says Mel Karmazin of Infinity, stations wouldn't offend.

"Clear Channel is serious about helping address the rising tide of indecency on the airwaves," says Mark Mays, its president and COO.

"Clear Channel Communications is taking the lead in fighting indecency over the airwaves," says a company PR person.

Forgive me while I hack up a hairball.

This isn't leadership, it's running for your life.

Localism boards? Zero tolerance for indecency? Responsibility to the listeners?

Leadership would have been talking about these things three, five, 10 years ago. *Leadership* would have been saying, "You know, Michael Copps, you've got a point, things have gotten out of hand on the airwaves lately." Or at least, "You know, Copps, we think you and others with your mindset just might have sufficient influence to do something really nasty to us if we keep simply winking at each other about what we've been broadcasting on the airwaves."

Leadership would be firing people who castrate animals on the air or solicit couples to have sex in a church or foul the airwaves with "entertainment" that any 12-year-old could tell you is bad stuff. *Leadership* would be blowing out so-called talent *when it happens*, not after the complaints pour in, and certainly not three or four years after the fact.

Leadership would have been calling a "voluntary" industry summit *before* the anger on Capitol Hill and among the public reached critical mass — before major-market radio executives rushed to install thousands of dollars' worth of profanity delays, and programmers sifted worriedly through records of old listener complaints dating from the last millennium, and everyone wondered if just maybe the federal government might actually revoke a broadcast license one of these days.

This is not an industry that is *leading*. This is an industry in full-blown, tail-between-its-legs retreat — led by the moguls of post-consolidation media and a finger-in-the-political-wind FCC chairman.

Thanks, guys.

20/20

"Oh, sure, Paul, pile on *now*," you say. "Hindsight is perfect."

But this isn't hindsight. Any reader of Radio World has seen dozens upon dozens of letters and commentaries in these pages from disillusioned industry people — folks *who love* radio, or love what it used to be — wondering what the heck happened. While most of them express frustration with the effects of consolidation in general, many carry a strong thread of criticism for programming gone awry.

I personally have been put off by what I hear on the radio, too many times to count.

Not long ago, I recall sitting behind the wheel of my car and tuning around the band with a rising sense of frustration, bumping from the latest raunchy comedy team to a graphic sex talk show to an endless block of screaming commercials to some other piece of mean-spirited "entertainment."

In such situations I usually exercise my right simply to tune away to a news or classical station or NPR, or pop in my own tunes. But always, when I do, I find myself thinking, "What is our industry becoming?" And "How many other people who *don't* work in my industry are offended by what I just heard?" and "Should I as an industry journalist defend these programming choices?" And "Where does a broadcaster's right to speech end and the public's right to influence our airwaves take precedence?"

I don't want to come out in favor of programming restrictions. I do *not*. Yet I'm angry as can be at industry leaders who have brought us to a point where people who favor soaring fines can make a solid case and where managers talk with a straight face about 30-minute program delays.

Core questions

Ultimately this comes down to who owns the airwaves and what radio's purpose is. My feeling is that some owners forget that their licenses are not immutable.

A.J. Liebling said freedom of the press belongs to the man who owns one. By this argument, the owners of radio stations *should* be free to program as they choose.

But who owns our "presses"? A licensee owns equipment, it owns brands. It does not own the channel on which it broadcasts. That belongs to you and me.

Even in smooth times — when our economy was strong, ad sales were jumping and people were less worried about whether they'd have a job next year — I have found myself troubled by a suspicion that when broadcast executives talk about their airwaves, they really do mean *their* airwaves. They think of themselves simplistically as business people who should be allowed to compete on an equal footing with the owners of billboards, newspapers, cable TV outlets and movie theaters and be similarly free to make choices.

This point of view is reflected in the words of Lowry Mays, a man who never forgets his mission as an advertising conduit:

"Clear Channel is in the business of selling Fords, burgers and toothpaste," he has been quoted as saying. Listeners are "important, but indirectly."

Groan. No wonder his company's image-makers finally started putting John Hogan out front instead.

Mays isn't wrong; radio *is* about advertising, and it wouldn't exist if profit-seeking businesses hadn't pushed for it in the first place. But I hope radio leaders also never forget that stations are authorized to *do* what they do — and are protected from unlimited direct competition in their medium — because they are part of a compact with the nation through its regulators.

As the FCC states on its Web site, "Whenever we look at an application — whether to build, modify, renew or sell a station — we must determine if granting it would serve the public interest."

In other words, a radio station is more than just a license to print money.

Many stations do a superb job at serving. They perform serious spade work in the ditches of localism and they make a difference in their communities.

I worked at such a station, Delmarva Broadcasting's WDEL(AM) in Wilmington, Del., in the 1980s; and today I listen to another, Bonneville's WTOP(AM-FM) in Washington. The upcoming NAB Crystal Awards will salute numerous others.

The problem is that good work of stations like those is obscured by men and women who have laughed off the idea of localism and decency as naïve and anachronistic. The good that radio does is being drowned out by the bad committed by a few who should know better.

They *should* have known better. It's downright stupid to find our industry worried about huge fines, license revocations and its image with advertisers because of patently offensive content and because some programmers forgot that they literally hold their stations' licenses in their hands.

I'm a journalist. I want every person to have the freedom to speak as he or she sees fit. But I'm also a member of society. I understand that what we say and how we say it must be tempered by where we say it and when.

Licensees are given a great gift. It's a pity that some value the gift so little. And now I worry that any lessons learned in this debacle will be fleeting.

From the Editor

Paul J. McLane

Clear Channel Radio Honors Engineers

SAN ANTONIO, Texas Clear Channel Radio recognized top performers with its first Engineer of the Year award, announced by Senior Vice President of Engineering Jeff Littlejohn.

The winners: in major markets, Josh Hadden, New York City; large markets, Erik Kuhlmann, Portland, Ore.; medium markets, Raleigh Rubenking, Des Moines, Iowa; small markets, Charlie Wooten, Panama City, Fla.

Hadden was praised for Clear Channel's readiness when the 2003 blackout hit New York; the group's stations were back on the air with full market coverage in minutes, Littlejohn said. Hadden holds quarterly meetings to discuss preparedness and brainstorms worst-case scenarios. He oversees a program of regular maintenance and testing of critical gear, as well as cross-training so personnel are familiar with other facilities.

Josh Hadden, Erik Kuhlmann, Raleigh Rubenking and Charlie Wooten

Kuhlmann, who also assists in Eugene/Albany/Corvallis and Medford, recently assisted in the recent move and power upgrade of KJR(AM) in Seattle, and he helped solve an intermodulation problem in that city involving working outside with an acetylene torch "in the middle of a torrential rainstorm and 40 degree temperatures," to weld a fix.

Rubenking oversees the seven-station Des Moines/Ames cluster, and drives to other Clear Channel markets if his help is needed. His work has taken him to all nine of the company's Iowa markets in the past year, as well as Minneapolis. Among his recent contributions were getting KWMT(AM) in Ft. Dodge back on after its tower was taken down by vandals, and overseeing the tower replacement project to completion.

Wooten manages Clear Channel Radio's six-station cluster in Panama City. He and Gerald Wilson managed a buildout of studios in Montgomery, Ala. Wooten spent an average of two days a week in Montgomery for four months. He also was cited for preparation that helped the Panama City stations survive a Prophet Systems server failure.

The winners earned company-paid travel, lodging and admission to NAB2004.

— Leslie Stimson

Canada

Continued from page 3

addition to XM's current channel lineup," said Stewart Lyons, CSR's executive vice president. Meanwhile, Sirius' Standard/CBC Radio partnership will appeal to the CRTC, because of the distribution possibilities CBC satellite radio offers to the government-funded cash-strapped CBC.

"Under our application with Standard and Sirius, CBC will get four channels on the satellite," said Michel Tremblay, CBC Radio's vice president of business development and strategy. "Two will be used to carry our main English and French networks, while the other two will be used by us for entirely new radio services not available on AM or FM."

The road ahead

As of mid-March, the CRTC had not publicly released XM and Sirius' satellite radio bids, nor the application for the competing CHUM proposal.

As a result, the CAB was not commenting on the "pay radio" issue.

"We will have to consider whether to intervene in the upcoming hearings and what position to take," said CAB spokesperson Pierre Pontbriand. "With the applications having yet to be made public, our position has yet to be determined."

Pay Radio, With No Satellite

Media company CHUM also wants to set up a Canadian subscription radio license. But its system would not involve satellites.

The CHUM proposal calls for a digital radio subscription service using its existing Eureka-147 DAB transmitters that are now sending digital signals on L-band free to listeners. It proposes pay channels using its current DAB infrastructure to deliver this subscription content, according to David Bray, of Hennessy and Bray Communications.

CHUM also wants permission to build terrestrial repeaters to serve as coverage gap fillers in urban areas.

The broadcaster plans to partner with a wireless communications company to offset infrastructure costs, according to Bray, who also acts as a spokesman for Canada's Digital Radio Rollout Inc. effort and is familiar with the proposals.

Pay radio could give digital radio a boost in Canada, DRRI believes.

The applications are not yet public, and details of the proposal had yet to be made available at press time.

NEWS WATCH

NWS to Use New EAS Codes

SILVER SPRING, Md. The National Weather Service will fully implement the new Emergency Alert System event codes on NOAA Weather Radio nationwide on Wednesday, June 30. NWS wants broadcasters to ensure that EAS equipment has been upgraded to implement the 2002 FCC Report and Order amending EAS rules.

The weather service already has implemented some of new event codes in partnership with local or state emergency communications committees in parts of the country. But on June 30 at 1800 hours Coordinated Universal Time, NWS will make the changes nationwide.

NOAA Weather Radio is the primary means for National Weather Service alerts to activate the EAS. If EAS equipment is not upgraded, the new EAS event codes will cause unknown event code operator alarms, NWS said.

A list of current and new EAS codes is online at *www.noaa.gov/os/nws_eas.htm*

Gregg Criticizes Mitre Study

WASHINGTON Sen. Judd Gregg, R-N.H., sent a letter to FCC Chairman Michael Powell and the rest of the commission blasting the recent Mitre report results that suggests third-adjacent-channel protections be dropped to allow more low-power FM stations on the air. Based mostly on this report, the commission recommended to Congress that the channel protections be changed.

"The Mitre study contained several technical and methodological errors that adversely and prejudicially affected its results," Gregg, who serves on the Senate Appropriations Committee, stated. He complained that just six radios were tested; there was no public disclosure of the technical characteristics of the receivers; and a common antenna was not used in testing to ensure consistent reception.

Further, Mitre did not test lower-adjacent channels for interference, but upper channels only.

"Previous research by the Consumer Electronics Association illustrates that different receivers reject interference to varying degrees, and that many receivers reject upper and lower adjacent channel interference by vastly different amounts," he wrote.

GUEST COMMENTARY

VOA Should Broadcast in English

by Kim Andrew Elliott

The English-language news on Voice of America is due to be cut back to 14 hours a day this October. It's already been reduced to 19 hours a day.

On Sunday, Dec. 14, at about 4:30 a.m. Eastern time, the news broke that Saddam Hussein might have been captured. By 7 a.m., his capture near Tikkrit, Iraq, had been confirmed.

The timing could not have been worse for the Voice of America.

On Oct. 26, VOA News Now, VOA's global English broadcasting service, was reduced from 24 to 19 hours per day. The hours cut were 0700 to 1200 UTC (Coordinated Universal Time), or 2 to 7 a.m. Eastern. Anyone in the world trying to get the American perspective on the capture of Saddam was not able to hear it, in English, from VOA.

It would seem obvious that the international broadcaster of the United states would want to broadcast 24 hours a day in the mother tongue of the United States. VOA English was cut because the Broadcasting Board of Governors, which supervises United States government international broadcasting, has not been impressed with its audience numbers. Indeed, in countries outside of Africa, VOA's English audiences are small.

Global English speakers

Executives of United States international broadcasting may be looking in the wrong places for VOA's English audience. In countries where English is a primary language, such as the Philippines, Singapore and Jamaica, there is plenty of English-language media content available domestically.

This reduces the incentive to listen to foreign radio. But a perusal of VOA audience mail indicates that VOA has many grateful listeners in countries where English is not a primary language, and where local media in English are sparse.

The audiences in these countries are people who use English as a second language, as well as people from English-speaking countries who are expatriates, visitors, workers, students, diplomats, volunteers, etc. The target audience for VOA English is, therefore, not so much in any one country.

Instead, the target audience is the global community of English speaking people. This is an elite audience, the movers and shakers of the world. What they lack in quantity, they make up for in quality.

In fact, if one adds up all the mostly small English audiences in all the countries, they amount to 15 million, or around 20 percent of VOA's worldwide audience. And those are just the ones who are actually counted. Generally, expatriates and travelers are not included in national sample surveys.

An ad for VOA in the 1966 World Radio TV Handbook.

Many in this audience are Americans abroad: workers, students, Peace Corps volunteers, missionaries, diplomats, military personnel, etc. Americans overseas have never been considered part of VOA's mandate.

This is curious, given that it is a key mission of the international radio station of virtually every other country to broadcast to countrypersons abroad. Perhaps the old Smith-Mundt law, which prohibits VOA from broadcasting within the United States, is the impediment. But Americans in other countries are not considered "domestic."

Indeed, in an increasingly dangerous world, Americans abroad ought to be considered a priority audience for U.S. international broadcasting. De facto, they already are; when the State Department plans to evacuate American citizens from a country in turmoil, it turns to VOA to make the announcements.

Evidence of Americans listening to VOA is ample in the letters and e-mails received by VOA. For example, Peace Corps volunteer Patricia Bigelow, a Peace Corp volunteer in Kazakhstan, wrote, "You have no idea what listening to your program means to a Peace Corps volunteer serving in Kazakhstan. I share the one shortwave radio with seven other volunteers."

Americans are not the only English-speaking expatriates who depend on VOA. Asian and African guest workers in Arab countries are grateful to VOA for news from their countries, or indeed for any friendly voice on the radio in English.

Some of the listeners are even on the high seas, including Leonid La-Anan Jr., who wrote, "I am a Filipino seaman on board a German container vessel, underway from China to Korea, and a listener to VOA since 1980. Maybe if there is an award for the most hours of listening to VOA everyday, I think I am the winner."

Many of these English listeners are interested in news about where they are *from*, at least as much as where they *are*. The VOA News Now service therefore succeeds by remaining global in scope rather than focusing on specific regions.

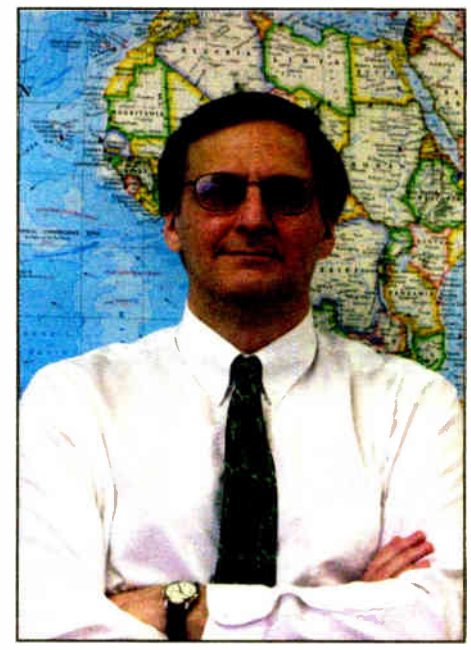
Shortwave 24 hours works

While English is being reduced from 24 hours, expansion of broadcasting to 24 hours has been implemented, planned or contemplated in languages such as Arabic, Persian, Urdu and Korean. Audience research shows that fans are large during a few peak morning and evening hours, then, not surprisingly, dwindle when people are asleep or at work.

English speakers are not limited to one or two time zones. They are virtually everywhere in world, on land and sea. Every of the hour of the day is prime time somewhere. English is the one language in which 24-hour broadcasting is an efficient use of resources.

One reason for cutting English is the expense of transmitting on shortwave 24 hours a day. The hourly cost of 500-kilowatt transmitters can be a conspicuous line item in a budget. Less-expensive alternatives to shortwave now are available.

The Internet is definitely cheaper than shortwave, and it may well become the primary vehicle of international broadcasting. However, if a person "accesses" VOA English via the Web, he or she also has access to hundreds of other English-language news sites, many with more news than VOA.



Kim Elliott

If one listens to VOA on a shortwave radio, it's an indication that he or she lives in an area where the Internet connections and satellite receivers are not available, or are restricted. VOA is just one of thousands of English-language websites, but VOA is *uniquely* available throughout the globe via shortwave. Only BBC World Service has a comparable capability.

Many VOA non-English language services have dropped shortwave because they are now relayed in their target countries on FM or AM transmitters. While this usually brings larger audiences, it also entails a higher risk. The transmitters can and are turned off when their content incurs the displeasure of the host governments, or during wars, revolutions, or other crises, i.e. when international broadcasting is most needed.

And so the U.S. government's global shortwave network remains a vital insurance policy. It can get into countries when other media are unavailable.

That network should remain viable if it should ever again be needed to reach countries in acute need of information.

See VOA, page 7 ▶

VOA

Continued from page 6

The way to do this is to keep the frequencies occupied, so that they are not taken over by other stations. And because radio transmitters tend to fall into disrepair if they are not used, they should be kept on the air.

VOA's frequencies and transmitters can be put to good use by using the old BBC World Service concept: Transmit in English on as many frequencies as possible, for as many hours as possible, to as many parts of the world as possible. If this is done, VOA should generally be audible any place in the world at any time. The global English audience would not need a program schedule; they could find VOA by tuning across the dial.

If people in a country find their domestic media restricted by a new dictator or a fresh crisis, they will dust off their shortwave radios and seek news from foreign stations. VOA can respond to this need by switching many of its English World Service shortwave transmitters to the appropriate language.

It would seem obvious that the international broadcaster of the United States would want to broadcast 24 hours a day in the mother tongue of the United States.

Another reason the decision makers have reduced the hours of VOA English broadcasts is the cost of personnel required to maintain a 24-hour information-intensive channel. Here, VOA could supplement its own English broadcast team by affiliating with domestic American broadcasting. I am not thinking of hyper-opinionated talk shows, but rather the many creditable news, current affairs, music and special interest programs available from American commercial and noncommercial radio networks.

Just as VOA is retreating from English broadcasting, another international broadcaster is enhancing its English output. On its Dec. 13 "Listener's Garden" program, China Radio International announced that it is expanding its English output to 24 hours.

When Osama bin Laden is captured, will VOA News Now be on the air? Or will listeners around the world have to hear the news from Beijing?

Kim Andrew Elliott is an audience research analyst in the United States International Broadcasting Bureau. Views expressed are his own.

Radio World welcomes other points of view.

Vegas Monorail Launch Put Off

LAS VEGAS The Las Vegas Monorail won't open in time for NAB2004.

In March, the company overseeing the $650 million futuristic transit system announced that the opening of the monorail system would be delayed because of final testing that had to be conducted at the monorail's eight stations. Building officials in Clark County, Nev., ordered a demonstration test, in which the system would be run for 30 days continuously.

Due to additional testing, the transit system is slated to open sometime this summer, according to the Las Vegas Review-Journal.

"We'll open it when we're ready to open, when it's right and when it's done," Jim Gibson, chairman/CEO of monorail manager Transit Systems Management told the Journal.

Developers previously had announced that the monorail would begin operating by March 1. Then that deadline stretched to the end of March.

NAB had been hopeful the monorail would open in time for its convention at the Las Vegas Convention Center, which opens April 17. With stops at the LVCC and eight resort hotels, the driverless trains someday are expected to offer conference attendees and tourists a fast alternative to busses and taxis. The LVCC station will be located at the intersection of Paradise Rd. and Desert Inn Rd. at the western side of the center.

A one-way trip on the Las Vegas Monorail will be $3, with round-trip fare costing $5.50. The monorail will run 20 hours per day, from 6 a.m. to 2 a.m., 365 days a year.

"We recognize the importance of transportation to all of the conventions that take place in Las Vegas," said Todd Walker, director of communications for the Las Vegas Monorail.

NAB, meanwhile, said it was prepared to accommodate a number of attendees with its fleet of shuttle busses that run from the LVCC to the hotels in the official room block during the convention. According to an NAB spokesman, the organization will provide the same number of busses as it did during the 2003 convention, which drew 87,000 attendees. The number of attendees is expected to be about the same this year, he said.

— Naina Narayana Chernoff

Split

▶ Continued from page 1

comes as NPR has submitted its report to the commission with final results from tests of supplemental audio channels on stations broadcasting in HD Radio.

The public radio network believes FM stations can do so using the existing hybrid analog/digital system — that the industry would not have to wait for stations to turn off their analog signals for the approach to work.

Now, eyes are on the commission to see how its staff handles the request.

Experts say they wonder whether commercial stations will adopt the concept.

There is precedent for broadcasters to air more than one digital stream in the same transmission channel. TV does this now.

Jackie Broo, a spokeswoman for Harris Corp.'s Broadcast Communications Division, said, "The current model on TV for supplemental channels is broadcasting a number of standard-definition channels during the day and then switching those off, to broadcast HDTV during prime time."

'Right track'

"NPR should be allowed to split their programming because it would be an enhancement to radio," said Womble Carlyle attorney John Garziglia, watching the situation in his role as a communications attorney. He said radio's transition from AM to FM occurred because of programming changes, and now the split digital channel concept "is absolutely on the right track."

"Stations have a real dilemma today," he said, as competing services gain market share. "The transition to satellite radio is happening not due to RDS and other things; it's the programming," he said.

From left, WDUQ's Scott Hanley, NPR's Mike Starling, Kenwood's Mike Bergman and Harris' Lucius Stone meet at the Tomorrow Radio Press conference at CES.

Michael Gartenberg, technology analyst for Jupiter Research, is another observer who agrees that better programming is key for HD Radio to succeed. He told the Los Angeles Times, "Sound quality is only part of the equation. If HD Radio wants to avoid the same fate as AM stereo and quadraphonic sound, it has got to find compelling content, get the pricing of the equipment down and get the product integrated into automobiles."

Al Kenyon, a former Clear Channel engineering executive who represented the company on Ibiquity Digital's board, believes that whether commercial stations choose to to split their digital channels depends on the sales of HD Radios.

"I suspect that once receiver penetration is high enough, commercial broadcasters might take advantage of a second channel."

He and another engineering manager with a prominent commercial radio group, who did not wish to be identified, believe the second-channel concept will need commercial radio's support to succeed. Their reasoning: the more stations transition to HD Radio, split their FMs and offer innovative content, the more chances there are to drive consumers to buy the new radios.

This engineer says not all stations, commercial or noncommercial, are going to want to create yet another competitor in a market.

"The broadcast model doesn't support doubling the stations. You won't double the advertising," he said, adding that he had been opposed to the concept due to audio quality issues for a long time.

He now feels those issues may be settled.

Tomorrow Radio proponents say for many applications, such as music, talk and data, the split channel is robust and the audio quality is good, although they acknowledge that splitting what a 96 kbps channel into channels of 64 and 32 kbps does have implications in some uses.

"You gotta adopt the product and evaluate before you play with this. But it might be worth it," said the group engineer.

NPR has said its member stations could provide more diverse content, some of it public service-oriented, on the new channels. General managers and engineers of noncom stations interested in the concept say the programming (and fundraising) possibilities of the extra channels make the case for investing in digital equipment more compelling.

Yet some radio engineers believe that the supplemental audio programming, or SAP, channels may have uses beyond what NPR intended, and that those also should be explored by the commission in considering this request.

Scott Clifton, director of engineering for the SportingNews Radio Network, was involved with the early digital radio effort Project Acorn, which eventually evolved into HD Radio. He says the commission must view the extra channels as new services — a view likely to be controversial to some current licensees.

"You're not occupying more spectrum, but you're doubling the service provisions to the public." The FCC should count supplemental audio programming channels as another station for purposes of ownership attribution, he said.

The proposed second-channel service is not considered viable for AM stations, even those that go digital, due to bandwidth limitations.

But Clifton makes a plea for AMs. If the commission allows FM channels to be split, he said, some of the new channels should be allocated for AM owners. He would move AM stations to the FM band on the new SAP channels. Where an FM channel is split, the FM licensee would get to keep one channel and a current AM owner would get the other channel.

Why does he advocate this approach? Clifton doesn't expect a good fix for AM audio quality with Ibiquity's HD Radio system in the hybrid mode.

Due to interference concerns, AMs are only authorized to transmit in digital during the day, although after seeing the results of recent Ibiquity tests, NAB has asked the commission to authorize AM digital at night.

Clifton doesn't expect the AM digital interference issue to improve until stations adopt the all-digital mode of broadcasting, at least several years from now.

"The problem is everyone wants to push this through and get it done. ... It's not a total solution for everyone," he said.

NPR Vice President for Engineering and Operations Mike Starling said the network is receiving interest from member stations that want to try the supplemental audio channel concept. Now that initial testing to prove the validity of the concept is complete, NPR seeks other noncom stations to try splitting their digital signals so it can gain experience with various equipment implementations, power levels, terrain and other factors.

NPR is looking at such implementation scenarios, Starling said, "to figure out what's an effective way of getting signals from the transmitter to the studio and implementing things like program-associated data."

Although noncommercial radio is pushing the supplemental audio concept, there's nothing to prevent commercial radio stations from trying it. Harris and Broadcast Electronics will have supplemental channel demos in their booths at NAB2004.

Ibiquity wrote software code for transmitter and receiver makers to allow stations using its HD Radio system to run digital FM at either the full 96 kbps or to split the digital stream into other configurations, Starling said.

The testing for the Tomorrow Radio project was conducted with Harris and Kenwood and reviewed by technical consulting firm Hammett and Edison (Radio World, March 1, page 12).

In its March 10 letter to the FCC, NPR states: "Given the evolutionary nature of the Ibiquity IBOC technology, the commission recognized the need to resolve ... whether and how stations might transmit multiple digital audio programming channels to a meaningful portion of the station's authorized service area without causing harmful interference to other services."

The testing "confirmed the viability of subdividing the HD Radio 96 kbps data stream into multiple streams for

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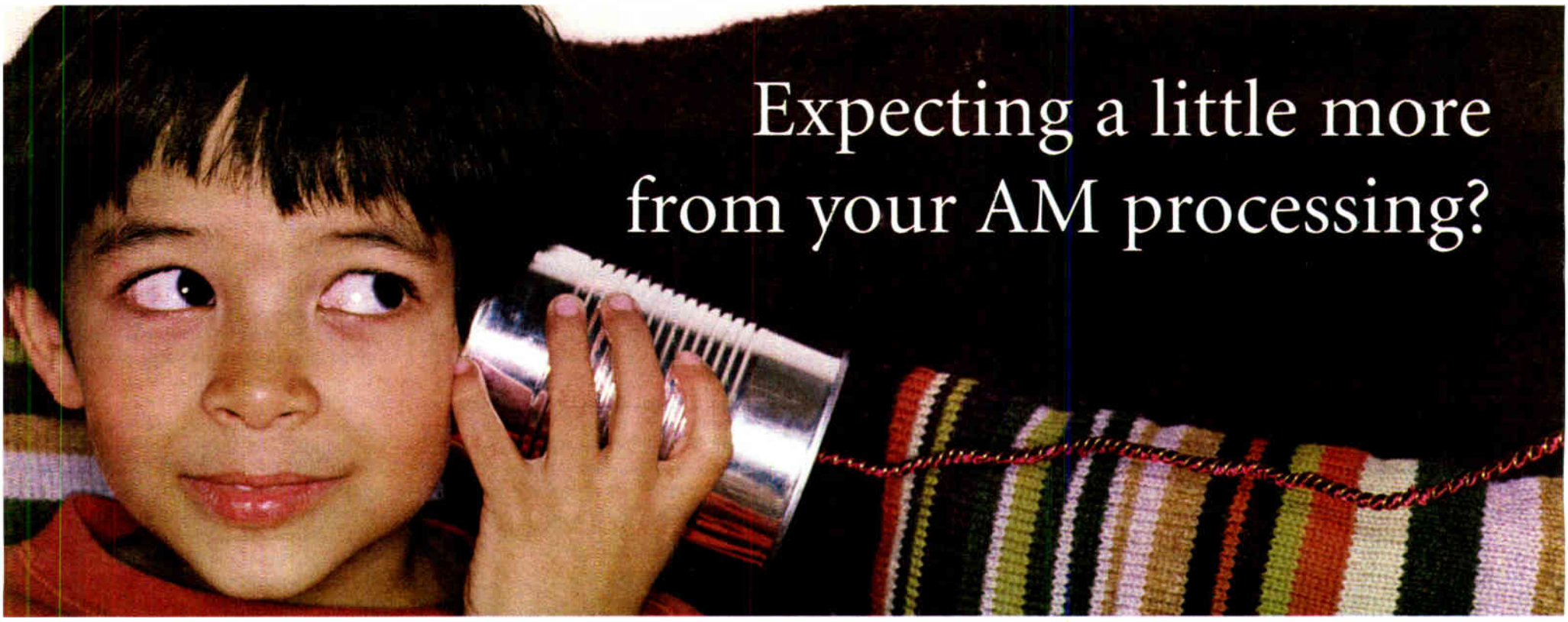

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Alert

▶ Continued from page 1

The opposing positions are apparent in comments filed with the FCC in response to the newly proposed emergency vehicle alert systems that proponents say could save lives. The commission has turned down one proposal, but is reconsidering that decision and is reviewing another.

EVSS

An Emergency Vehicle Signaling Service involves the installation of a low-power transmitter in emergency vehicles. The alert service uses the AM and FM bands to transmit a warning directly to car radios that are already in use, overriding the audio of broadcasters. The message would alert drivers that public safety and emergency vehicles are engaged in an emergency response situation in their proximity.

The alert service would affect both mobile receivers and fixed radio in residences or businesses.

Two companies within the past year, Safety Cast Corp. and Alert Devices International Corp., have sought the FCC's approval of EVSS systems. They say they have public safety in mind and that EVSS protects both public safety providers and motorists.

A third company, AlertCast Communications LLC, has proposed the use of EVSS in California. Calls to AlertCast for this story were not returned.

Several organizations, including the NAB and the Society of Broadcast Engineers, oppose EVSS. They argue that it could override Emergency Alert System messages and that such a system is likely to interfere with the AM and FM radios of people living in houses or working near urban areas where emergency vehicles most often travel.

ADiCorp petitioned the FCC last year to make changes to Parts 2 and 90 of the commission's rules to allow emergency vehicle warnings to be transmitted over AM and FM broadcast signals.

The company says its Radio Alert Transmitter unit transmits a tone and then verbal warning over the entire standard AM and FM bands at a range of 600 feet. Transmitter power levels would fluctuate between 15 mW and 45 mW, depending on the speed of the emergency vehicle. The cost of an ADiCorp EVSS unit is approximately $985.

'Vastly lower power'

Tom Macone, president of ADiCorp's emergency alerting division, said the Radio Alert Transmitter does not "overpower" radio station signals.

"The EVSS signal is steadier and cleaner than the broadcast signal and transmits slightly off-center in the broadcast channel, which allows a car radio to grab the line-of-sight signal instead of the broadcast signal," Macone said.

"Because the EVSS signal is off-center, the car radio preferentially grabs the EVSS signal despite broadcasting at vastly lower power," he said.

The NAB stated in its comments on the Petition for Rulemaking that ADiCorp failed to submit technical specifications for the device.

"Alert Devices' purported purpose, to alert motorists of emergency and public safety vehicles, is a laudable goal, but it is far from clear that its proposal is the best means of achieving that goal," according to NAB's comments.

The broadcaster trade group also asked the commission to order ADiCorp to stop selling EVSS transmitters over the Internet. Macone says ADiCorp is using the Internet as a "worldwide marketing tool" and not selling the Radio Alert Transmitter unit in the United States.

"The unit has been approved for use in Canada. But we are not selling it there yet, either," Macone said. "We are very concerned with the regulation of the service."

ADiCorp has since added the following message to its Web site: "This device has not been authorized as required by the rules of the U.S. Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, for use in the United States until authorization is obtained."

'Dangerous precedent'

SBE has similar concerns with how EVSS works.

"The system proposed by ADiCorp is deeply and fundamentally flawed, and would set a dangerous precedent for further damage to spectrum integrity," the engineering group wrote in its comments to the FCC.

Comments on ADiCorp's Petition for Rulemaking were due March 31 after the company recieved an extension.

Meanwhile, Safety Cast applied for Special Temporary Authority from the commission in early 2003 to test its EVSS technology in Jacksonville, Fla. In July 2003, the FCC dismissed the Safety Cast application.

Ed De La Hunt, associate chief of the FCC's audio services division, said the dismissal of Safety Cast's prior application was based on a staff determination that the experimental application would result in destructive interference in violation of the FCC's Part 74 rules.

"Specifically, we determined that the experimental operation would cause predicted interference within the 60 dBu projected contours of several radio stations in (the Jacksonville) area," De La Hunt said.

Safety Cast officials acknowledge there would be a temporary interruption of radio service when an EVSS unit is engaged. But they say the interruption would be minimal, and the amount of the broadcast area affected would be small.

The FCC is reconsidering the Safety Cast application at the request of the company.

"There has been a rush to judgment by some in the broadcast industry on this technology. We believe ourselves to be a friend of broadcasters," said Robin Wilson, vice president of marketing for Safety Cast.

Safety Cast officials believe EVSS will save lives by allowing the use of radio frequencies to alert a specific group of people in a specific area.

"We are not cracking a walnut with a sledgehammer here. We can communicate directly with people right at a point where they can make a decision about their personal safety," Wilson said.

Non-interference

As a public safety vehicle approaches traffic from behind, Wilson said, the Safety Cast message includes a non-intrusive alert tone and audio message: "Emergency vehicle approaching. Prepare to yield."

Wilson said if an emergency vehicle is parked on the shoulder of the roadway, the alert message reads: "Officer on roadside. Be alert."

Opponents of EVSS say they are simply advocating for non-interference with existing broadcast services.

"The actual technology involves jamming existing signals, which would probably be fairly indiscriminate and probably affect non-intended target radios — for instance, cars traveling in the opposite direction on a freeway," said Larry Estlack, director of technology for the

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Injured Trooper Founded ADiCorp

WOBURN, Mass. George Derome Jr. founded Alert Devices International Corp. in 1999. The company, based in Woburn, Mass., hopes eventually to sell radio alert transmitters to law enforcement and emergency responders.

Derome is a former Massachusetts state trooper who was run down by a car while trying to secure an accident scene. According to the company's Web site, Derome has undergone 47 surgeries on his left leg since the accident in 1983.

ADiCorp petitioned the FCC in 2003 to amend the commission's rules to allow the company to sell its Radio Alert Transmitter and establish an Emergency Vehicle Signaling Service, which uses the AM and FM bands of a car radio to relay alerts about approaching public safety vehicles.

After retiring from law enforcement in 1993, Derome said he reflected upon his accident and started looking for ways to help protect emergency responders.

"I'm convinced from all my years in law enforcement that (EVSS) will work to cut down response times and prevent a number of accidents for emergency responders," Derome said.

— by Randy J. Stine

Safety Cast and Alert Devices say EVSS protects public safety providers and motorists.

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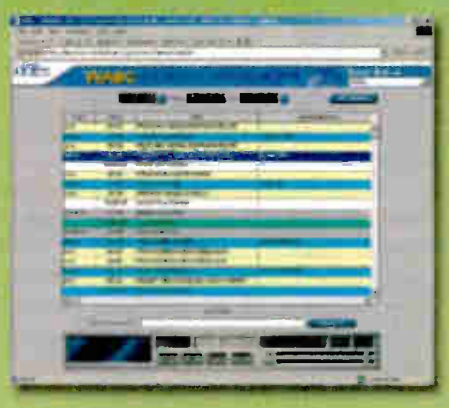

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◆ NEWSWATCH ◆

Congress Moves On Indecency

WASHINGTON The U.S. House of Represetatives and the Senate Commerce Committees passed bills to raise the fines for broadcast indecency to at least $500,000. The measures are heavily amended and contain large differences.

The House passed its broadcast indecency measure by a 391-22 vote on March 11. At press time, eyes were on the Senate as its members needed to decide whether to vote on the House or Senate committee's measure or to craft a compromise bill in conference committee.

During the House vote, vocal supporters of the First Amendment turned up the heat. A few Democratic lawmakers opposed the bill, suggesting it was an attempt to suppress those who speak out against the Bush Administration.

Rep. Gary Ackerman, D-New York, was one of several lawmakers who supported shock jock Howard Stern, saying Clear Channel took him off six of its stations not for indecency but because he criticized the administration.

Clear Channel Radio's top Washington lobbyist Andrew Levin called the charge "nonsense" in comments to Radio World.

"It's amazing to me that people are so quick to buy into conspiracy theories. The truth is we pulled Stern because the broadcast in question was sexually explicit, completely over the line, and had no place on the air," Levin said.

The new chairman of the House Commerce Committee, Rep. Joe Barton, R-Texas, praised the chamber's passage of the bill and said he looked forward to "expedient" Senate action and having the bill "on the president's desk as soon as possible."

WDRQ Tries Text Messaging

DETROIT ABC station WDRQ(FM) is working with Telenor Mobile Interactive USA to launch what they describe as the first cross-carrier premium wireless text messaging service. The service runs during WDRQ's "Man @ Large" show, weekdays from 6:30 p.m. to midnight.

At 9 p.m. Eastern, listeners are invited to vote on a chosen song as a Hit or Miss by sending the text message DRQH (for a Hit) or DRQM (for a miss) from their mobile phones The cost of sending a text vote is 50 cents plus text messaging rates.

The station hopes to boost audience loyalty and participation by integrating wireless text messaging into its shows, events and promotions.

"Through Telenor's premium text messaging, audience interactivity can be a profit center instead of a cost for radio stations," said Telenor Mobile Interactive CEO Steinar Svalesen.

This particular service is available to subscribers of Verizon Wireless, AT&T Wireless, Cingular Wireless and T-Mobile.

Spanish Media Form Association

WASHINGTON Spanish-language networks, broadcast companies, financial institutions and other service providers have formed the Independent Spanish Broadcasters Association.

"This new association is intended to give a voice to independent Spanish language broadcasters in their effort to increase opportunities for capital formation, acquisitions and advertising revenue," said Rosamaria Caballero, a founding member. For information visit *www.spanishbroadcasters.com.*

Split

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purposes of broadcasting audio programming," NPR states. After testing the concept on four FMs — WETA in Washington, WNYC in New York, KALW in San Francisco and KKJZ in Los Angeles — Hammett and Edison concluded that a secondary audio channel service area would reach a typical FM station's 70 dBu to 60 dBu service area.

The partners redid portions of the tests with Ibiquity's new HDC codec in two markets, New York and Washington, and were "heartened" by the "highly positive results." The earlier tests were conducted with the former PAC codec.

Because Tomorrow Radio involves dividing a station's HD Radio data stream, NPR "anticipates that existing commission public interest requirements governing FM broadcasting would apply to FM stations electing to broadcast multiple audio channels."

While some broadcasters believe this could become a contentious issue with commercial owners, the NAB has taken no position on the Tomorrow Radio concept so far.

NPR has asked the FCC to authorize FM stations to implement the supplemental audio channel capability of HD Radio as soon as possible. That permission might be included in a further notice of proposed rule making that IBOC proponents hope comes out this year for permanent IBOC authorization, or on its own.

NPR Vice President for Government Relations Michael Riksen said the FCC is "teeing up" the further notice on IBOC, but could not pin down when that might be released.

"Reasonable speculation is that it is more a matter of weeks rather than days or months," he said in March.

Alert

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Michigan Association of Broadcasters.

Mark Manuelian, chair of the EAS Primary Entry Point Advisory Committee, said his main concern with EVSS is that it would interfere with EAS messages.

"Some EVSS proponents say they could curtail its use during an EAS alert. That seems impractical since all EAS alerts are broadcast at different times over different radio stations," Manuelian said.

Both companies say their second-generation versions of the technology would fix that problem.

ADiCorp officials said their EVSS system will not interfere with the public's reception of EAS messages, because each EVSS transmitter will be programmed to monitor primary EAS stations in each local market for an EAS attention signal. The transmitter will turn off upon its receipt and remain off for the duration of the EAS transmission.

Wilson said the Safety Cast version of EVSS can "opt out" local primary EAS radio stations when warnings are being broadcast.

Several other broadcast engineers believe the public safety officials to whom ADiCorp and Safety Cast are marketing have little understanding of the technical hurdles involved.

"This is clearly a concept driven by sales and not engineering," said Clay Freinwald, chairman of SBE's EAS Committee.

Bill Croghan, vice chair of Nevada's EAS committee, said such a system could create more problems than benefits.

"What happens when multiple responders all have their EVSS units on? It could create confusion. If these EVSS transmitters, which are essentially jammers, were in use by multiple responders in an area, they would likely jam each other, too," Croghan said.

In addition to having doubts about whether EVSS transmitters would be compatible with HD Radio, the NAB suggests ADiCorp consider using the 5.9 GHz spectrum for its service, which the commission recently allocated for a wide range of emergency warnings.

The FCC in February adopted licensing and service rules for the Dedicated Short Range Communications Service in the Intelligent Transportation Systems Radio Service in the 5.850-5.925 GHz band (5.9 GHz band).

Dedicated short-range communications involves vehicle-to-vehicle and vehicle-to-infrastructure communications, which can warn drivers of an impending dangerous condition.

"It would make more sense to equip new vehicles with a low-cost receiver on a unique frequency," Manuelian said, "instead of relying on a jamming technique."

A spokesman for the Consumer Electronics Association said the trade association had reviewed ADiCorp's EVSS request, but had not taken a position on its use.

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Radio's Grace Under Pressure

Satellite Radio Could Be Making Terrestrial Radio Better

by Skip Pizzi

It is well known that threats can be effective motivators to change.

Every parent knows this; and to some extent so does every government and law enforcement agency. But the concept also applies to technologies. When a new entrant emerges, the threatened incumbent often works hard to optimize and refine its traditions, hoping to stave off the upstart and retain its market position.

In many cases these efforts simply are exercises in deck-chair rearrangement, only slightly postponing the inevitable demise of the legacy. Yet sometimes such developments can revitalize a stagnating yet still animate format, allowing it to realize a potential that may not otherwise have been achieved.

For example, when digital audio recording first entered the studio environment, the established analog recording industry reacted with things like the 1/2-inch, 30-ips Ampex ATR-100 and Dolby SR. Years later even these are artifacts of a bygone era, yet they flourished for a number of years, and now retrospectively represent the pinnacle of analog recording technology. Without the threat imposed by oncoming digital recording, however, they may not ever have been developed.

A push from the sky

Today we see the same effect taking place on terrestrial radio. New satellite radio services from XM and Sirius are driving FM radio broadcasters to make improvements on a format that hasn't seen significant, practical change in decades.

First, much of the movement toward terrestrial digital radio broadcasting in the 1990s was the result of broadcasters' early fears that satellite radio was coming, with possible detrimental effects to traditional radio's audience. It was felt that unless terrestrial broadcasters were also digital that satellite radio would have an unfair advantage.

By now, however, it's become obvious that this argument was at least partially flawed: most satellite radio customers don't choose the format because it is *digital*, but because it offers content that appeals to them and is unavailable elsewhere. Terrestrial broadcasters' choice of a format that could provide only a digital version of their existing analog signal (at least initially) would likely be no more successful than early FM was, when it provided only a higher fidelity version of existing AM signals. This approach alone would therefore certainly not provide the desired defense against the new technology of satellite radio.

Recently a more refined understanding of the appeal of satellite radio has begun to emerge. It features a higher granularity of insight to the satellite radio user, based on recent research of current customers.

For example, one of the most desirable elements of the XM and Sirius services turns out to be the text display of "now playing" artist and title information. While HD Radio will include this capacity, some broadcasters have used this learning to adapt the PS display on RBDS receivers to add similar functionality to FM radios in the meantime.

Although the perils of PS scrolling have been discussed in this column and elsewhere in Radio World, the service seems to be largely welcomed by users. The NRSC has even dusted off its moribund RBDS Subcommittee to address and perhaps codify this new functionality. Yet none of this would have taken place had it not been for satellite radio raising the bar.

Another case in point is the reaction of terrestrial broadcasters to the full-time major-market traffic and weather services recently added in by the satellite radio providers. Suddenly the idea of a supplemental audio channel in HD Radio doesn't sound like such a bad idea, and commercial broadcasters have begun to embrace the Tomorrow Radio project, initially something that only appealed to public radio stations.

Between this and the idea of offering synchronized spot breaks in a second language, commercial stations may find something to love in an area they originally wanted to avoid with digital radio: more audio services.

Again it is the hard lesson being taught by satellite radio that the advantage of digital transmission is mostly about quantity, not just quality.

Competitive advantage

The waning days of any legacy format generally imply a maturity that means any further improvement will be difficult to achieve. The old saying of the last 1 percent takes as much effort as the first 99 percent usually applies. Yet in this case, some underutilized features of FM — and unappreciated capabilities of IBOC — are allowing substantial improvements with minimal investment.

New satellite services are driving FM broadcasters to improve a format that hasn't seen significant change in decades.

The Big Picture

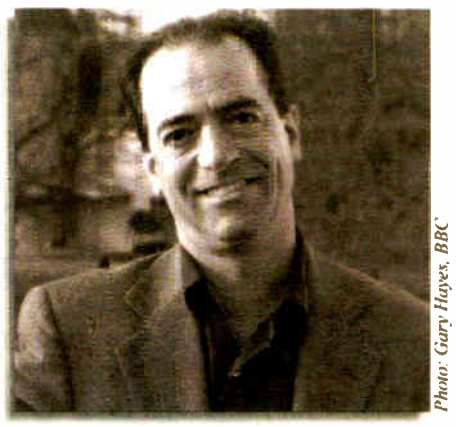


Photo: Gary Hayes, BBC

by Skip Pizzi

This process may not be over. As satellite radio continues to progress, additional new features may come online, such as recording/time-shifting capability, 5.1 channel audio or electronic program guides, and terrestrial radio may respond in kind, either with enhancements to analog AM and FM services, or expansions to HD Radio plans.

So both current and future terrestrial radio systems will offer services that have come about only because new competition forced their hand. But this only is the American way. Competition breeds stronger products, and the consumer ultimately benefits.

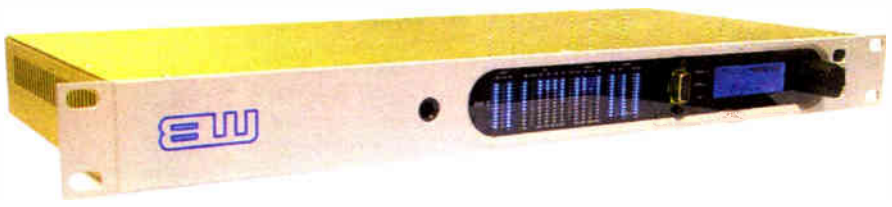
Skip Pizzi is contributing editor of Radio World.

Processing Company Will Give Away Gold-Plated Model at NAB

Broadcast Warehouse is giving away a gold-plated version of its DSPX broadcast audio processor. Visitors who stop by booth N1710 will register; a winner will be picked on Wednesday afternoon.

BW says the DSPX is a low-cost FM, digital radio and Internet streaming broadcast processor. The company also is demonstrating the Microgen TS9000 FM broadcast analyzer, a low-cost USB-powered FM test set. And it is showing its family of low-power transmitters and dynamic RDS encoders.

For information visit www.broadcastwarehouse.com.

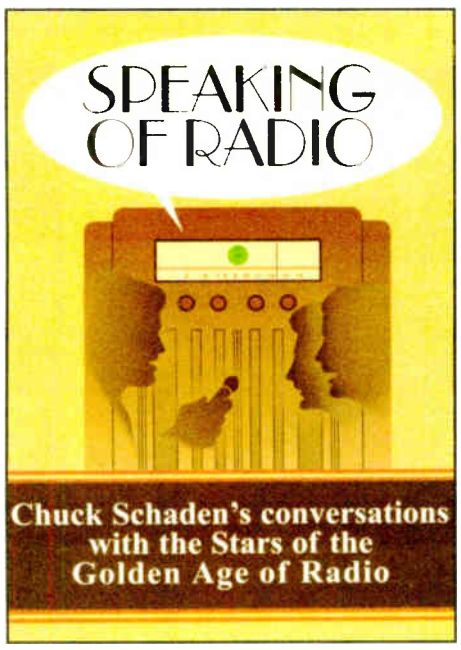


ROOTS OF RADIO

'Speaking of Radio' Tells It Like It Was

by Ken R.

If you absolutely must know the name of the guy who said, "Yesssss?" on Jack Benny's radio program, the information is in this book. (It was Frank Nelson, who first was heard on the radio in 1926 in Denver.)



If you ever wondered who played Fanny Brice's radio father *before* Hanley Stafford, that's here, too. (It was Alan Reed, better known in later years as the voice of Fred Flintstone.)

But the charm of "Speaking of Radio," by Chuck Schaden, not just the trivia. It is in the warmth and humility of the author and the dozens of retired luminaries he interviewed.

At some 400 pages, this illustrated paperback features a lot of names you will recognize, like Les Tremayne (who contributed a forward), Agnes Moorehead, Rudy Vallee and Edgar Bergen. However, the less-known folks often have the most interesting stories to tell.

Let's break for a poem

Did you know, for example, that producer/director Norman Corwin's first radio job was reading poetry on New York's experimental station W2XR(AM), later known as WQXR? After auditioning, he was "hired" for exactly nothing per week.

Or did you know that Mercedes McCambridge, a prolific radio actress during the golden years, later voiced the moans and groans coming from the demon girl in "The Exorcist"? She used her real-life affliction of bronchitis to wheeze and rasp, creating that unforgettable aural image.

The author allows his subjects to ramble, but the digressions can be fascinating. Harry Von Zell tells the story behind his famous "Heever Heeby Hoover" blooper in 1931. Willard Waterman, aka "The Great Gildersleeve," describes paying his dues in "The Guiding Light" before that show became a soap staple on TV. And Art Linkletter relates that "People Are Funny" was created when he and his partner, John Guedel, each spent $15 to borrow a studio at NBC to make the pilot.

Schaden, a Radio Hall of Fame inductee himself, has made a career out of his love of American radio shows of the 1930s, '40s and '50s.

In addition to writing this enjoyable book of interviews with the stars, he hosts "Those Were the Days," a weekly radio program now carried on WDCB(FM) at College of DuPage in Glen Ellyn, Ill. That show has been on the air on several stations for 34 years.

It's obvious that Schaden is a radio geek, and we use that term in the nicest way.

The book is presented in question/answer interview form; the personalities of the subjects come through in a most entertaining way. I was surprised at the number of stars who started in radio almost by accident. They didn't know the rules because,e in the early days, there were no rules.

"Speaking of Radio" retails for $27 plus $2.36 tax for Illinois residents and $5 shipping. It's available from Nostalgia Digest Press, Box 421, Morton Grove, IL 60053. Secure orders can be placed through *www.nostalgiadigest.com.*

Ken R. is a former broadcaster who has permanently hung up his golden headphones, much to the delight of his former audience.

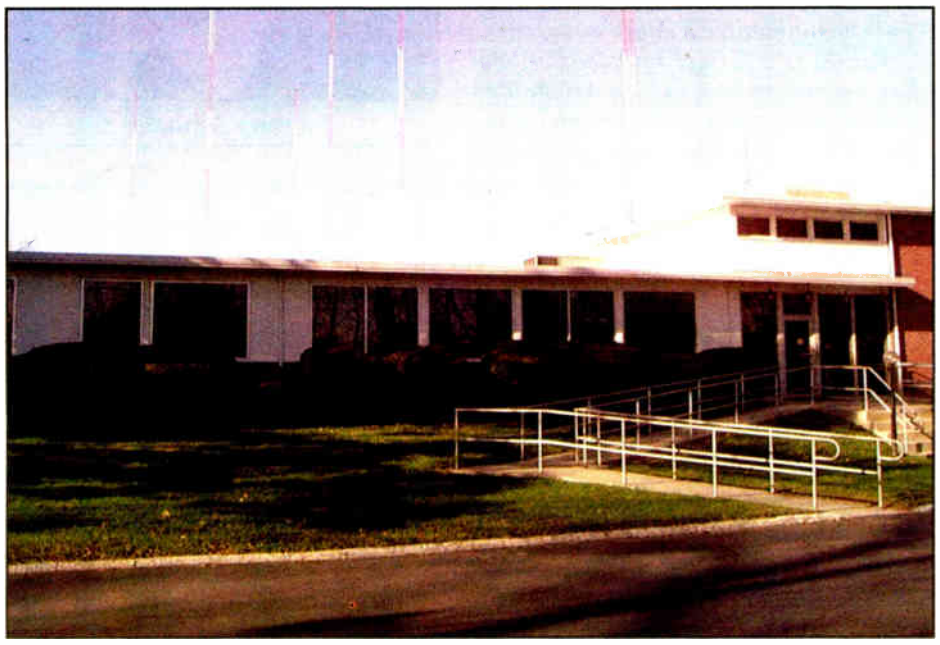
Chuck Schaden

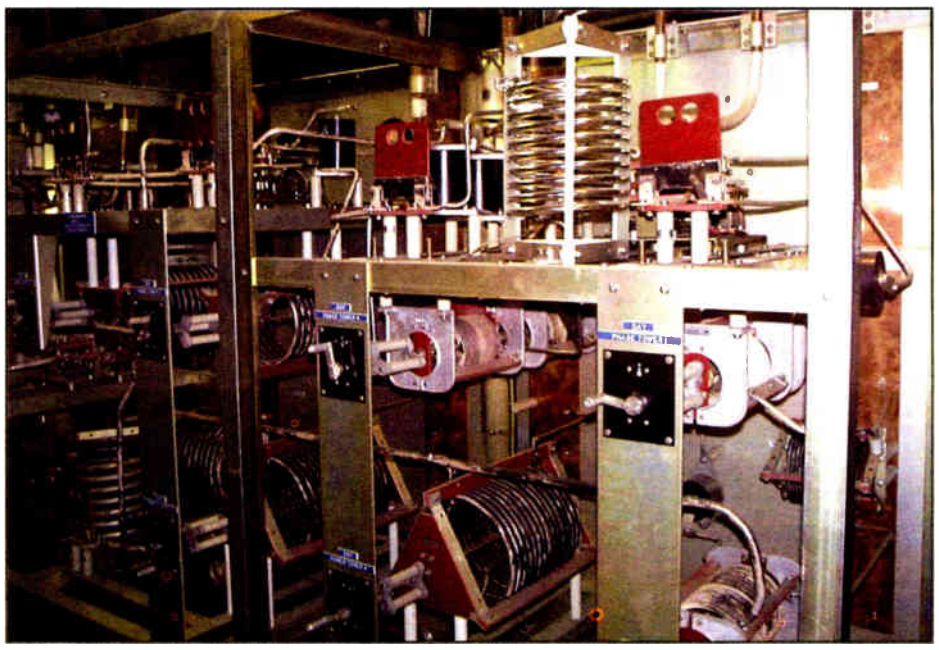
FIRST PERSON

A Walk Through WFIL/WNTP

by J. R. Russ

If you want to learn the history of a couple of great Philadelphia AM radio stations, seek no further than Fred Moore, now the chief engineer of AM stations WFIL and WNTP, which was once WIBG — "Wibbage." The stations, once fierce competitors, now air from the same studio facility and are owned by the same company, Salem.





Phasing Equipment

Moore, who retires this year, was an engineer at "Famous 56 WFIL" from 1966 to '72. During what is considered by many to be the "glory days" of top 40, the little 5 kW David, operating at 560 kHz and owned by Triangle Publications, which ran the Philadelphia Inquirer and TV Guide, dethroned Buckley Broadcasting's 50 kW Goliath WIBG, on 990. The latter had been the dominant Delaware Valley music station in the late 1950s and '60s.

After engineering stints in the Big Apple at WPAT(AM-FM) and WNEW(AM-FM), Moore returned to the City of Brotherly Love in 1993 to wear the hat of chief engineer at WBEB(AM), the former WFIL. Salem purchased the station in November of 1993 from Jerry Lee, owner of perennial market leader WBEB(FM).

Lee had tried several formats on the AM in the '80s including a run at an oldies format and was airing beautiful music instrumentals with the ID of WBEB(AM). When Salem took over, the station changed to religious WPHY. Eventually, General Manager Russ Whitnah was able to reclaim the WFIL calls when they became available.

Less than a year later, Salem acquired the former WIBG. It had been re-christened WZZD around 1978 in an attempt to revive the station's sagging ratings. "Wizard 100" played a disco format. The dancing stopped in 1980 when owner, Unicom, began airing a Christian format.

Thus WZZD already had a religious format when Salem took over, creating a one-two punch on two of the better AM signals in the region.

Around that same time, in 1993, the suburban township of Whitemarsh, Pa., in which both stations were located, expressed a desire for the land where WFIL sat, to use as a recreational area. Lafayette Hill had become residential, and a school had been built to the west of the towers.

Faced with stations in two locations; aging studios, transmitters and towers; and legal pressure to vacate the smaller site, Salem laid plans for a multi-million dollar project that would combine and upgrade the facilities at the WZZD site on Ridge Pike a mile away.

Today, the land where the three WFIL towers once stood is occupied by softball fields. The building remains, unused; if you peer through the glass of the front door, you can still see an equipment rack in the darkness toward the back.

Salem recently changed the call letters of WZZD to WNTP, part of a format tweak to news/talk. CEO Edward G. Atsinger III called this move a "significant growth opportunity" for Salem, "part of our long-term plan of developing our three formats."

The company quoted Philadelphia GM Russ Whitnah as saying, "Historically, WFIL(AM) and WNTP(AM) offered listeners similar programming in the Christian teaching and talk format. Our listeners now will enjoy the best of both worlds: Christian teaching and talk; and news/talk."

After the major buildout in 1995-97, Salem operates the two stations from the WNTP complex on picturesque land adjacent to a country club. The single-lane driveway is easy to miss. If not for the six towers in the side yard, the building could be mistaken for a large home set back from the road by 50 yards. The layout, a mixture of contemporary and art deco architecture, is deeper than it is wide.

I recently visited to see and share how these legendary stations operate. (I made my visit prior to the call letter change from WZZD.)

Media mix

Integration began in the mid-1990s, as the analog and digital worlds were colliding. Moore describes the three-studio facility now as "a lot of both."

While you see touchscreens and digital media, you also notice cart and reel equipment. Much of the programming on both stations is network and syndicated; and there are still live programs broadcast. A host may bring in his or her own spiritual music; a church may send the Sunday service for broadcast, recorded on reel.

Moore met me in the neat reception area and up the stairs to the first stop, the WNTP air studio. Neat and functional, it sports an Audioarts console with a transmitter control/monitor and a flat-screen monitor with program controller from ENCO Systems (see the sidebar for an equipment list). A television doubles as amusement for the operator during long-form programming and a link to keep abreast of worldwide developments and breaking news.

Around the corner in the WFIL studio,

See WFIL, page 17 ▶

WFIL

▶ Continued from page 16

one can delight further in the plant's media-diverse nature. It is billed as "Philadelphia's Christian Talk" station. You can find everything from another Audioarts console and touchscreens to play programming off hard disk, to nearly every conceivable format of the last 50 years. There are CD cartridge machines above a dual cassette deck; directly below is an ITC tape cartridge record deck, with another one in the elevated rack. A pair of reel to reels, MiniDisc recorders, even a VCR along with a VCR/DVD combo reside here. Just about whatever media it's on, they can play it.

Directly behind the WFIL control room is a production room that serves both stations.

The only thing missing in the building is a turntable. Moore says he had planned to have at least one, but somehow never installed it and there hasn't been a need for one.

Working a 50

In the 1970s I learned many radio fundamentals from the late Chuck Smith, then of WIMS(AM) in Michigan City, Ind. He always said he wanted to "work a fifty." He would be in his glory here.

Just outside the "back" door of the production studio, you are greeted by not one but two Harris 50,000-watt transmitters. In a glassed room, along with audio processing racks, sits a DX-50, the station's main transmitter, installed during the last upgrade. It is reduced to 10 kW at night. Down the hall sits an MW-50 backup, circa 1980, built into the wall and looking as pristine as the day it was powered up.

Heading down to the basement, we stopped to gaze out a stairway window at the tower field. The six towers stand in two rows that march away from the building in two rows roughly north-south. The row on the right has four towers; the first tower is shared, transmitting on 560 and 990, while the other three complete WNTP's array. The row on the left has two more towers for WFIL.

The complex directional patterns are controlled not by a phasing cabinet but by a phasing *room*. Insurance regulations would not allow me to enter due the high RF levels. But I was able to lean waayyyyyy in to get a photo of this custom maze. The Vector phasing room controls WNTP, while a smaller cabinet by the WFIL transmitter controls that station. Both units were designed and installed by Consulting Engineer Tom Jones; they control the stations' separate day and night patterns.

About a third of the basement area is workshop and storage. In the middle the WFIL Nautel Amphet 5 backup transmitter stands next to an impressively sized Kintronic DL-50 dummy load. Around that corner is the WFIL transmitter room, featuring the primary Harris DX-10, rack equipment and a backup Nautel Amphet 10.

Because the WFIL towers here are 100 feet shorter than at the old location, in the fall of 1995 the station was allowed to compensate by retuning and increasing power from 5 kW full time to 7.1 kW during the day and 8.3 kW at night.

My tour ended as I stepped out the side door and looked up at the towers. I couldn't help but feel that this is one of the few, high-power, major-market studio-transmitter locations remaining.

Salem seems to respect broadcast history by its general *modus operandi* of keeping existing plants and call letters where it can. This is evident on a portion of the original building exterior, where the original call letters "WIBG" can be seen carved in stone below the roofline. Moore said the letters are said to have originally meant "I Believe in God."

I couldn't help find it interesting that Salem has turned the station full circle, back to God, and took "Famous 56" along for the ride. It appears the wheel will again turn with the birth of WNTP.

J.R. Russ is a broadcast veteran specializing in radio program consulting and TV/radio imaging. A list of the station equipment appears in the online version of this story at www.rwonline.com.

WFIL's Air Studio

The Odd World of U.S. Shortwave

U.S. Shortwave Broadcasters Consider Themselves Rebels — And Are Proud of It

by James Careless

Radio's renegades.

That's how many broadcasters view privately-owned U.S. shortwave radio stations. They've got a point; when it comes to the conventions of commercial AM/FM radio, this country's 25-odd shortwave stations are anything but conventional.

In fact, the U.S. shortwave broadcast industry is sufficiently different from domestic AM and FM that it has its own lobbying group, the National Association of Shortwave Broadcasters (online at *www.shortwave.org*). A look at its membership list reveals stations unknown to most U.S. broadcasters, such as WMLK Assemblies of Yahweh, KAIJ Two If By Sea Broadcasting Corp., and WRMI Radio Miami International.

Missing from the shortwave ownership list are names like Clear Channel and Infinity. Most U.S. shortwave stations are owned by religious groups, while a few others, such as WRMI and WBCQ, are commercially owned.

Restricted access

Why is U.S. shortwave so different?

First, AM and FM are local or regional in coverage, while SW is national or international, thanks to the way radio waves propagate in the 5,000-30,000 kHz area of the spectrum. Like familiar AM signals at night, amplitude-modulated shortwave signals literally bounce off the ionosphere, allowing them to reach thousands of miles beyond the horizon. However, shortwave signals do this all the time, depending on which of the SW bands are used.

The rule of thumb: higher shortwave frequencies bounce best during the day; lower SW frequencies work better at night. Combine this with seasonal ionospheric variations and the sun's 11-year sunspot cycle, which affects how well SW signals bounce, and one can see that shortwave stations need a number of frequencies assigned to each of them.

Second, in the United States, the SW bands are reserved for international broadcasters.

"When the Voice of America was founded in 1947, it was prohibited from broadcasting domestically, in order to prevent the government from propagandizing to its citizens," says Larry Magne, editor in chief of "Passport to World Band Radio."

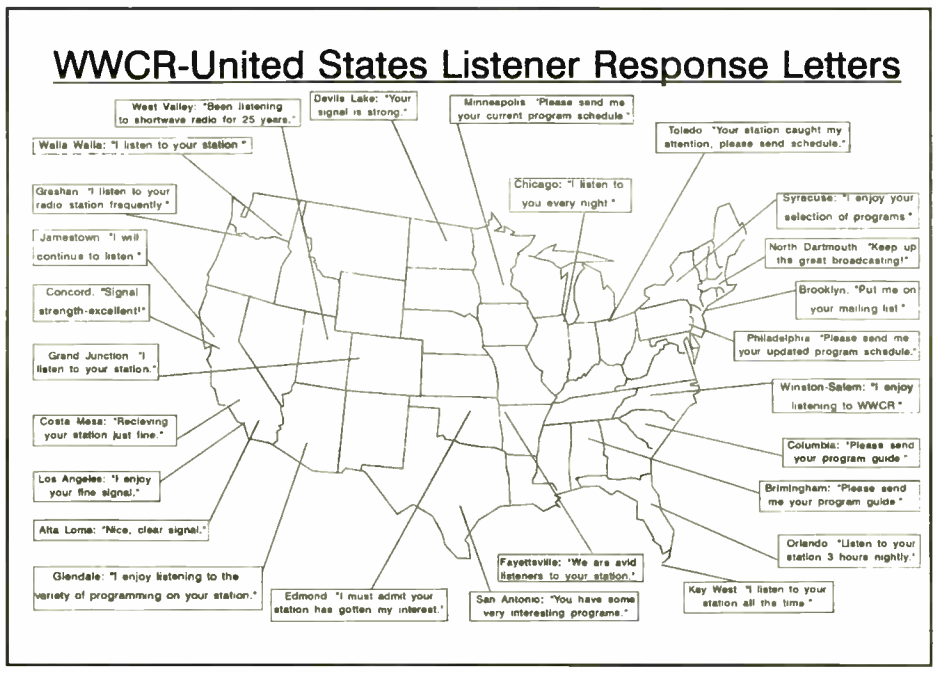
"The FCC decided that if this rule applied to the VOA, it should also apply to domestic shortwave broadcasters as well."

Fuzzy business model

However, according to NASB President and WRMI General Manager Jeff White, the FCC's restriction has an important loophole.

"The current rules do not say SW stations cannot broadcast to the U.S.," he said. "They say stations cannot broadcast programs that are intended *exclusively* for an audience in the continental United States."

As a result, U.S. shortwave broadcasters typically target countries such as Canada and Mexico, with their signals coincidentally blanketing any U.S. territory that happens to be in the way.



For instance, WRMI's 50 kW North American feed originates from a Florida-based periodic yagi antenna pointed towards Vancouver at 317 degrees.

"With this heading, we manage to legally cover virtually all of the continental United States," White said.

Then there's the issue of revenue. Although some U.S. shortwave broadcasters — religious groups such as EWTN Global Catholic Radio and Adventist World Radio, for example — don't count on making a profit, others, like WWCR, WCBQ The Planet and WRMI, definitely do. But although there are believed to be 600 million shortwave listeners worldwide, including about 5 million in North America, no Arbitron-style ratings service exists to report what they're listening to.

Without ratings, it is difficult to impossible to sell commercials. As a result, profit-minded U.S. SW stations make their living by selling airtime to whoever wants it. Typically, this tends to be religious or political groups.

The religious programmers run the gamut from mainstream to fringe, while political programmers range from Cuban dissidents to right-wing militia groups. In some cases these programmers work live in the station's studios. However, it's more typical for them to send in prerecorded programs on cassette, CD or MiniDisc, or to send in their shows by phone or, increasingly, over the Internet.

The cost? "We charge anywhere from $25 to $65 an hour, depending on the time of day and the number of hours purchased," said Allan Weiner, WBCQ owner and general manager. Based in Monticello, Maine, the station uses three converted commercial/military transmitters, some home-built antennas and a 1950s-vintage mobile home converted into a studio building.

At WRMI in Miami, Jeff White sells airtime for $1 a minute. Meanwhile, WWCR in Nashville, Tenn., charges anywhere from $15 for 4.5 minutes to $160 for 59.5 minutes, depending on whether you're buying on a one-day, weekly or Monday-through-Friday basis. With four 100 kW transmitters — a single 50 kW transmitter is considered to be the bare minimum by the FCC — WWCR has more reach and a more sophisticated transmission/production plant than WCBQ or WRMI.

Thus, given the FCC's restriction on domestic broadcasting, the issues of propagation, audio quality and static associated with amplitude-modulated shortwave and the lack of a measurable audience, the commercial SW market is not one for the faint-hearted.

Add the general public's lack of awareness of the medium — "People ask me all the time how they can pick up Radio Miami International on their AM/FM receivers," White said with a shrug — and one can see it's a tough business.

"The handful of truly commercial stations may generate anywhere from less than $200,000 a year to perhaps a few million," he added. "These are not Clear Channel-type operations."

Paying the bills

These broadcasters are willing to put up with poor production quality and content; this comes with the turf of selling airtime blocks. They can tolerate downright weird shows.

"I remember one show where the guy was doing a chant to the angels," White said. "He just kept chanting the same thing over and over again for 15 minutes."

In fact, U.S. SW broadcasters are willing to put up with almost anything from their clients, as long as they pay their bills.

"It is still a free country and they have a right to say a lot of things," said WWCR General Manager George McClintock.

"We pretty much let anyone say what they want," said Weiner. "Our listeners

See SHORTWAVE, page 19 ▶

FCC-Authorized U.S. Shortwave Stations

KAIJ Dallas
Two If By Sea Broadcasting Corp.

KFBS Northern Mariana Islands, SA
Far East Broadcasting Co.

KHBN Medorn, Aimeliik, Palau
High Adventure Ministries

KIMF Pinon, N.M.
International Fellowship of Churches

KJES Vado, N.M.
Our Lady's Youth Center

KNLS Anchor Point, Alaska
World Christian Broadcasting Corp.

KSDA Agat, Guam
Adventist Broadcasting Service Inc.

KTBN Salt Lake City
Trinity Christian Center of Santa Ana Inc.

KTWR Agana, Guam
Trans World Radio Pacific

KVOH Rancho Simi, Calif.
High Adventure Ministries Inc.

KWHR Naalehu, Hawaii
LeSea Broadcasting Corp.

WBCQ Monticello, Maine
Allan H. Weiner

WEWN Vandiver, Ala.
Eternal Word Television Network Inc.

WGTG McCaysville, Ga.
Blue Ridge Communications Inc.

WHRA Greenbush, Maine
LeSea Broadcasting Corp.

WHRI Noblesville, Ind.
LeSea Broadcasting Corp.

WINB Red Lion, Pa.
World International Broadcasters Inc.

WJCR Millerstown, Ky.
World Wide Gospel Radio Inc.

WMLK Bethel, Pa.
Assemblies of Yahweh

WRMI Miami
Radio Miami International

WRNO New Orleans
Good News World Outreach

WSHB Furman, S.C.
Herald Broadcasting Syndicate Inc.

WTJC Newport, N.C.
Grace Baptist Church

WWBS Macon, Ga.
Charles C. Josey

WWCR Nashville, Tenn.
WNQM Inc.

WWFV McCaysville, Ga.
Blue Ridge Communications Inc.

WYFR Okeechobee, Fla.
Family Stations Inc.

Details:
www.fcc.gov/ib/sand/neg/hf_web/stations.html

Shortwave

▶ Continued from page 18

demand that we be as open and free speech as possible. They crave it. They demand it."

Besides, "The FCC doesn't really monitor the content on U.S. shortwave," White said. "I don't think they see that as their mission or concern. They are more worried about whether a station's technical parameters are correct."

That said, U.S. shortwave broadcasters often suffer grief from their clients' programming. Even radio's renegades have their limits.

For instance, WWCR learned that neo-Nazi Ernst Zundel was using his airtime to deny the Holocaust. "We threw the program off," said McClintock. Zundel had been broadcasting in German, and WWCR's operators didn't understand what he was saying.

Even so, many Americans associate U.S. shortwave with far-right broadcasts. This is ironic, given that most of what McClintock calls "militia money" stopped flowing to shortwave broadcasters when the dreaded year 2000 finally arrived. Apparently the New World Order's "non-collapse," in McClintock's words, severely hurt the militias' ability to solicit donations from listeners.

All in all, U.S. SW broadcasters operate in a strange, Twilight Zone kind of world, but one that they relish. Passport's Magne believes that U.S. shortwave broadcasters enjoy it so much that they don't want the FCC to loosen its archaic restrictions on domestic shortwave.

"The truth is that they like it the way it is," he said. "If the rules were changed, it could open the floodgates to more competition."

An unfair accusation? Not according to WRMI's White.

"We discussed changing the rules at the National Association of Shortwave Broadcasters' convention a few years ago," he said. "In fact, the FCC asked for our help in doing so. However, after some discussion, a lot of people came to Magne's conclusion: that we're all better off just leaving things as they are. After all, under the current regime, the FCC pretty much leaves us alone. If the rules were changed, then they might get serious about enforcing them."

"If it works for you, leave it alone," said McClintock. Granted, the FCC shortwave rules are "as loose as a goose," he said. But "If it ain't broke, don't fix it."

FIRST PERSON

When Calamity Hits, Think Smart

by George Whitaker

A few years ago, an engineer at a Texas station was electrocuted while working on a transmitter. With the intent of writing a safety article, I looked into the incident.

Although many articles have been written on transmitter safety, a further lesson emerges from this incident, concerning how a station's staff should act *after* a calamity strikes.

In this case, significant errors were made in the aftermath. As a result, it was impossible for me or anyone else to reconstruct the exact sequence of events.

The transmitter was co-located with the studio; a disc jockey had been within a few feet of where the man had been working. Most of the information I eventually gleaned came from this announcer. Physical evidence, as I'll explain, no longer existed.

At the time of the accident, the station was operating on a full-power backup; speed of repair should not have been a real issue for the engineer. Many times we have felt pressure to "Get us back on the air!" However, in this case, urgency should not have been a factor.

The engineer had been attempting to field-repair a switchmod card in a Continental transmitter. He had been checking various readings over a period of a couple of hours when he received a phone call and left the room for several minutes.

A few seconds after he returned, the disc jockey heard an arc sound. The engineer turned to the DJ and said, "Help me!" Then he fell to the floor. The announcer had been facing the opposite direction until the sound of the arc, so there was no eyewitness to the actual event.

Before and after

Although the point of this article is about what to do after an accident, I will describe briefly some of the errors that led to the fatal mistake.

First, field repair of a switchmod card is contrary to Continental's published recommendation. The engineer also may have violated the "hand in back pocket" rule; he apparently had one hand on the cabinet while probing with the other.

Another error was in violating what I call my "stand a while" rule: If you become distracted, don't do anything until you have stood and looked at the project long enough to get your mind back into it.

What if the announcer had known CPR?

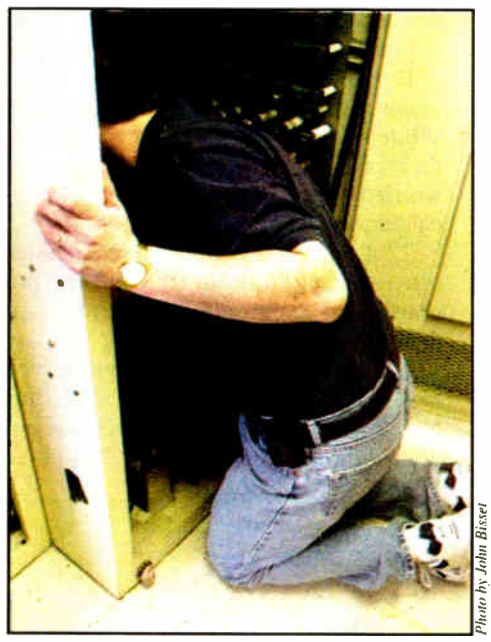


Photo by John Bisset

In the accident described by the author, the victim may have had one hand on the cabinet while probing with the other — as in this re-creation of what not to do.

Could the outcome have been different?

Possibly. The fact that no life-saving measures were applied within a reasonable time period certainly did not help the victim.

However, in the course of my investigation, I interviewed a doctor with extensive study in electrical shock cases. Without having examined the victim, he could only make an educated guess, but he said the amount of voltage and the apparent path of the energy through the body would leave grave doubt as to whether resuscitation would have been possible.

This entire situation was tragic. But the investigation was complicated needlessly because the station staff failed to take simple, commonsense precautions after the event.

In addition to my research, there were at least two government agencies, an attorney and a private investigator attempting to reconstruct the accident. We were all thwarted by the actions taken following the incident. No real conclusion was possible.

A muddied trail

Among the mistakes in the aftermath:

First, all of the meters and test equipment that might have been present had been removed. Further, no one had noted which instruments were present at the time of the accident. This leaves the question, "Did the victim stick his bare hand in to move something, or did a probe break down?"

The voltage and current present on a switchmod card easily could penetrate a faulty probe, and possibly even a good one if it were not designed for that type of voltage. Unfortunately, the people who had moved the test gear did not know a field strength meter from a VOM, and could not say for sure what gear, if any, was being used. An examination of the probes was called for, but they were no longer available for inspection.

Second, within hours of the accident, the station owners called in a TV engineer from one of their sister stations to finish the repairs on the transmitter. This was many days before any formal investigation began. At this time, he just installed a swap-out switchmod card.

This engineer should have done the following before touching the transmitter:

1. Noted whether there were tools or other objects inside the transmitter. Debris might indicate that something had been used to defeat an interlock and that the item failed, allowing the interlock to close.
2. Carefully documented which interlocks were defeated and what method had been utilized to accomplish this.
3. Documented which doors were found open or removed.
4. Documented whether any shields or other protective devices had been removed or defeated.
5. Created a photographic record if something appeared amiss.

I interviewed this individual about two weeks after the incident. He was unable to provide even the slightest bit of information about the condition of the transmitter when he first encountered it.

Continental field service apparently had talked him through step-by-step to get the transmitter back on the air. He had no idea what he had done or why. Needless to say, all of the people involved in trying to learn from this incident were frustrated by this lack of information.

I am certainly not suggesting Continental is at fault here. There's no reason to believe the factory did anything but what it was supposed to, or what any transmitter company does every day. As I mentioned earlier, Continental's instruction manual for this transmitter states that field service of this card is *not recommended* because of the voltages involved. The "swapout" as done by the TV engineer is the recommended procedure for this transmitter because it is done with all voltages *off*.

Remember that almost every calamity, whether it be fire, flood, tornado or accident, will need to be investigated by *someone* — an insurance adjuster, OSHA, arson investigators or employees of any number of other agencies. This is vitally true in a case involving a fatality. With all of the stupid lawsuits today, you may be giving some lawyer an opportunity to steal another million just by speculating about what happened. You might foil the crook by producing proper evidence. Equally, if someone or something was indeed negligent, the truth is served by proper documentation.

In any situation, and particularly in a contract job, it behooves you to protect yourself in the event someone questions the course of action you take following a calamity. In armchair quarterbacking, someone might be able to make a villain out of a hero if you don't have all the circumstances of the moment.

I recall a situation in which an owner said I had made a costly mistake. I explained to him what the circumstances had been at the time, and he replied, "Given the same information, I would have done the same thing you did." All unpleasantness was resolved immediately because I had the facts at hand.

Remember that someone will need proper documentation about almost any event of this kind. A complete record avoids errors. Errors lead to misunderstandings. And that might lead to real injustice.

The author is a retired Dallas chief engineer and a longtime technical writer. He is the owner of mikeflags.com and Practical Radio Communications, publisher of his books.

The Blue Giants Of Greenville

This is one in a series of photographs of radio broadcast facilities and history from the collection of Jim Hawkins.

The Voice Of America transmitting plant A at Greenville, N.C., is one of the most impressive transmitting facilities I have visited. If anyone wanted to know what it might feel like to be aboard the starship Enterprise, this is the place to go.

This article discusses the three Model 420A Continental Electronics transmitters (circa 1962). The similar plant B, further south, has another three of these units.

Working in pairs

Each of the three transmitters consists of a pair of individual 250 kW transmitters, combined at the output to obtain 500 kW. A control console provided for each pair is divided into three parts.

Controls operate servomotors to adjust tuning elements, such as variable capacitors and inductors. The left and right sections control each 250 kW transmitter individually. A scope is provided to adjust the phase shifting networks properly for the two output tubes in the Doherty RF amplifier in each unit. The center panel controls the network, which combines the two transmitter outputs to obtain 500 kW output.

The combining network is output to the antenna system. The system may be run with only one transmitter for 250 kW. Because of budget and coverage changes, the transmitters are rarely run at the 500 kW level at this time.

Circuit overview

The RF amplification chain consists of a type 807 tube in the first stage, a 4-125A in the second stage, then a pair of 4-1000As driving two 5682 water-cooled "peak" and "carrier" output tubes in a high-efficiency Doherty linear configuration.

Transmitters using the Doherty configuration replaced those with conventional plate modulation in many AM stations in the New York City area, such as WOR, WFAN, WCBS, WBBR and WEVD, before most of them went to digital modulation.

The line-in audio is fed to a pair of 807s, which drive five type 845 triodes in parallel. The 845s drive a water-cooled 5681 audio power amplifier, which delivers audio to the screen grids of the 5692 RF tubes. This configuration eliminates the need for huge modulation transformers and reactors as are used in high-level plate modulation.

The high-powered stages of each unit are in huge enclosures in back of, but separate from, the front-panel unit. Power supplies are in separate enclosures in the same back area. The mercury vapor tubes, once used in the power supplies, were replaced by stacks of solid-state diodes long ago. This was a common early modification to most transmitters using mercury vapor rectifier tubes.

One interesting note is that the 845 type tube is a popular power output tube for tube hi-fi enthusiasts. One can often find auctions of this tube type on eBay going for a hefty price.

Thanks to Macon Dail, VOA transmitter maintenance supervisor, for details about the operations of these transmitters.

Visit the author's Radio and Broadcast Technology Page at www.jphawkins.com/radio.html.

Transmitter panels with doors open. Inserted images show the first audio stage with five 845s and one of two 807s, top; and the control console, bottom.

An Air Conditioning Failure Plan

by John Bisset

At a recent broadcast conference a group of us were talking about experiences that gave us more respect for the dangers of broadcast engineering.

For me it was an incident that took place while I was working inside a transmitter during a thunderstorm. Lightning had blown up parts in an FM cavity. Eager to get the station back on, we replaced and rebuilt the damaged parts.

My partner and I left to get sodas, hanging the trouble lamp inside the cavity while we were gone. When we returned we saw that, in our absence, lightning had struck the antenna, traveled down and into the cavity and roasted the trouble lamp.

My associate and I looked at one another and decided the station could stay off the air until the storms passed.

Fig. 1: Keep nitrogen tank caps secured to tanks that are not in use.

Danger comes in many forms in our profession. Some situations might seem harmless.

Ray Tadry follows up our discussion on the necessity of securing nitrogen tanks so they won't fall over. He adds an equally important consideration: Ensure that there is adequate ventilation during bottle changes/purges. Nitrogen will displace oxygen in a confined space and will become an asphyxiant.

Thanks for the reminder, Ray. The process of oxygen depletion is unnoticeable, as nitrogen is an odorless, colorless gas. Adequate ventilation is a must whenever you change a tank, especially in winter months when doors and windows are kept closed to retain heat.

Ray can be reached at *ray.tadry@verizon.net.*

★ ★ ★

As spring rolls along, pollen can become a nightmare at transmitter sites.

Even in closed-air systems, any pressure differential will give pollen an open door into the building, primarily through cracks and under the door.

Spring-cleaning tip: Check the transmitter door threshold. Make sure the rubber isn't worn away and that the door offers a good seal.

Now's the time to spray the threshold with a good bug killer. Spray under the top of the doorframe with a bee and hornet killer; this will deter wasps from nesting at your front door. An intact threshold also will deter water during those brief, sometimes violent spring storms.

If your transmitter site is air conditioned, contract with an air-conditioning mechanic to pressure-clean the condenser coils. Spring is a good time to perform this routine maintenance. Clean coils will improve air-conditioning efficiency and

See KEEP IT CLEAN, page 23 ▶

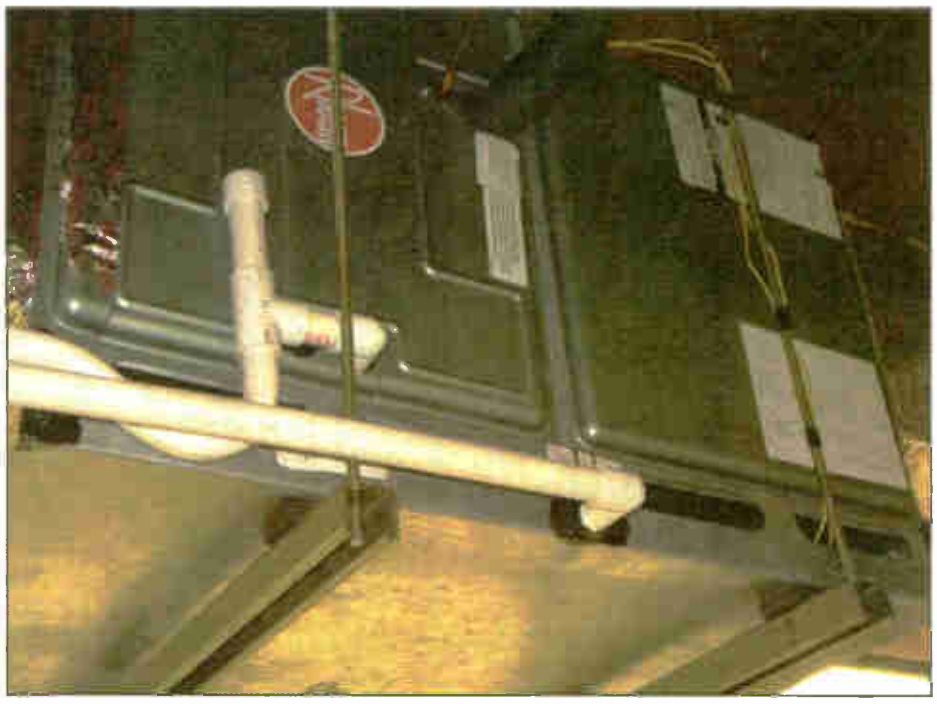


Fig. 2: Avoid a flood. Blow out air handler condensate drains and pressure-clean the coils in the condenser.

Keep It Clean

▶ Continued from page 22

your system won't work so hard.

If you question the need for this service, note the bugs, pollen and dirt that a pressure cleaning removes.

While the mechanic is at the site, have him check the belts on air handlers and clean the condensate drains. Algae build-up will clog drains, resulting in a flood.

The cost of such maintenance is minimal compared to a compressor replacement. Most HVAC contractors will offer a package deal to do your multiple sites. Before the really hot weather hits, schedule the work.

Do you have an "air conditioning failure" plan? A couple of box fans, an exhaust fan, a backup air conditioner qualify. Remember, if your air conditioning fails, closed systems will heat rapidly, even with a solid-state transmitter. Plan so you'll know how to keep things cool.

★ ★ ★

There never seems to be enough space in a control room for logs.

Fig. 3 shows how Lamar Smith and his staff at the Entercom Scranton properties gave the jocks a little more space. The "log rest" straddles modules that are used less frequently on this Harris-Pacific console. The studio is a stand-up operation, so the Plexiglas panel allows jocks to see what's underneath, if necessary.

This is the kind of control-room feature that will be appreciated by the air staff and won't kill your budget.

John Bisset has worked as a chief engineer and contract engineer for more than 30 years. He is the northeast regional sales manager for Dielectric Communications. Reach him at (571) 217-9386 or john.bisset@dielectric.spx.com.

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

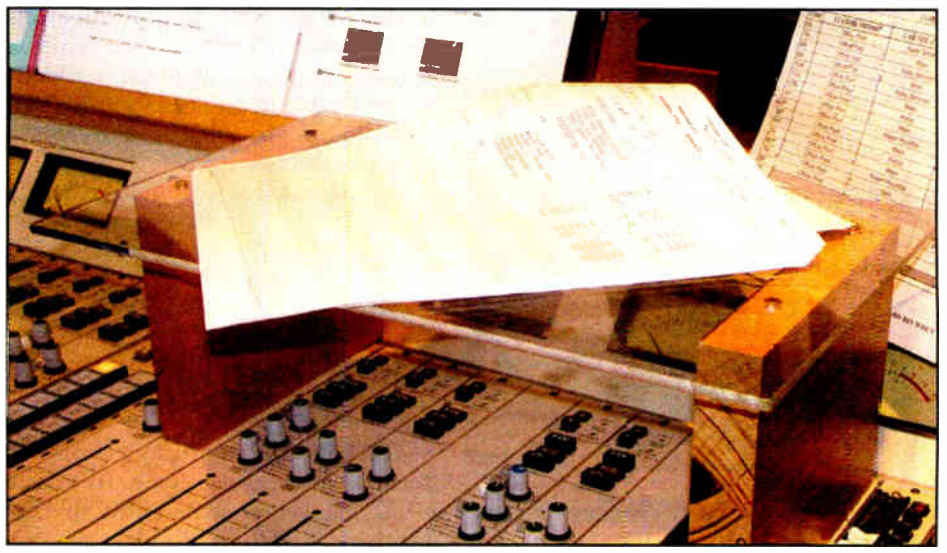


Fig. 3: A homemade 'log rest' offers a space for the log without compromising console operation.

MARKET PLACE

Consulting Company Offers 'B-BOp'

RF consulting company ExH Inc. is promoting B-BOp.

The design and consulting company, based in Massachusetts and Maine, said its Broad-Band Optimization technique allows a broadcaster to upgrade a rigid coaxial transmission line run to broadband performance without replacing it.

"This unique patented technique gives exceptional VSWR performance and provides a substantial cost savings over the traditional technique of total transmission line replacement," the company stated. "Each job includes an RF system checkout by a qualified engineer.

"The B-BOp process begins with a set of measurements of the transmission line that provides a set of baseline data from which a mathematical model can be generated. This model is then employed to calculate the physical dimensions of line sections, that when inserted into the transmission line run, will break up the addition of reflections from the flange joints," the company stated.

"Typically, the line sections are inserted every three or four full-length sections. This combined with the relatively short lengths of the line sections allows a rigging team to make the modifications using only the tower elevator, thus eliminating the time and expense of having to rig the tower with a winch."

ExH said the cost of a modification typically is one-fifth to one-third the cost of a new run.

Brett Grandchamp is vice president of research; Robert Baker is vice president of engineering.

For information call the company at (207) 671-9110 or visit www.exh4rf.com.

Tell us about your job change or new hire. We're particularly interested in hearing news about radio engineers and managers. Send news and photos via e-mail to radioworld@imaspub.com or mail to Radio World People News, P.O. Box 1214, Falls Church, VA 22041.


Mike Hagans

Mike Hagans was promoted from director to VP of engineering for Premiere Radio Networks. Prior to 1999, Hagans worked for 10 years as chief engineer at stations owned by the Daytona Group, Pulitzer and Jacor.

Chief Engineer/Station Manager **David Huva** retired from day-to-day operation of **WLCM(AM)** in Charlotte, Mich., after 36 years. Huva trained for his First Class license at DeVry Institute in Chicago and came to Charlotte in1967 when the station was WCER, owned by Roy and Jean McLean. Prior, he worked at WPLB in Greenville and WJPW in Rockford, WERX in Grand Rapids and WION in Iowa. His amateur radio call K8PTZ remains active after 40 years.

Phil Wells, former chief engineer for several Southern California radio stations, started **Giant Step Communications**, specializing in computer networking, wireless networks, Web cams and PC-based business phone systems. He is interested in providing systems/labor to broadcast stations.

DBS Broadcast Technology, formerly Continental Electronics, hired TDM Broadcast Services owner **Michael Troje** as a regional and vendor sales manager. He had been a broadcast engineer, domestic sales manager for Broadcast Electronics and National Sales Manager for Shively Labs television products division.

The **FCC Office of Engineering and Technology** promoted **Ira Keltz** to chief, electromagnetic compatibility division; **Jamison S. Prime** to chief, spectrum policy branch; and **Robert J. Chase** to chief, technical analysis branch.

AP Broadcast Business Editor **Mark Hamrick** was elected to the National Press Club Board of Governors.

The 2004 **Broadcasters' Foundation** Pioneer Award honorees are **Bill Burton**, president of the Detroit Radio Advertising Group; **the Carter family** of Kansas City; **James E. Duffy**, retired president of the ABC Television network; **Pierson G. Mapes**, retired president of the NBC Television Network; **Jeffrey Smulyan**, president and chief executive officer of Emmis Communications; and **William F. Turner**, retired head of Forward Communications.

Harris Corp. appointed **Leon V. Shivamber** as corporate VP of supply chain management and operations. He had been president of Vertisync Inc., a supply chain management company he founded in 2001.

DG Systems named **Tom Cox** as VP of marketing. He had been a marketing director for Reliant Resources.

Andrew Corp. named **Roger J. Manka** as group president of worldwide sales. He joined from Commworks, where he served as VP of worldwide sales.

The John Bayliss Broadcast Foundation elected three to its board: **David E. Kennedy**, president and COO of Susquehanna Radio Corp.; **Peter Smyth**, president and CEO of Greater Media Inc.; and **Skip Finley**, vice chairman of ICBC Broadcast Holdings Inc.

First Broadcasting Investment Partners appointed **Hal A. Rose** as senior VP of transactions and legal affairs.

Debra Ashmore was named director of membership for **WXPN(FM)** at the University of Pennsylvania. She had been VP of communications at McPherson Associates.


Peter Smyth

Jones Radio Networks promoted director of contemporary programming **Jon Holiday** to senior director of programming/contemporary formats/promotions.

Francis Nash, GM of stations WGOH(AM) and WUGO(FM), Grayson, Ky. published his second book, "The Hop Brown-Lady Comets Story," a history of a local girls basketball coach in Olive Hill, Ky.

Furman Sound promoted **Steve Rose** to VP of product development. **Carl Butrum** was named president of **The John Bayliss Broadcast Foundation**. Butrum had been executive VP and director of sales for the Hispanic Broadcasting Corp.

Infinity Broadcasting's recently appointed senior VP of programming **Steve Rivers** was named president of programming. He replaces Andy Schuon, who resigned.

Joan E. Gerberding resigned from her role as consultant to Nassau Broadcasting Partners. She joined the company in 1980 as a sales development manager and was later named president of Nassau Media Partners in 2000. Gerberding also is immediate past president of American Women in Radio and Television.

Harris' Broadcast Communications Division appointed **Matt Gillon** broadcast center manager. He had been radio field sales manager for BCD. **Jay Adrick**, VP of strategic business development for BCD, received the 2004 Harris Industry Recognition award for his contributions to the advancement and adoption of digital technology in the broadcast industry.


Will Fraser

BSS Audio USA brought on **Will Fraser** as an applications engineer and product specialist. He came to the company from the contracting industry.

Lung Huang was promoted to senior group account manager of **Arbitron Advertiser/Agency/Cable Services**, a position established to focus on group-owned agency customers.

Maser Technology Group appointed **Keith Edmundson** sales and marketing manager for its broadcast division. He has previously worked for Ampex and Sony, and was involved in product and system sales in Australia and Southeast Asia for the last seven years.

Country radio personality **Lia Knight**, host of **Jones Radio Networks'** "Lia," was elected to the American Women of Radio and Television Board of Directors as western area director.

Hal A. Rose was appointed senior VP of transactions and legal affairs for **First Broadcasting Investment Partners**. Rose was a founder and legal partner of Worsham, Lancaster, Helling and Rose.

Avcom of Virginia appointed **Pat Piper** director of worldwide sales. He was satellite product manager for Richardson Electronics and had been with Midwest Communications/Harris Broadcast designing, building and selling SNG trucks and satellite earth stations.

Edward Grant was re-elected president of the **Michigan Association of Public Broadcasters** Board of Directors. Grant is the GM of Central Michigan University Public Broadcasting. MAPB also re-elected **Caryn Mathes** as president, **Jayne Marsh** as VP; **Evelyn Massaro**, as treasurer and **Howard Sharper** secretary.

Marcellus Alexander was named president of the **NAB Education Foundation**, replacing Chuck Sherman, who has retired. Alexander will remain executive VP of television at the NAB.


David E. Kennedy

Separately, NAB and the Broadcast Education Association awarded the 2004 Hugh Malcolm Beville Jr. Award to **David E. Kennedy** of Susquehanna Radio Corp.

National Religious Broadcasters honored "Truths That Transform," the radio broadcast of **Dr. D. James Kennedy**, as Best Teaching Program for 2004 at the organization's convention in February.

New to NAB Radio Board's 2004 term are **Joe Bilotta**, Buckley Radio, New York; **Brad Eure**, Eure Communications, Charlottesville, Va.; **Bud Janes**, KHMO/KICK(FM), Bick Broadcasting, Hannibal, Mo.; **Mary Quass**, NewRadio Group, Cedar Rapids, Iowa; **Paul Gardner**, Elko Broadcasting Company, Elko, Nev.; and **Howard Anderson**, KHWY Inc., Los Angeles.

Rich Nevens joined **Digidesign** as director of worldwide console sales. He had been with Euphonix for 12 years, and recently ended his tenure as executive VP of sales for the Americas.

Reach Media, parent company of the "Tom Joyner Morning Show," made personnel changes. **Marla H. Bane** was promoted from VP to senior VP of operations and finance. **Katrina Witherspoon** was promoted from executive director of BlackAmericaWeb.com to VP of interactive media for Reach Media. **Kervin Clearance** was hired as director of affiliate sales. He had been general sales manager for Cox Broadcasting's HOT 105, a affiliate.

American Urban Radio Networks' senior director of corporate marketing **Dawn Hill** received the National Bell Award for developing and executing the best PR and marketing communication initiatives created for the New York City chapter's programming series.

Country Radio Broadcasters presented Premiere Radio Networks' "After Midnite" host **Blair Garner** with a plaque commemorating the show's tenth anniversary and Garner's support of the CRB, at the annual Country Radio Seminar in Nashville.

More People News appears on page 37.

USER REPORT

Onsite Production With BIAS Peak

by Marco Gavini
Freelance Consultant
Mac OS A/V Applications

This story was to appear in the Buyer's Guide issue on Digital Audio Production, March 10.

SEATTLE For five years I have been involved with a low-power FM radio station that operates under the Part 15 rules of the FCC. We operate on a dry lakebed in Nevada for about a week every year, and we produce quite a bit of material onsite using a laptop and a **BIAS** Peak stereo audio editor.

Our format is a random hodgepodge of whatever the DJ wants to play at the time. Most of the material comes from CDs, but I have been doing my show from my Apple PowerBook since 1999. I connect the audio output from the laptop directly into our vintage board and mix in additional program material as needed.

Given the free-form nature of the station, I am always looking for new, non-musical material to add to the mix. I have produced several types of material onsite, including PSAs, audio documentaries and station IDs.

Audio treatment

One of my first attempts at onsite production was an audio documentary about another low-power FM station that had been operating using a solar-powered setup. I interviewed the station operator about the history and aims of his radio endeavor, and recorded our exchange on a MiniDisc recorder. I connected the output of the MiniDisc to the audio input of the PowerBook and fired up Peak.

Using the "hardware settings" under the Audio menu, I previewed my material and made sure that the levels were correct before recording the entire interview into a single file: Peak's level indicators allow you to ensure that you're not going to clip when recording.

Once I had the interview on the computer, I cut out any inappropriate sections (too much wind noise, irrelevant dialogue/comments), ending up with a more concise audio file. I logged the entire interview in a word processor to begin developing the script of the documentary and returned to the audio file to extract the sections that I would need. I copied these sections to new blank documents labeled with relevant titles.

Based on the script, I recorded the voiceover directly into the laptop, using the same mic I used for the interview to give the piece a consistent sound. Once the voiceover sections were recorded, I sweetened them up with a bit of EQ and reverb using one of the VST audio effects plug-ins that ship with Peak.

The version of Peak I used supported a number of plug-in formats, such as Adobe's Premiere and Steinberg's VST. Peak 4 now includes support for VST, as well as Apple's Audio Units format. Hundreds of VST and Audio Units plug-ins are available from commercial and free sources.

I decided to add a music bed to the voiceovers, as they sounded a bit dry on their own. I browsed through my music library, found an appropriate section of music and imported it into a new file using Peak's "Import CD Track" feature. It was a simple matter of mixing the two sound files using the "Mix" command. Even though it took me a couple of times to get it right, Peak's multiple "Undo" and "History" features made it easy to experiment until I got the right mix level of the two sound files.

The author recounts the production of an audio documentary using BIAS Peak and his Apple PowerBook.

The mixing process may be simpler with a multitrack editor such as Deck, but I didn't have access to that software at the time, and Peak did the job just fine.

With the interview sections, voiceovers and script complete, it was time to cut and paste the sections together to create the final document. After a bit of tweaking and normalizing, the file was ready to go. Total time from start to finish was just over two hours. And I did all the editing while sitting in a lawn chair under a tent at the festival site — except for the voiceover recording, which was done in the relative shelter of a friend's RV. I broadcast the final product during my show later in the week.

Since that first attempt, I have used Peak to create everything from PSAs to station IDs, mostly onsite whenever the creative bug struck. The variety of tools and processing options available in Peak and the portability of my PowerBook make the job an easy one.

For more information, including pricing, contact BIAS in California at (800) 775-2427 or visit www.bias-inc.com.

GM Journal

Radio World | Resource for Business, Programming & Sales | April 7, 2004

Cole on Indecency Fines
Page 36

AM Stations Return to Music

by Tom Vernon

As AM radio tries to reinvent itself with digital technology, a handful of major-market broadcasters also are turning heads by resurrecting forgotten formats.

While some media critics have written off the AM band as stagnating on news/talk/sports and ethnic formats, a few programming pioneers seek to capture a mature listening audience by playing music on a medium that is familiar to them. What are the key factors for success, and how do they make it work?

At Entercom's WKBW Buffalo, being a heritage top-40 station made the choice obvious.

"KB was wasting away with a business radio format," said Program Director Hank Nevins. Many of the original WKBW jocks were available, and a survey of listeners suggested that there would be an enthusiastic response for a return to personality-driven top-40 radio. Entercom agreed, and the switch was made in January of 2003.

Dan Neaverth, Sandy Beach, Hank Nevins, Jack Armstrong and Joey Reynolds have all returned to the KB airwaves.

"The 45-65 demographic of WKBW was being neglected in the Buffalo market, and this is a perfect fit for AM," Nevins said.

Deep playlist

KB's music is centered around its golden years as a top-40 station, from 1958-74, but with a much more extensive playlist than a typical oldies station.

"We want KB to be truly a Buffalo radio station, not a sterile, homogenized station you can hear anywhere," Nevins said, "so we actually listen to our listeners and add their most-requested songs to our playlist, which numbers about 1,300 titles."

Vintage jingles and commercials were an important part of the original WKBW, and the station was able to obtain a comprehensive assortment of jingles from collectors. "There isn't any package from 1958 on that we don't have, or can't get," Nevins said. Listeners have also sent the station a vast collection of airchecks, commercials and jingles gratis.

Localism is an important element of news and promotions as well. Nevins resurrected the "pulse beat news" format with bulletins at 15 and 45 past the hour, using the resources of news-talk sister station WBEN. Vintage car cruises and record hops, also a staple in the 1960s, have let listeners know that WKBW is back while the station lives with a limited promotions budget.

The 10 p.m.-1 a.m. and noon-3 p.m. time slots on KB are automated, but rather than do voice tracking, the station sticks to a "jukebox" format. "It's a great way to showcase a lot of the old elements of KB, like the jingles and commercials," Nevins said, "and it's surprisingly popular with listeners."

So far, the response from listeners has been gratifying. KB has gone from a 0.5 in the last Arbitron book with the business radio format to a 1.6 in the first winter book (12+, Mon.-Sun., 6 a.m.-midnight).

Many of the positioning statements the station uses on the air, such as "I feel like I'm in high school again" and "The music you grew up with sounds best on the station you grew up with" came from listeners. Nevins adds, "We're just having a lot of fun here."

All-time favorites

For CHWO, a 50,000-watt clear channel AM station in Toronto, the answer is playing a nostalgia mix called "all-time favorites."

When the CBC abandoned the 740 kHz frequency, it was awarded by the government to a commercial broadcaster. CHWO, then a 10,000-watt station on 1250, got the nod by promising to target the over-50 audience, which was being neglected by other Toronto stations.

As with WKBW, the target demo of CHWO is 45-65, but the playlist is quite different. "Our cornerstones are Frank Sinatra and Elvis Presley," said PD Gene Stevens. But the format is not pure adult standards.

"Around them is our secondary core: Roy Orbison, Rick Nelson, Tony Bennet, Paul Anka. We've also added newer artists, such as Diana Krall, Michel Bolton and Rod Stewart."

The station also must conform to a government rule that requires music stations to play 30 percent Canadian artists. CHWO has built an extensive music

See AM MUSIC, page 30 ▶

Gene Stevens programs Toronto's CHWO.

Morning host Dan Neaverth enjoys local media coverage of his first day back at WKBW.

WSAI 'Good Guy' Ted Mc Allister, left, and PD Dan Allen pose with a legend of rock and roll.

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VIRTUOSO 10

New compact 10 kW FM transmitter designed specifically for HD Radio all digital or hybrid transmission. Frequency agile and ideal for N+1 configurations in conjunction with the Maestro 50 digital exciter. Hot-plug RF and power supply modules with maximum duplication and redundancy features. Sophisticated graphic user interface plus diagnostic LED flow diagram.

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1 kW AM transmitter in compact 19" rack mount value package available for overnight delivery. Dual redundant RF amplifiers and universal switch mode power supplies. Sophisticated graphic user interface plus diagnostic LED flow diagram. Built-in power pre-set scheduler is ideal for day timers. Fully compatible for HD Radio or DRM transmission.

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As always, BSW is here to help. We've lined up a giant sale with incredible deals and FREE bonuses on STL equipment, transmitter site control systems, modulation monitors, telephone systems, broadcast mics and much more. Hurry, these special promotions end May 31st, 2004.

With all of the great deals and FREE stuff in this ad, we simply ran out of room for our traditional humorous diversion...but this picture in its uncropped state would have lead to *all kinds* of hearty guffaws. We think.

Telos

Top-Selling 6-Line Telephone System with FREE 2nd Switch Console

The ONE-x-Six has all of the telephone interface equipment needed for talk show programming. A single rackmount unit houses both a Telos ONE digital hybrid and a six-line, broadcast phone system. For system control, the ONE-x-Six uses a desktop Switch Console (sold separately). Special function buttons on the Switch Console are used to automatically select the next caller, to put callers on the air or to conference, to control external recorders and delays, and to access several other unique features. A standard telephone set may be used for call screening. Purchase a complete system (1X6 and SCONSOLE) by 5/31/04 and get a free 2nd control surface (a $595.00 value). Great deal!

1X6	hybrid/phone system	List	1,795.00
SCONSOLE	switch console	List	595.00

Call For Price

AUDIOARTS ENGINEERING

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Take advantage of this incredible offer from BSW to add the new digital Audioarts Engineering D-16 on-air console to your studio. Not only do you get the finest digital console on the market, you get a $449.00 high-end 2x8 distribution amp for your studio.

A compact tabletop console, the D-16 has both analog and digital Program and Audition stereo outputs, two mono analog outputs, 14 input faders plus two caller faders; 4 mic preamps, control room and studio monitoring, built-in cue and headphone amplifiers (with concealed headphone jack), and four internally generated mix-minus outputs!

D16 List 8,855.00 **Call For Price**

Inovonics

FREE Sony Noise-Cancelling Headphone with Inovonics Off-Air Modulation Monitors

The Inovonics 520-00 is a tunable, off-air AM modulation monitor with built-in preselector. It features independent indication of positive and negative carrier modulation, multiple peak flashers, and remote alarms for loss of carrier and loss of audio. Get FREE noise-cancelling headphones only from BSW!

The new Inovonics 531-00 combines a frequency-agile, wideband FM receiver with very linear demodulation and metering circuitry for precise measurement of carrier modulation. It also offers frequency-selective measurement of data and analog subcarrier injection levels. Alarm tallies enable remote indications of faults.

52000	AM monitor	List	1,750.00
53100	FM monitor	List	2,700.00

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Crown

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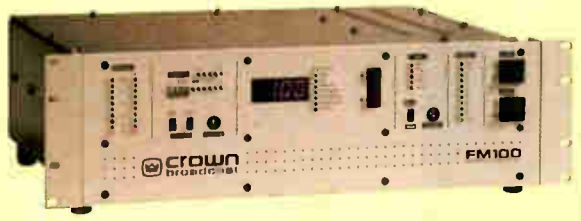

Crown's FM transmitter systems combine built-in audio processing and stereo generation in a rugged, compact unit. Each model provides excellent signal quality with a variety of features including quick set-up; built-in digital metering and diagnostics; 87-108 MHz user-selectable frequency range; and 100/120 VAC, 220/240 VAC or DC operation. Order now and get a FREE spare parts kit (up to a $429.00 value)!

FM30T	30-watt FM	List 4,195.00	FM250T	250-watt FM	List 6,895.00
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The Broadcast Tools DSC-32/64 allows complete remote control of two StarGuide II/III, Wegener Unity 4000 or ComStream receivers. An encoder control with a 16x2 LCD display provides local control and program descriptions, while external control may be in the form of serial or 32 contact closures. Sixty-four, thirty-two character ASCII character strings are provided for each receiver port. The DSC32/64 provides preset memory location for most networks. Order today and get FREE COP and COA37 D-sub-to-screw-terminal adaptors for Starguide II/III.

DSC32/64 List 449.99 **379.00**

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l BSW for our complete line of Burk systems, and special hrough May 31st. Plus a Free BTU-4 temperature sensor!

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PCL6020	composite stereo/15 kHz mono STL	List 8,250.00
LANLINK900	LAN/IP transmitter	List 3,990.00
MAXLINK	T1/E1 wireless data link	List 4,950.00

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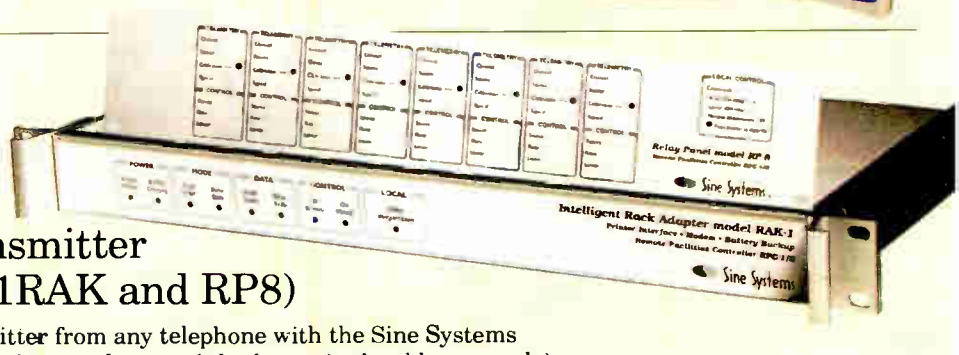

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BSW®

AM Music

▶ Continued from page 26

library and keeps 2,000 songs in active rotation.

With its huge signal, CHWO is Canada's largest 50+ station. In the Toronto market, Arbitron places it as No. 2 in the 50+ demographic. CHWO has a 535,000 12+ cume, with 12.6 hours tuned weekly, making it the longest TSL in the market. The Ontario Association of Broadcasters has recognized CHWO, naming it the station of the year for 2002.

CHWO emphasizes local stories in its newscasts, which air every 30 minutes in morning drive, and hourly through the rest of the day. Hourly "Prime Time Moments" focus on travel, gardening, finances and car care.

The station features specialty music programming on Tuesday, Thursday and Sunday nights, when Bob Sprott and George Jonescu present big-band music. Both have extensive record collections and receive calls from across the United States and Canada, including an occasional call from legendary composer Les Paul.

Stevens said that record collectors provide a vital element in CHWO's music mix.

"A gold or nostalgia format gains tremendously when there are one or two collectors on staff. It's their extra library depth as well as their personal passion that adds so much variety and credibility to the station."

Such a resource must be used carefully.

"Many collectors forget how different they are from typical listeners," said Stevens. "Even a specialty or nostalgia station must maintain a healthy balance between the big hits and the rare spices."

First-generation oldies

In Cincinnati, Clear Channel's 50,000-watt WSAI switched to a "first-generation" oldies format in January of 2003.

According to Program Director Dan Allen, the choice was based on a decision by the local FM oldies station to exclude hits prior to the Beatles from its playlist, as well as an over-abundance of talk stations on the Cincinnati AM dial.

WSAI has a library of about 1,800 titles, with 500 in active rotation. "Our cornerstone artists include Dion, Elvis, the Beach Boys, the Four Seasons and the Sherrells." The peak years for the station's music are 1960-63, he said, adding that the station's target audience is 50-64.

Allen is keen on avoiding the pitfalls of many oldies stations.

"Some operations have a core of about 200 songs, which they play incessantly. How long can you keep doing that?"

The trick to keeping the format fresh is putting untested songs by familiar artists on the radio. "Like many stations, we play Ricky Nelson's 'Poor Little Fool,' 'Be-Bop Baby' and 'Stood Up.' But we also play Nelson's forgotten tunes such as 'Waitin' in School.' By introducing these obscure songs, the format can be more self-sustaining and avoid burnout," Allen said.

Localism is another component of WSAI's success.

"Cincinnati isn't a migratory town, most of the residents grew up here. We try to highlight local record labels from the '50s and '60s such as King and Fraternity, as well as local artists such as Mel Carter."

With air personalities like Dusty Rhodes, Jack Stahl and Ted Mc Allister, WSAI has a core of the original "good guys" who drove the station to success in the 1960s.

Selling the station's over-50 audience to advertisers has been challenging, but Allen said the station has made inroads with new car dealerships and the gaming industry, which advertises its riverboat casinos on WSAI. The station has also had success in bringing women back to AM radio, creating additional sales opportunities.

Since switching from nostalgia to oldies, WSAI has seen an increase in listenership of 28 percent, most of which came from the FM oldies station in town. WSAI earned a 1.2 in the most recent 12+ book. Allen notes it has taken longer than expected to build an audience, due in part to a limited budget for promotions.

"We're doing the things in radio you're not supposed to do, like have fun and make the new technology work for you," he said. "WSAI is live in morning drive and voice tracked the rest of the day."

Voice tracking need not be an evil, Allen said. Most of the announcers record their shows close to air time, so the content is fresh and the enthusiasm for the music always shines through.

Other operations programming music on major-market AM radio include KLAC in Los Angeles; WPTR in Albany; WCOL in Columbus; WRLL in Chicago and KPOJ in Portland, Ore.

Now Where Did We Put That SP-15?

Introducing a format with an extended playlist may pose special challenges for broadcasters. Much of the music is unavailable in digital format, or even on CDs, and most stations discarded their turntables, vinyl record libraries and jingle masters years ago.

The key is to enlist the services of a record collector or production director who was there when the format was in its heyday. Appeals to listeners for materials may also help.

At WKBW, former announcer and production specialist Steve Mitchell dubs forgotten songs from his collection of 15,000 titles onto CD. So far, KB has about 35 CDs packed with long-lost oldies, and more are on the way.

CHWO relies on the resources of big-band collectors and announcers Bob Sprott and George Jonescu, who air out-of-print rarities and live broadcasts of the big bands that were never released to the public. Both have collections of recordings numbering in the thousands.

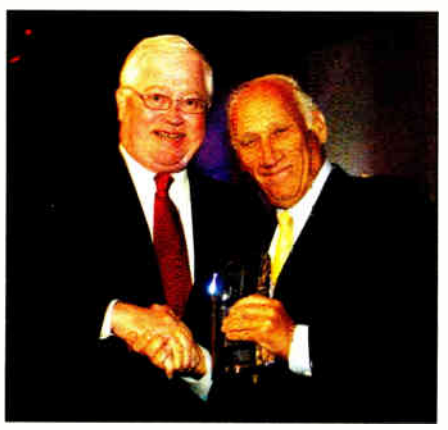
At WSAI, PD Dan Allen draws on tapes from local musicians, bootleg recordings from Europe and Asia as well as his personal collection of forgotten favorites to augment the station's playlist, and ultimately Clear Channel's burgeoning 48,000-plus library of song titles.

PC-based audio enhancement and restoration software such as Enhanced Audio's DC Five can be used to remove noise, scratches and tape hiss from recordings, as well as adding sweetening like EQ and limiting, so aging material can sound new again.

And when that last-minute vinyl inspiration strikes, it doesn't hurt to have a turntable in the air studio.

— Tom Vernon

All News, All the Time



Gary Fries, president and CEO of the Radio Advertising Bureau, presents Roy Shapiro with the Kevin B. Sweeney Award "in recognition of his dedication and leadership to the radio industry" during this winter's RAB convention in Dallas. RAB saluted Shapiro for his work in developing the all-news radio format; he recently retired as vice president and general manager of Infinity's KYW Newsradio 1060 in Philadelphia.

Automotive Promotions for Fun & Profit

by Mark Lapidus

More than 100 qualifiers were standing in line, each waiting for their turn to try their key. Whoever could start the classic '67 Corvette would win it!

The day was hot, nearly 95 degrees, and we were standing outside in the Chevy dealership in the burning sun. The anticipation was almost as thick as the humidity.

Key winner Number 10 climbed into the car and placed the key in the ignition. When the 'Vette didn't turn over, the contestant pulled the key out. But before the promotion assistant standing by could do anything, this very angry loser jammed the key into the ignition again and attempted to force the car to start.

Americans have real affection for cars, motorcycles — and winning.

The key snapped in a half.

Fortunately, after just a few minutes, the dealership was able to get the key out, and the contest continued until a real winner was declared.

How much fun have you had at a car dealership lately? What can you do to make sure things go as planned? How do you make more money?

Read on as we explore fun and profit with promotions for one of radio's top sales categories, the automotive industry.

Only one works

First, let's cover the key promotion. You need:

1) A car, truck, van or motorcycle that fits the image of your station. If you're at a country station, a 4-by-4 pickup fits. If you're rock, I'd go for a Hummer!

2) Either an advertising schedule tied to air around the contest, or at least a significant lift in billing from that dealership over the previous year;

3) Blank keys provided by the dealership.

In return, your station provides a three- or four-week on-air promotion; Web exposure; DJs to host the event the day of the key party; and registration boxes/pads at the dealership.

The on-air promotion can key off a song of the day, an artist of the day or a sound effect. You can give away a registration prize that makes sense or simply give the solicited caller a key.

To add a twist, place a key in one envelope, a T-shirt in a second envelope and a CD or something else in the third envelope, then have the caller pick one envelope.

To increase traffic at the dealership (one of your client's goals), put a registration box at the dealership and give away one key that way.

The day of the key event, you'll want to give away a few more keys on-site to generate more pedestrian traffic and excitement at the dealership.

Be specific when you write the rules for this contest. Make sure your qualifiers are licensed drivers and local residents. Keep it to one key per person.

At the key event, carefully count out of the correct number of keys into a basket. Show the crowd you have the one key that starts the car by actually starting the car with that key.

Next, remove one key from the basket and drop in that one key that starts the car. Have each key winner pick a number. This number determines their place in line.

Do not let them select a key until they come to the front of line and are ready to try the car. Do not hand out any more keys after the car starts. This prevents any conflict in case more than one key ends up working on the vehicle.

I love this promotion because it generates listening and money.

Money where his mouth is

Here are more concepts that will help you pull in automotive dollars.

• This is a great one for small markets. When you come across a dealer who tells

See PROMOTIONS, page 32 ▶

Promo Power

by Mark Lapidus

Springfield Says 'No' to Arbitron

by Ken R.

Arbitron rates three Springfields: the one in Massachusetts (market No. 81), the one in Missouri (144), and the one in Illinois (206).

Whoops. Make that *two* Springfields.

The city of Springfield, Ill., is home to about 112,000 souls (metro: 180,000), and it is the state capital. But all the radio stations in that town have dropped Arbitron.

What happened? And will this become a trend or is this just an isolated occurrence?

Arbitron dis-invited

Three broadcast groups own stations in Springfield. They are Clear Channel Communications, Saga Communications and Mid-West Family Broadcast Group.

Radio World talked to Glen Gardner, president/general manager of the Mid-West cluster of four.

"We were the first to decide we didn't want Arbitron any longer," he said. "Independently, Saga saw we were getting along fine without ratings, and they were next to bail. Then after this last (ratings) book, Clear Channel told Arbitron that they too were no longer interested."

Jessica Benbow, a press aid at Arbitron, responded by saying that Springfield, Ill., was canceled because the company did not have sufficient client support to continue measuring the market as part of the syndicated radio service. She said the counties would continue to be surveyed by Arbitron as part of the Total Service Area of surrounding markets.

Benbow said the action Springfield took does not represent a trend.

"Since Spring 1996, the survey immediately after the passage of the Telecommunications Act, Arbitron has added 33 new syndicated radio markets," she said. "In that same period nine markets were canceled."

"Arbitron has created an artificial universe for radio," said Gardner. "It's a universe that is disconnected from the listener and the client. The basic assumption Arbitron makes is that size of audience equals results, and I've never seen any research that proves that."

Gardner believes that a more important benchmark of a successful commercial is the message.

"If you're looking for a measurement tool, the client's cash register is the best one around," he said. "Results are the real deal."

But how does this idea play with a typical small-market advertising agency?

Tom Newsom is president of TNT Advanced Concepts, an agency in New Castle, Pa., which has extensive radio time placement experience in several states. Newsom believes that the message contained in a commercial is important, but the more people reached with that message, the better.

"If you have no idea who you're reaching, there is no way to be efficient," he said. "I would buy around radio entirely in a market that had no ratings available. If there is no yardstick, the station can set any rate it wants and you have no idea how much those spots are worth."

But how does Gardner measure effectiveness?

"We sit down with our clients and determine our expectations up front," he said. "We have return-on-investment formulas and we can tell the client whether his or her expectations are reasonable. The beauty of it for us is that the inevitable 'cost per point' discussion is irrelevant. We base our rates purely on demand."

Glen Gardner

If you're looking for a measurement tool, the client's cash register is the best one around.

— Glen Gardner

I would buy around radio entirely in a market that had no ratings available.

— Tom Newsom

According to Gardner, local retailers don't care about the lack of a ratings service but some agencies are confused by the change.

"They don't know what to do, and in some cases are using the two-year-old numbers," he said. "But since Arbitron left the market, our billing is increasing at a pace above industry standard. We don't see Arbitron coming back."

Arbitron as programmer

Does Gardner think his approach is the wave of the future?

"The future is in local business, and that's what we built our company on," he said. "That way we are not as susceptible to market fluctuations like those that were caused by 9-11. Local customers don't care about those things so they stayed with us."

It is no secret that, nationally, many stations adjust their programming specifically for Arbitron ratings. Huge money giveaways are staged during survey periods. Intense cross-promotion of dayparts is built in and in some cases an unnaturally high number of call-letter mentions occurs.

"We can now stop programming for diaries and start programming for people," Gardner said.

He also realized other residual benefits of avoiding the ratings wars.

"The direct costs of the ratings service were not even the biggest factor for us," he said. "Arbitron was developed as a measurement tool, and now they want to make it into a programming tool and it's probably one of the worst programming tools out there. They market 'PD Advantage,' which they sell to stations to help them figure out where they are deficient in this artificial universe. They try to sell something to help programmers better manipulate their own product. Arbitron has forced stations to pander for quarter-hours."

Radio World asked Arbitron to respond to Gardner's comments. The company chose to provide a prepared statement by Pierre Bouvard, president of Webcast Services and New Ventures, a division of Arbitron.

"In 1993 we had 1,900 radio station customers," he said. "Today we have about 4,000. We are very focused on helping those stations enhance their business and helping them increase revenue and gain programming insights on their audience."

But Glen Gardner is sticking to his ratingless world. Referring to Arbitron he said, "Radio is the only business I can think of that supplies the tools (ratings) which our customers can use to lower our rates through negotiation. Then Arbitron charges us for the tools."

Promotions

▶ Continued from page 31

you radio doesn't work, ask him if he's willing to bet $500. If he agrees to the bet, go on the air and tell your listeners that this dealership is giving away $5 in cash for as long as it lasts, no strings attached. After the crowd cleans the guy out in about 10 minutes, explain that it's the "offer" that often drives the degree of success in advertising.

• Ticket raids work well at car dealerships: "Drop by Jim's Automotive Center from 1 to 2 p.m. today. Every 15 minutes, we'll give away another pair of tickets to OzzFest." While people are standing around, what do they do? Look at cars! This one does not necessarily need to be hosted by an on-air talent. If you have an outgoing promotion person, they'll do just fine.

• Got a classic rock or sports talk station? Fill a truck cab up with rocks (foam ones) or balls (golf, basket, etc). Have a box next to the truck where people fill out an official registration form with their guess as to the number of rocks or balls in the cab. The closest guess among all entries wins. You need a large staff the day of the event to sort through the guesses. Make sure the winning number has been pre-written on a piece of paper and sealed in a little portable vault, which you will open in front of the crowd at the event before going through the entries.

• The March of Dimes does a "motorcycle ride" for their charity in many markets. Call them to see if they'd be willing to start their ride at the motorcycle dealership you select in exchange for promoting that event. After getting that permission, sell it to a dealership.

Maybe you can get the dealership to toss in a motorcycle to raffle for the charity, or at least do a silent auction of motorcycle merchandise (T-shirts, pants, etc.) to benefit the charity.

Americans have real affection for cars and motorcycles. Anything you can do to tap an emotional element — winning being one emotion — will literally have people driving to the dealership you target. Start your engines!

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

Blind DJ Is Delaware's First

by Anthony Pierce

It is a Wednesday afternoon in the basement of Perkins Student Center, home to the University of Delaware's radio station, WVUD(FM). The digital clock above a window peering into a production studio reads 1:47 p.m.

Disc jockey Merian Peleski says her farewells for the afternoon and concludes her portion of the classical music program "Fine Tuning" with a selection by Christoph Poppen and the Hilliard Ensemble called "Morimur."

As the piece winds down, a man strolls in dressed in a blue Hawaiian shirt and blue jeans.

After 60 seconds of Associated Press news headlines and two distinct finger motions toward the soundboard, Ken Galvin launches into another edition of "Ken's Classic Rock Café," with the raspy voice of Robert Plant in the appropriate opener, "Black Dog."

Galvin is the first visually handicapped DJ in Delaware history, according to a state official.

'Radio art'

As the first guitar licks come in, Galvin seems to be relaxed, but only for a moment. A nice segue leads into "Custard Pie," which in turn segues into "The Ocean."

"I'm celebrating the month of 'Zeptember' on the show today ... that means all Led Zeppelin for two hours."

As a live version of "All of My Love" comes to an end, Galvin explains he must do a station ID, a promo and an underwriting ad, daily procedures for any DJ at this station, which recently observed its 35th anniversary.

However, Galvin, who also is 35, is anything but your average DJ. He is legally blind, and has been since the day he was born. This makes him the first visually handicapped person to become a DJ in Delaware history, according to Robert Goodhart, deputy director of the Division for the Visually Impaired.

Galvin pulls out a small, black hand clock from his left pocket, opens the lid and gently fingers the hour and second hand before going on the air. The light on the main console turns red, signaling the beginning of Galvin's vocal intro.

"Welcome to Ken's Classic Rock Café," he says. "Happy 'Zeptember,' everyone! I would like to say hello to my friends Chris and Joe, who are listening at home ... and don't forget to listen to 'Java Time' tomorrow morning with Jerry Roman ..."

Galvin speaks fluidly. He comes to the end of his intro and begins counting off from the first set of buttons on the beginning of the soundboard, to the sixth set, labeled "CD 1."

"I've been planning this show for the past few days now," he says. "I spend anywhere up to six hours going through CDs trying to (figure out) what song sounds good after what song. I make it into my own form of radio art."

Galvin flips through his bag and selects Led Zeppelin's classic album "1." He has made a numerical "1" out of tape and placed it on the side of the CD case, making it easier to decipher, which he has done for most of his albums.

He wants to focus on musical elements in his show, as opposed to the hoopla of talk and incessant commercials.

"I want to bring radio back to the way it used to be," he says.

Hands-on

Galvin, who is unemployed but hoping to find a commercial radio job, heard WVUD three years ago while flipping through FM stations.

"Radio was always something I've wanted to do. So I decided to give (station manager) Chuck Tarver a call to see if I could get involved."

Ken Galvin works the board at WVUD.

In the spring of 2001, Galvin toured the station, bought the necessary certification handbooks, which were then

See GALVIN, page 34

LPFM and Sponsorship Regulations

Managers Must Know the Difference Between Commercials and Underwriting

by Jerry Donnelly

As noncommercial licensees, low-power FM radio stations are allowed to broadcast sponsorship or "underwriting" announcements, but not commercials.

The difference is not always clear to professional broadcasters, let alone to a person new to radio. Many low-power stations are managed by citizens who have other full-time jobs and responsibilities and who have little or no previous background in broadcasting. Licensed to civic groups, churches and schools, these stations often are operated by volunteers as a form of community service.

Understanding FCC regulations, particularly in the area of program sponsorships, can be a challenge.

We discussed these questions with communications attorney Cary S. Tepper in Washington for his input.

Understanding FCC regulations, particularly in the area of program sponsorships, can be a challenge for LPFM licensees.

Terminology

Basically, a sponsorship announcement cannot include a call to action. It can identify a sponsor but cannot describe the sponsor's business in a comparative or qualitative way.

Tepper said length can also become an issue.

"Some announcements are simply too long. Even though your content may not be a sales pitch, the FCC has taken the position that the longer it takes to identify the sponsor and its services, the more it becomes promotional," he said.

"I have clients who run 45-60 seconds in an announcement, and even though nothing is said that is inappropriate, there's just too much of it. Keep your announcements as short as possible."

Tepper said sometimes more detail can be included depending on the nature of the announcement.

"If more information is needed for an event — let's say a county fair is going to be a sponsor of one of your programs and you need to give lengthy directions how to get there, or there is a special charity event that you need to give a little extra information (for) — that's fine. But if it's a regular merchant, you can pretty much say what you need to say in 20-25 seconds at most."

Tepper would refrain from putting in testimonials or any information that has nothing to do with the sponsor.

Some operators may be unaware that there are times when a station is allowed to promote an event directly with announcements that sound just like commercials.

One example, Tepper said, is a remote broadcast from a local establishment, such as a restaurant or a bar, that serves as a station fundraiser.

"The FCC has taken the position that if you're getting an extra financial benefit — the door, for instance — and nobody else is, they'll let you promote the event. I would promote the event but I would not promote the kinds of things where the bar or restaurant can make money. Don't promote their food and don't promote their drink specials or anything like that."

With the sponsor

One obstacle noncommercial stations face is explaining the differences between an underwriting announcement and a regular commercial to a potential sponsor.

Tepper's advice is to tell them you are a non-commercial radio station and that you are not allowed to broadcast regular commercials.

"You can, however, identify their services and provide address and phone numbers. But it has to be brief and to the point. You shouldn't go out there and 'sell' 30-second spots. Tell your clients to gather some information and you will put together an appropriate spot."

See LPFM, page 6 ▶

NAB Announces Crystal Finalists

The National Association of Broadcasters announced 40 finalists for the NAB Crystal Radio Awards competition. The awards recognize radio stations for their year-round community service efforts.

The finalists are:

KBHP(FM) Bemidji, Minn.
KDF(FM) San Francisco
KEEY(FM) Minneapolis
KFOG(FM) San Francisco
KFOR(AM) Lincoln, Neb.
KGBI(FM) Omaha, Neb.
KGO(AM) San Francisco
KLOS(FM) Los Angeles
KLVI(AM) Beaumont, Texas
KRRO(FM) Sioux Falls, S.D.
KSTP(FM) Minneapolis
KSTZ(FM) Des Moines, Iowa
KTCZ(FM) Minneapolis
KTRR(FM) Windsor, Colo.
KUAD(FM) Windsor, Colo.
KUZZ(AM) Bakersfield, Calif.
KYW(AM) Philadelphia
WBAB(FM) Long Island, N.Y.
WBIG(FM) Washington
WCMT(AM) Martin, Tenn.
WDEL(AM) Wilmington, Del.
WDRV(FM) Chicago
WEZL(FM) Charleston, S.C.
WGHT(AM) Pompton Lakes, N.J.
WGRD(FM) Grand Rapids, Mich.
WHAM(AM) Rochester, N.Y.
WHUR(FM) Washington,
WICO(FM) Salisbury, Md.
WJBC(AM) Bloomington, Ill.
WLUP(FM) Chicago
WSTW(FM) Wilmington, Del.
WSYR(AM) Syracuse, N.Y.
WTMX(FM) Chicago
WTOP(AM) Washington
WUPE(FM) Pittsfield, Mass.
WUSL(FM) Philadelphia
WVXA(FM) Rogers City, Mich.
WVXU(FM) Cincinnati
WWKI(FM) Kokomo, Ind.
WWZZ(FM) Washington

Finalists will be honored and 10 Crystal Radio Award winners will be announced during the Radio Luncheon at NAB2004 Tuesday, April 20, in Las Vegas.

Galvin

▶ Continued from page 33

translated into Braille by the Delaware Division for the Visually Impaired, and spent the summer reading over the information before taking the station's mandatory policy and technical examinations.

The next step, Galvin said, was training on how to operate the main soundboard in the FM studio. Dave Mackenzie, WVUD's engineer, was responsible for Galvin's training.

"He was a very quick learner," Mackenzie says. "He would record our training sessions and then study them later at home. Ken surprised everyone here with his ability to do so well, so quickly."

Galvin said, "I feel honored because I can be a role model for anyone visually impaired. I have an advantage in being able to hear, really *hear* the music I'm playing, and make good connections and transitions between songs."

However, he has a disadvantage that other jocks need not worry about: precise timing of the show.

"I have to time out the entire show prior to going in, because I can't read exactly how long each track is at the station," he said. "I have to play all the songs at home, time them with my hand-held watch and make sure everything adds up to 120 minutes. This takes about 12 hours, in total, do to."

Tarver praised Galvin's true abilities as a DJ.

"He is someone with an obvious love for radio and music and he's really good at it, too," he said. "I would love to see Ken go somewhere and make a career out of (disc jockeying). He approaches radio the way it once was — he is an entertainer."

LPFM

▶ Continued from page 34

Those spots do not have to be so plain as to include only a voice reading the information.

"You can add production to these spots — sound effects and such," said Tepper. "The only thing you shouldn't do is go into your music library and use copyrighted material in your announcements. You can go out and buy production libraries. But just because you're paying an ASCAP or BMI fee doesn't give you the right to use that music for production."

Tepper said stations also are allowed to recoup whatever production expenses were necessary for a broadcast. Creative operators can find additional ways to bring in revenue.

"Just because you're a non-profit and a noncommercial radio station doesn't mean you can't make money off your non-broadcast activities," Tepper said. "People can pay you for your tower space, people can pay you for production. If you want to do production for other people, you certainly can do that and make money off of it."

A noncommercial station is permitted to promote a sponsor that is a non-profit entity. One example might be a blood drive at the local American Red Cross.

Tepper cautioned that it's important to make sure the local ARC is a non-profit, tax-exempt organization. "A lot of those organizations aren't, surprisingly. So you really need to find out."

Non-profits can include student organizations — if they are truly non-profit; most that use a university account will qualify.

"You have to be the judge of what their status is and make a good-faith determination on that. Make sure they are tax-exempt, truly organized as a non-profit entity."

Although LPFMs are not required to keep an Issues-Programs list in their public file as full-power stations are, Tepper thinks it's a good idea.

"You don't have to do it, but it certainly can't hurt you to do it. It would just bolster your position should somebody ever challenge you about whether or not you were programming in the public interest sufficiently."

Such a list must be updated quarterly and include between 10 and 15 hours of public interest programming responsive to the specific needs of your community.

"Some of that can be national, but some of it certainly should be local. A lot of stations try to fulfill that obligation with a lot of PSAs and that doesn't cut it. PSAs count for a little bit, but you really need to have some longer-term programming — 15 minutes or more in length."

Because many LPFMs are licensed to schools and colleges, some operators wonder about the requirements for minimum hours of operation. According to Tepper, the FCC has recognized that colleges and universities that do not have a full schedule during the summer months or even winter break are not under the normal operating requirements.

It is wise, though, to stay on the air if you possibly can.

"The thing you run the risk of is if your station is not on the air all year long, somebody could come in at license renewal time and request a time-share, claiming that you're not fulfilling 100 percent of your public obligation. That's the risk that you theoretically take."

Although LPFM stations have fewer regulations than full-power stations, Tepper emphasized that it is crucial for operators to take the regulations that do exist seriously. That means remaining vigilant about programming, including the content of sponsorship announcements.

"Some think that nobody's watching them and chances are nobody is. But you would hate to be that one station where somebody was listening at that moment and makes an issue of it."

Note that not all of the opinions reported here are shared by all legal experts. As always, it's best to consult your communications counsel before making decisions on specific matters.

The author is chair and associate professor of the Department of Mass Communication at Northwest Missouri State University. E-mail him at jeryd@mail.nwmissouri.edu. *Write to Radio World at* radioworld@imaspub.com.

STATION SERVICES

NRB Pitches Its Tent at NAB

One trade organization will take part in another's convention when the National Religious Broadcasters sets up its booth at the NAB show in Las Vegas this month.

The NRB will promote marketing channels it offers "to connect with the producers who reach 140 million listeners, viewers and readers every month." It called religion one of radio's fastest-growing formats.

The NRB plans to highlight its annual exposition, named one of "The 50 Fastest Growing Trade Shows" by TradeShow Week magazine, as well as a weekly e-newsletter, monthly magazine, convention sponsorships and a new directory. It plans to give away a portable DVD player each day at the NAB show through a drawing.

For information visit www.nrb.org.

COLE'S LAW

Shut Your Mouth and Open Your Eyes

Indecency: Look Not Only at Obvious Changes But Also at the Fine Print

by Harry Cole

Unless you've been hiding under a rock for the last month or so, you know that there's a new indecency law pending from Congress. You probably know that the new law would raise by a huge factor the monetary penalty that can be imposed for the broadcast of indecency.

You may also have heard that the new law might mean that indecency violations may be held against you at renewal time, and that one version of the proposed law would add a "three strikes" provision so that three indecency violations in a given license term could result in a license revocation proceeding.

But for all the sexy, headline-grabbing changes in the works (e.g., "Congress Proposes to Jack Fines Up By a Factor of Fifty Gazillion!!!"), it appears at this writing that the longstanding process for collecting forfeitures for indecency likely will remain intact, at least for the time being. And for that, broadcasters — and supporters of the First Amendment — may justifiably breathe a sigh of relief.

Shut your mouth

The process by which fines are collected may appear at first glance to be somewhat counter-intuitive, to say the least. Basically, wrongdoing broadcasters don't have to pay unless and until the FCC is able to jump through a number of daunting hoops *after* the FCC has already satisfied itself that a forfeiture is warranted.

The drill goes like this:

Let's say that a licensee broadcasts something that, for the sake of argument, we will all agree was "indecent." FCC investigates, concludes that indecency was broadcast and issues a Notice of Apparent Liability. Licensee responds to NAL, making whatever arguments it cares to. FCC rejects licensee's response, issues Forfeiture Order assessing the fine. Maybe licensee seeks reconsideration or other review with the FCC, maybe not. In any event, when the smoke clears at the agency, the licensee is holding an order from the FCC, which says "pay up."

What does the licensee do?

For openers, the licensee is barred from appealing the order directly to the court of appeals unless the licensee first pays the forfeiture.

Photo by Bob Kovacs

But if the licensee is not inclined to pay the fine (and doesn't want to get to the court of appeals badly enough to justify paying the fine), pretty much the only alternative is to wait and see what the government does. Fortunately, the Communications Act provides that the mere fact that the FCC may have concluded that the licensee is subject to a forfeiture *cannot* be held against the licensee in *any other proceeding UNLESS* either (a) the licensee has paid the forfeiture, or (b) an appropriate court has ordered the licensee to pay the forfeiture, and that order has become final.

So let's think about this for a minute. If the licensee pays the fine, the underlying misconduct automatically can be considered by the commission in any other proceeding relating to the licensee — like, say, its next renewal, or possibly the application by which it hopes to acquire more stations.

But if the licensee does not pay the fine, the underlying misconduct can't be considered at all unless and until some court orders the licensee to pay, and it's up to the FCC to try to obtain such an order, while the licensee goes about its business, free of any adverse effects from the forfeiture.

Is this a great country or what?

Steps and more steps

And if the FCC *does* try to collect the fine, it must first convince a U.S. attorney from the Department of Justice to sue the licensee in federal district court to get the money. That suit will entail a "trial *de novo*," meaning that the government will have the burden of convincing the judge that the licensee really did violate the rules.

That, of course, assumes that the FCC will be able to convince the judge that the "rules" that were broken were themselves reasonably clear and constitutional as applied to the licensee's situation. The licensee, meanwhile, will have the opportunity to make any and all factual and legal arguments available to it.

What are the chances that all the stars will align properly and the Justice Department will jump in on behalf of the FCC and a licensee will find itself on the wrong end of a district court order? We here at Team Cole's Law are not aware of any place where the FCC makes public statistics along those lines — although presumably those stats are maintained somewhere and might be obtained through a Freedom of Information Act request.

But in a 1995 decision of the U.S. Court of Appeals for the D.C. Circuit, the court observed that, between January 1987 and March 1993, a total of seven indecency forfeitures had been ordered by the FCC. Of those, only three were referred out to Justice, and only one of those ended up in district court.

To be sure, in the six cases that did not make it to district court, the target licensee may simply have paid the fine and moved on; we just don't know, although it would be swell if the FCC would compile and release publicly statistics on this.

But it may also be possible that either the FCC chose not to pursue collection efforts or the Justice Department declined to file on the FCC's behalf.

At a minimum, there is a good deal of hassle involved for the FCC to try to get a court to order payment. And until such an order is issued and becomes final, not only does the licensee not have to pay, but the FCC cannot hold the underlying misconduct against the licensee in any manner.

Read the fine print

Interestingly, the original version of the much-anticipated indecency bill that was voted out by the House in March contained language that would have shifted onto the licensee the burden of seeking judicial review.

Under the original draft of the bill, a notice of apparent liability could have been held against the licensee if the fine was paid or if the forfeiture order had not been reversed by a competent court. Under that formulation, a licensee could not just sit back and chuckle at a forfeiture order, because that order could be held against the licensee at, *e.g.*, renewal time, unless a court had reversed the order. And if the FCC chose not to bring the matter to court, the only way that an order reversing the fine could be obtained would be if the licensee sought such an order.

That language, however, was amended out of the bill when it was brought up for a vote before the full House. As adopted by the House, the bill reverts to the status quo; the commission would still be required to secure a court order to pay the forfeiture before the forfeiture can be used against the licensee.

This does not mean that this issue has been resolved. As of mid-March the Senate still had yet to consider its version of the House bill, and then the two versions would have to be reconciled in conference. While the Senate has thus far not indicated any inclination to tinker with the post-forfeiture order burdens, you never can tell what might happen.

The take-home lesson here is that it is important to look not only at the obvious changes that Congress is proposing, but also at the fine print.

The change that was originally proposed and which was approved by the House Committee would have effected a major change in the indecency enforcement process, a change that would most likely have adversely affected broadcasters. And yet it appears to have been ignored by most observers, perhaps lost in the glare of the big dollar forfeitures likely to be imposed on indecency.

If you have received an indecency forfeiture or are concerned that you may be found liable for one, consult with communications counsel concerning the avenues available to you.

Harry Cole is a member of the law firm of Fletcher, Heald & Hildreth, P.L.C. Reach him at (703) 812-0483 or via e-mail to cole@fhhlaw.com.

STATION SERVICES

Text Messaging Tool Aimed at Radio Promotions

Is there big business in text messaging for radio promotions? A company in Evanston, Ill., hopes so.

Interactive mobile marketing firm Vibes Media has launched what it calls the first text-messaging platform for interactive radio promotions. KTTB(FM) in Minneapolis was the first user.

"Listeners from around the Twin Cities sent text messages to B96 DJs from anywhere, anytime using any cell phone and instantly received personalized responses," it stated.

"Using the OptimumAnalysis Tools provided by Vibes, DJs customized their programs on the fly and created keywords for participants to text into the station, where DJs monitored in real-time all of the messages being received."

On-air personalities replied to individuals' phones through an online interface.

The system can be used to link text messaging to promotions — for example, allowing a station to set up a text request line or telling listeners to send keyword text messages to win concert tickets.

President Jack Philbin said, "Text messaging is perfect for marrying radio's inherent mobile nature to its mobile, phone-carrying audience."

For information contact the company in Illinois at (847) 866.0479 or visit www.vibesmedia.com.

More People News:

Joe Noonan was promoted to national sales manager for **Bomar Interconnect Products Inc.** He joined in 2000 as national accounts specialist.

Rick Sametz joined **Interep** as VP and director of marketing. He had been director of promotions for Marvel Entertainment.

The **Radio Advertising Bureau** made three executive promotions within its services division: **Christa Mallick Dahlender**, from VP to senior VP of member communications; **Mark Levy**, from director to VP and general sales manager of educational services; and **John Potter**, from director to VP of educational services and director of the RAB Radio Training Academy.

Recent items from **Clear Channel**: Attorney/CPA **Andrew W. Levin** was appointed to the new position of executive VP for law and government affairs, as well as chief legal officer. Levin joined the company in 2002 as senior VP for government affairs in Washington, D.C. Before joining Clear Channel, he served as Democratic counsel to the U.S. House Energy and Commerce Committee...

At Clear Channel Radio, **Michael Oppenheimer** was promoted to VP and market manager for the Tulsa, Okla., cluster; **Mary Lou Gunn** to VP and market manager for Portland, Ore., replaced in Fresno by **Jeff Negrete**; **Dan Lankford** to VP and market manager for Akron, Ohio; **Earl Jones** to regional VP, Kentucky; **Julie Anderson-Smith** to senior VP of sponsoring development; **Morgan Bohannon** to regional VP and market manager for Charlotte, N.C.; **Evan Armstrong** to VP and market manager for Waco ... **Kelly Krueger-Erickson** to director of strategic sales for the Northwest region; **Brenda Adriance** to regional VP of the Dallas cluster, in addition to working with the Tyler and Texarkana markets. **Charlie Thomas** was named market manager of stations in Shreveport, La.

The company reorganized its Mid-America Division, formerly known as Delta. Regional VPs are **Lee Clear**; **Kenny Windham**; **Dick Harlow**; **Tony Beringer**; and **Tim Davies**.

At **Infinity Broadcasting**, VP and GM of Los Angeles' KCBS(FM) **Jeff Federman** took on the added responsibility of director of sales for Infinity's seven L.A. radio stations, the country's largest radio market as measured by revenue; **Tracy T. Gilliam** was named GSM for KRTH(FM); **Chad Brown** was named VP and GM of WCBS(FM) and continues to serve as director of sales for New York's six Infinity stations; **Matt Timothy**, former VP of marketing and development for CBS2, succeeded Brown at WCBS(AM); **Adam Stupak** was named VP of Infinity Solutions and Beyond, Infinity's in-house marketing systems group, with responsibility for pharmaceutical sales for the company's 185 radio stations; **Greg Strassell** was promoted to senior VP of programming; former VP of CHR/Top 40 programming **Jon Zellner** took over as VP, Hot AC; **Peggy Panosh** was named Infinity's senior VP of marketing; Infinity Radio Chicago named **Dave Robbins** VP/GM of WUSN(FM). He continues to serve as VP/GM of WJMK(FM). Paul Agase, senior VP and director of sales for Infinity Radio Chicago, was named acting GM for WBBM(FM). **Peter Bowen**, GSM for WBBM(AM), also now serves as station manager.

Infinity Radio Sales promoted several employees to VP/director of sales. They are former Dallas Directors of Sales **Nicky Cassidy** and **Joan McNamara;** former New York Directors of Sales **Stefanie Schreiber** and **Julie Fedroff**; and former Los Angeles Account Executive Dean Canter.


David Johansen

Dave Gorab joined Sirius as director of talk programming. He had been executive producer of Jim Cramer's "Real Money" programming and syndication for WOR Radio Networks, New York, and VP of programming for Launch Radio Networks. Gorab also served as director of programming operations for Sony Worldwide Networks. Author and television film critic **Frank DeCaro** joined Sirius as a program host for Out Q, a gay and lesbian channel . Jazz broadcasters **Les Davis** and **Paul Anthony** joined the on-air staff of Sirius' jazz music stream Pure Jazz. Davis is the former host of WNEW(AM)/New York's "Make Believe Ballroom," while Anthony's "Jazz Unlimited" has been on Washington, D.C., radio for 40 years. New York rocker and musicologist **David Johansen**, known for his night-club alter ego act Buster Poindexter, joined the satellite network as a DJ for the Sirius Disorder stream.

USER REPORT

AKG Mics Meet Classical Challenge

by Martin Macheiner
Technical Director
Radio Stephansdom

VIENNA, Austria During 2003, high-quality AKG microphones helped Radio Stephansdom capture high-class concerts for discriminating music lovers.

Since 1998, Radio Stephansdom has been broadcasting 24 hours a day from its studio in the attic of a charming historic building next to the cathedral of St. Stephen in the heart of downtown Vienna.

Our station quickly became popular as its programming includes the highest quality classical music content aired by any station in Austria. And part of what makes Radio Stephansdom unique is the special performances it airs.

Radio Stephansdom used AKG mics and amplifiers for broadcasts of classical music from Vienna's 2003 concert season.

During the 2003 concert season, we faced several interesting challenges, not the least of which was miking the oldest usable harpsichord in the world, rolled out from the archive of the Gesellschaft der Musikfreunde in Wien/Musikverein. Several other ancient instruments will undergo renovation and be played for another series of concerts in 2004.

One of these concerts also was aired by Japanese pubcaster Nippon Hōsō Kyōkai (NHK). Music enthusiasts in Japan were so excited by the concert that a CD is being produced in Japan using the live recording tracks made by Radio Stephansdom.

The concerts, which included works by Frescobaldi, Bach, Haydn, Mozart and Schubert, took place from the refurbished Brahms-Saal hall at the Musikverein. The renovation moved the stage to the center of the hall, with seating at the sides, creating a challenging recording situation.

To capture the performance, Radio Stephansdom used three AKG C 480 B preamplifiers with CK 62 DF capsules. The csakan, guitar, cittern and vocals were miked with C 451 Bs; the pianoforte and harpsichord were miked with C 414 B-ULSs.

The sound was perfect. All the instruments and voices were recorded with absolute accuracy to the smallest detail.

Also used for the recording were K 271 Studio headphones, which are for any situation where the mixing console is set up in the same room as the performance.

They provide excellent isolation, sound and comfort. After all, I was wearing them for five hours a day on each of the four days of recording, and they felt pleasant to the last minute.

For more information, including pricing, contact AKG in Nashville at (615) 620-3800 or visit www.akgusa.com.

JBL's LSR6300 Series Monitors Room Acoustics

JBL Professional says its LSR6300 Series studio monitors incorporate technologies that minimize detrimental effect on response caused by the acoustic properties of the room, such as Linear Spatial Reference technology, RMC Room Mode Correction and boundary compensation.

Three new models are included: the LSR6328P bi-amplified reference monitor with 8-inch woofer and 1-inch tweeter; the LSR6332 reference monitor with 12-inch woofer, 5-inch midrange and 1-inch tweeter: and the LSR6312SP subwoofer.

The current LSR25P compact bi-amplified reference monitor with 5.25-inch woofer and 1-inch tweeter can be used in systems with any of these. All four models include mounting points for use with mounting hardware, magnetic shielding for use near video monitors and THX approval. The LSR6328P features handles for transportation and room positioning.

A speaker that measures "flat" on-axis in an anechoic chamber may not produce flat response at the mix position. The company's Linear Spatial Reference approach helps keep the mid and high-frequency content at the mix position accurate by incorporating a +/-30 degrees horizontal, +/-15 degrees vertical, radiated response.

To avoid "boominess" at the mix position caused by low frequency standing waves due to the room's geometry, the LSR6328P and the LSR6312SP subwoofer use a JBL RMC circuit that eliminates the effect of low-frequency room modes and enables accurate bass response at the mix position. The RMC Calibration Kit, included with the subwoofer and available as an accessory for use with the LSR6328P, offers equipment for measuring the room response, identifying the dominant room mode and calibrating the system's response.

Boundary compensation circuitry is featured in the LSR6328P for frequency response correction and overcoming spectral shift when the system is mounted on a wall, in a corner or on a workstation.

Other highlights of the LSR6328P include a titanium composite high-frequency transducer with elliptical oblate spheroidal waveguide for pattern control, and Differential Drive technology with dynamic braking for extended low frequency response and minimal power compression. The LSR6332 has a neodymium midrange with 2-inch voice coil and Kevlar cone material for low distortion.

For more information, including pricing, contact JBL Professional in California at (818) 894-8850 or visit www.jblpro.com.

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TECH UPDATES

Lawson AIR Mic Has Quick-Change System

Lawson Inc. debuted the AIR microphone, a 48-volt phantom-powered cardioid condenser mic. It uses a variation of the company's L47MP studio tube mic capsule design.

The capsule diaphragms are edge- rather than center-connected, which the company says allows for more resonant proximity effects. A solid-state circuit uses a Neutrik transformer and gold-plated XLR connector. Other highlights include a rated impedance of 150 ohms, a 20dBA multi-pattern equivalent noise level and a frequency range of 20 to 20 kHz.

Lawson mics use the Quick Change capsule system; capsules and head assemblies are interchangeable. Three Phillips-head screws attach the head to the mic electronics. The head interfaces to the electronics via a D-connector. To change a capsule, the user removes the screws, pops off the head and puts on a different one by mating the connectors and reinserts the screws. The company touts the "mix-and-match" capabilities of the Quick Change system, as it enables two microphones to provide the sound of four through various combinations.

For more information, including pricing, contact Lawson Microphones in Nashville at (615) 269-5542 or visit www.lawsonmicrophones.com.

Heil Sound Promotes Classic Pro

The Classic Pro from **Heil Sound** is a dynamic cardioid microphone. The company says its sound is comparable to a condenser mic in its frequency range, transient response and low IMD. It is a stainless steel-, chrome- and nickel-plated reproduction of a 1930s RCA Model 74B broadcast mic and RCA 91B cast steel base.

The mic uses a magnet structure and aluminum 1-1/8-inch low-mass voice coil assembly. The phasing plug assembly has ports that sense audio entering out of phase, producing a linear cardioid pattern and reducing proximity effect. Frequency response is spec'd at 40-18,000 Hz.

The Classic Pro mic has a condenser mic sound and a 1930s-style cast steel base.

The cardioid pattern offers rejection at 180 degrees off-axis. A sorbothane rubber shock mount with breath blast filter is intended to minimize handling and breath noise. Blue foam windscreens are molded to fit the inside of the mic's shell to act as noise filters and provide the screen without using silk material. A 10-foot balanced line "Heilwire" cable terminates in a 3-pin male XLR connector.

Heil Sound has changed the name of its Goldline Pro dynamic cardioid mic to Proline PR 20. It too uses the sorbothane shock system and many of the features of the Classic Pro.

The Heritage model takes after classic 1950s "Elvis" mics, such as the 55S Shure. The "showchrome" finish of the molded steel body is copper- and chrome-plated. Heritage has a 5/8-inch-27 standard thread assembly, which mates with Heil Sound's mic stands and booms. A slide switch turns the audio on and off, and features a small lick screw to deactivate the switch.

The company also has debuted its PL-2T "topless" mic boom, which features removable top and backs plates for threading the mic cable inside the boom. It uses a system of balanced internal springs instead of outboard springs, and handles mics up to 1.5 pounds in weight. An optional FL-2 flange mount allows the PL-2T to be mounted to a desk or table top with three supplied screws; it includes a security lock for tightening to the desired position.

For more information, including pricing, contact Heil Sound in Illinois at (618) 257-3000 or visit www.heilsound.com.

Genelec Models Are Active, Compact

Genelec bi-amplified monitoring systems are compact active monitors that contain electronic crossovers, overload protection and power amplifiers. They are marketed for use in near-field monitoring, broadcast and TV control rooms, mobile vans and home studios.

The company's Directivity Control Waveguide technology enables stereo imaging and frequency balance. Room frequency response controls allow tailoring. The speakers perform well in vertical orientation, it says.

Genelec offers LSE series subwoofers to integrate into the systems, as surround sound reproduction is an increasingly popular application of the bi-amplified systems. The user can build conventional stereo pairs or full surround systems with neutral sound.

The 7050A subwoofer is intended for use with models 1029A, 2029A and 2029B. The 7060A, 7070A and 7071A are for stereo systems based on 1030A monitors and larger, and surround sound systems. Features include bass management unit with six signal input/output channels, and LFE input and summed signal output connectors for connection to surround and stereo systems.

The LSE series features the Genelec Laminar Spiral Enclosure bass reflex cabinet, made of a sheet metal rolled into a spiral shape and clamped between thick MDF side panels.

For more information, including pricing, contact Genelec Inc. in Massachusetts at (508) 652-0900 or visit www.genelec.com.

Audix Has I-5 Dynamic

The I-5 from **Audix** is a dynamic microphone that features a cast zinc alloy body, black E-coat finish and cardioid polar pattern. Its frequency response is 50 Hz-16 kHz. It handles sound pressure levels in excess of 140 dB. A mic clip and carrying pouch are included.

The company's Fusion series vocal mics employ a cardioid pattern to help minimize feedback and off-axis noise, providing over 20 dB of rejection. The F50 is a dynamic moving coil mic with a frequency response of 50 Hz-16 kHz, 3-pin gold-plated male XLR cables/connectors and output impedance of 250 ohms.

For more information, including pricing, contact Audix in Oregon at (503) 682-6933 or visit www.audix.com.

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The new Omnia-6EX won't short-change your listeners. We've built Omnias with sampling rates of 48kHz and higher from the start. All along, we've needed the sampling headroom to keep analog FM audio grunge-free. Now it's essential for HD Radio. Even if some listeners wouldn't notice the missing high frequencies, there's a fair chance they would hear a sharp 15kHz low-pass filter operating within HD Radio's codec range.

The new Omnia-6EX has enhanced processing for analog FM, and is ready for HD Radio with a second limiter section and digital output. Both FM and HD limiters and outputs are included as standard.

Omnia-6EX is also full of processing enhancements that result in yet more bass punch, yet more voice clarity, than the original Omnia-6. A sound so powerful and free of artificial constraints, you'll crave it for your station the first time you hear it.

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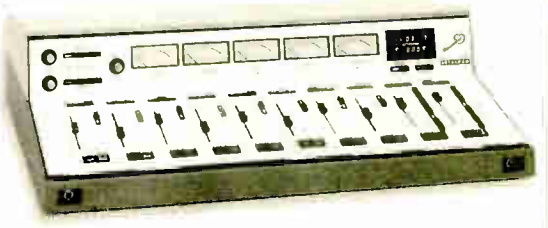

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TECH UPDATES

Electro-Voice Amps Use Class-H Design

Electro-Voice said its Precision Series compact amplifiers produce less heat and feature a reduced size as a result of its Class-H design.

The CP100 is intended for small full-range cabinets and individual high-frequency components in multiway systems. It uses a conventional transformer power supply and supplies up to 2 x 600W into 2 ohms and 2 x 400W into 4 ohms. The CP1800 supplies up to 2 x 900W into 2 ohms and 2 x 600W into 4 ohms.

The CP2200 supplies 2 x 1100W into 2 ohms and provides up to 30 percent headroom for a wide dynamic range on music signals. Its dynamic limiter keeps the output clipping from exceeding a THD of 1 percent up to an input signal of +21 dBu. Detent level controls provide repeatable settings. LEDs indicate signal present, 0 dB and limit. Rack wiring is enabled through paralleled male and female input XLRs.

The CP3000S is the first amp in the series to use a switch-mode power supply, supplying up to 2 x 1600W into 2 ohms and 2 x 1100W into 4 ohms. Electro-Voice says this model is designed to allow for long-term driving of low loads into subwoofers without stress.

For more information, including pricing, contact Telex/Electro-Voice in Minnesota at (952) 884-4051 or visit www.electrovoice.com.

Monitor Family From Mackie

The Tapco S 5 active studio monitor from **Mackie**, pictured, is a compact, bi-amplified monitor that features dual internal amplifiers providing a total of 120 watts RMS (60 for the 5-1/4-inch woofer, 60 for the 1-inch tweeter). Rear-panel controls enable acoustic tailoring with low-frequency boost and high frequency cut/boost. Inputs include 1/4-inch TRS/XLR balanced and RCA unbalanced. The Tapco S 8 is similar, but provides more bass.

Mackie's HR series are active studio monitors with flat frequency response; they use FR series amplification. Each model is customizable through acoustic space controls and has THXpm3 approval.

HR824 is a two-way, 8-inch monitor, useful for long sessions of general mixing, while the HR624 two-way 6-inch monitor enables mid-range accuracy for lead vocal placement within the mix and dialog replacement in post. The dual 6-inch HR626 offers low-level accuracy and a symmetrical left-right sound field.

The FR series of amplifiers derive their name from the amp's fast recovery feature, which reduces distortion at clipping. This allows the amp to recover quickly, rather than use large amounts of negative feedback. The amps come in two models, with 800 or 1,400 watts. Tapco's Juice series of amps come in three, with 800, 1,400 and 2,500 watts.

For more information, including pricing, contact Mackie in Washington at (800) 258-6883 or visit www.mackie.com; or contact Tapco at (877) 827-2669, or visit www.tapcogear.com.

TECH UPDATES

Nady Audio Offers Vacuum Tube Mics

Nady Audio, **Nady Systems**' line of audio gear, debuted its SM-120 and SM250A studio monitors.

The SM-120 passive monitor is a two-way speaker with 6-1/2-inch shielded woofers and 1-inch Ferro fluid-cooled, soft-dome shielded tweeters; it is rated at 120W peak power. The SM250A is an active speaker with 100W bi-amped power.

The cabinets have a curved front baffle for reduced high-frequency diffraction and imaging, and stiff construction for articulate performance at high SPL levels. Gold-plated binding posts are provided for hookup to banana plugs, spade connectors or bare wires (SM-120).

The Nady line includes the TCM 1050 and TCM 1100 vacuum tube condenser mics. The TCM 1050 has a gold-sputtered, 1-inch diameter mylar dual diaphragm; tube preamplifier circuitry with 6072 vacuum tube; and an output transformer designed for transparency.

Power is provided by a dedicated AC power supply, offering switchable pickup patterns. Nine polar patterns are selectable. The TCM 1050 is suitable for applications such as vocal and instrument pickup. It comes with an aluminum flight case, TMPS-2 power supply, 30-foot / 7-pin XLR cable, elastic spider shockmount and foam windscreen.

The TCM 1100 is a cardioid mic with a brass capsule with a 3-micron mylar diaphragm (1.1 inch). A gold-plated center element creates an extension of the top octaves and a better transient response. Like the TCM 1050, the TCM 1100 uses a 6072 vacuum tube and output transformer. The TCM 1100 has a 16-foot/7-pin XLR cable and TMPS-1 power supply.

For more information, including pricing, contact Nady Systems in California at (510) 652-2411 or visit www.nadywireless.com.

Audio-Technica Makes Short Shotgun Mic

Audio-Technica's AT897 is an 11-inch shotgun microphone suitable for various media applications.

The AT897 condenser element features on-axis response. The line + gradient polar pattern enables sound rejection from the sides and rear of the mic. Operating on an internal battery (AA) or phantom power (9-48V, 2 mA), the mic comes with a foam windscreen and stand adapter. For video work, it mounts on a DV camcorder without adding noticeable weight and remains out of the frame on wide shots.

For more information, including pricing, contact Audio-Technica at (330) 686-2600 or visit www.audio-technica.com.

Neumann BCM 104 Has K104 Capsule

Neumann's BCM 104 microphone is targeted at professional radio announcing.

The K104 large-diaphragm condenser capsule has a cardioid directional pattern with switchable proximity effect compensation, introducing a high-pass filter that reduces frequencies below 100Hz by 12 dB/octave. A second, pre-attenuation switch allows the sensitivity to be reduced by 14 dB to optimize performance for circuits designed for dynamic mics. Both switches are mounted within the mic housing.

The K 104 capsule offers a flat frequency response up to 3 kHz, while higher frequencies have a max increased presence of 2dB. The BCM 104 amplifier has a linear operation down to 20 Hz. Its head grille twists off for cleaning, revealing a piece of fine gauze directly in front of the capsule, mounted on a frame holder, that serves as a built-in pop screen. Neumann will offer optional, color-coded head grilles so each announcer may use his or her own. The pop screen can be removed for cleaning.

Additionally, the BCM 104 is fitted with an elastic mount — compatible with broadcast-type microphone arms — to combat structure-borne noise.

For more information, including pricing, contact Neumann in Connecticut at (860) 434-5220 or visit www.neumannusa.com.

Brauner Debuts FET Large-Diaphragm Mic

Transamerica Audio Group, the U.S. distributor for Germany-based Brauner microphones, is shipping the Brauner Phantom C for lead vocal and voiceover applications; this is the first non-tube (FET), large-diaphragm microphone from the company. The Phantom C is a fixed cardioid pattern phantom-powered FET mic.

Designer and manufacturer Dirk Brauner tuned the Phantom C for vocal use where more proximity effect and less sibilance is required, "to nail a particular sound for vocal recording," said Brad Lunde, president of Transamerica. It comes with a carry case and shock mount, and offers 8dBa self-noise, 28mV/Pa cardioid sensitivity and 142dB Max SPL at 0.5 percent THD.

"During its test period, the mic demonstrated its voiceover capability at keeping intelligibility high without sounding overly bright," Lunde said.

Brauner's VMA variable pattern tube mic features a two-position toggle to switch between the more transparent sound of the company's VM1 mic and a new "American" setting for close-up vocals. After switching from one position to the other, the microphone gets re-biased, and parameters and components that make up the signal path change, creating a new sound. The mic is useful for distance-miking an orchestra or Decca Tree applications, or for close-mic broadcast applications.

Also distributed by Transamerica, Soundelux Microphones is debuting its E49 large-diaphragm condenser microphone, based on the 1952 German IRT design. A remote variable pattern tube mic, it uses a KK47 large diaphragm capsule and a head grille design. The E49 has a double shock mounting system. It includes a capsule-to-electronics shock assembly and a separate capsule and electronics package shock mount. The universal outboard power supply has a continuous variable polar pattern control that adjusts from figure-of-eight to cardioid and then to full omni-directional.

For more information, including pricing, contact Transamerica in Las Vegas at (702) 365-5155 or visit www.transaudiogroup.com.

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Products & Services SHOWCASE

TECH UPDATES

Sonifex Redboxes Drive GWR Headphones

The GWR studio complex in Bristol, England, comprises 18 studios. For headphone monitoring, GWR opted to use **Sonifex** RB-HD6 headphone distribution amplifiers, part of the Redbox line of analog and digital audio interfaces.

The GWR studio uses headphone distribution amplifiers from Sonifex's Redbox line of analog and digital audio interfaces.

The RB-HD6 is a six-way stereo headphone DA for driving six pairs of professional stereo headphones from a stereo or mono input. A rear-panel switch enables the distribution of a mono signal to the 12 outputs — both earpieces of a pair of stereo headphones — via the left-channel input.

It is possible to use the RB-HD6 as six separate stereo headphone amplifiers by using the override (insert-point or break-jack) input associated with each outlet.

A typical application might be to provide common headphone feeds for guests around a table in a studio, with a separately derived feed, perhaps including talkback, for the announcer.

Users can configure the override inputs as parallel front-panel outputs by altering jumper settings inside the unit.

The RB-HD6 has outlets on the front and rear; and it is possible to bypass the master volume control.

Other headphone distribution products include the RB-DHD6 Digital six-way headphone distribution amplifier, and the RB-HD1 single stereo headphone amplifier.

The RB-DHD6 has AES/EBU and S/PDIF digital inputs and produces six buffered, jack-plug headphone outputs, each with its own volume control.

It has been designed to provide distributed audio outputs from an original digital audio input, for example, from a digital mixing desk or digital audio routing matrix. Sonifex digital products are 24-bit, 96 kHz compatible.

For more information, including pricing, contact Independent Audio at (207) 773-2424 or visit www.independentaudio.com.

Tannoy Ellipse iDP Minimizes Diffraction

Ellipse iDP studio monitors from **Tannoy** use DSP technology, networking intelligence, class D digital amplifiers and Dual Concentric driver technology. The latter provides control over the monitoring operation through preset storage/recall and acoustic alignment via remote control. iDP lets the user control parameters such as bass management, global level, recall of preset settings and solo/mute functions in real time.

A pod-mounted SuperTweeter sits atop the Ellipse iDP.

Features include equalization and optimization of each loudspeaker, taking into account its position within the room relative to the room boundary and its own performance relative to the acoustic properties of the room.

For digital productions, the Ellipse iDP monitors the digital signal by feeding the monitor with an AES/EBU signal. Analog inputs also are provided.

The pod-mounted SuperTweeter sits atop the Ellipse iDP and uses a dome with a rare earth magnet. The SuperTweeter is time-aligned to the Dual Concentric. The crossover frequency is at 20 kHz, away from the frequency band where stereo location information is concentrated. Tannoy says that while listening at 1 meter on axis with the high frequency horn — the point where the signals synchronize — the SuperTweeter is undetectable as a separate source.

The TS8 and TS10 compact sub woofers are less than one cubic foot in size, and improve the performance of stereo or multi-channel loudspeaker systems.

For more information, including pricing, contact Tannoy in Canada at (519) 745-1158 or visit www.tannoy.com.

Yamaha Has Nearfield Monitors, Power Amps

Yamaha's biamped MSP10 Studio nearfield monitor speakers have a 4-ohm, 8-inch cone woofer driven by a 120W power amplifier, and an 8-ohm, 1-inch titanium dome tweeter driven by its own 60W power amplifier.

The company says this results in balance between frequency ranges, a smooth HF response beyond 40 kHz and uniform dispersion over 120 degrees. Line-level electronic crossovers have 30 dB/octave roll-offs in both low and high-pass filters for minimal inter-modulation at the crossover point and better midrange.

Cabinets are made of medium-density fiber material and have internal bracing, a 2-mm edge radius and a multiple-layer lacquer finish to minimize resonance. Polypropylene woofer cones include low-damping rubber surrounds and magnetic shielding circuits. Rear panels include balanced XLR inputs, an input sensitivity control, response trim switches for both the woofer and tweeter and an 80Hz low-cut switch. Options include a wall bracket.

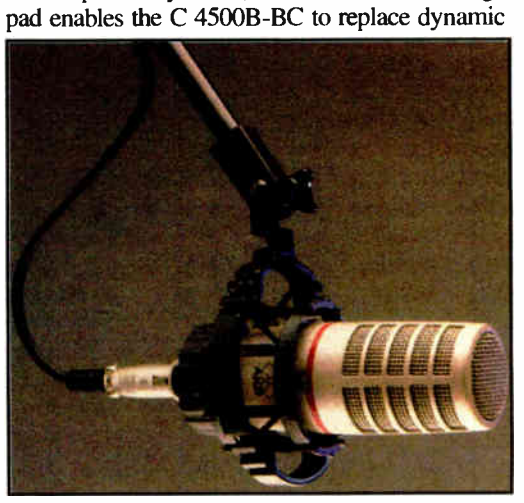
P Series II power amps are for applications that call for high output power in permanent or mobile sound reinforcement. The P2500S, P3500S, P5000S and P7000S deliver power outputs of 250, 375, 525 and 700-watt power per channel into 8-ohm loads. The P Series II offers three output modes: normal Stereo, Parallel and Bridged Mono.

For more information, including pricing, contact Yamaha in California at (714) 522-9011 or visit www.yamaha.com/proaudio.

C 4500B-BC Is a Condenser for On-Air

AKG's C 4500B-BC is a large-diaphragm condenser microphone for on-air broadcast and post-production work that the company says improves upon "old-standard" dynamic on-air units.

It is a font-address cardioid mic with minimal proximity effect, a result of its three-stage pop filter and acoustical design. A 20-dB pad enables the C 4500B-BC to replace dynamic mics without major gain structure adjustments, while a 120-Hz roll-off filter allows further reduction in low frequencies if needed.



AKG's C4500B-BC is a front-address cardioid mic with minimal proximity effect.

The C 4500B-BC is protected from RF and EMI from digital gear and video monitors, enabled by its metal housing and transformerless output circuit. AKG says "voice-friendly" response tuning gives the mic a dramatic sound with full frequency response, dynamics and intelligibility. The microphone comes with an H 100 shock mount and a W 400 foam windscreen.

For more information, including pricing, contact AKG in Nashville at (615) 620-3800 or visit www.akgusa.com.

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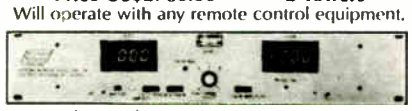

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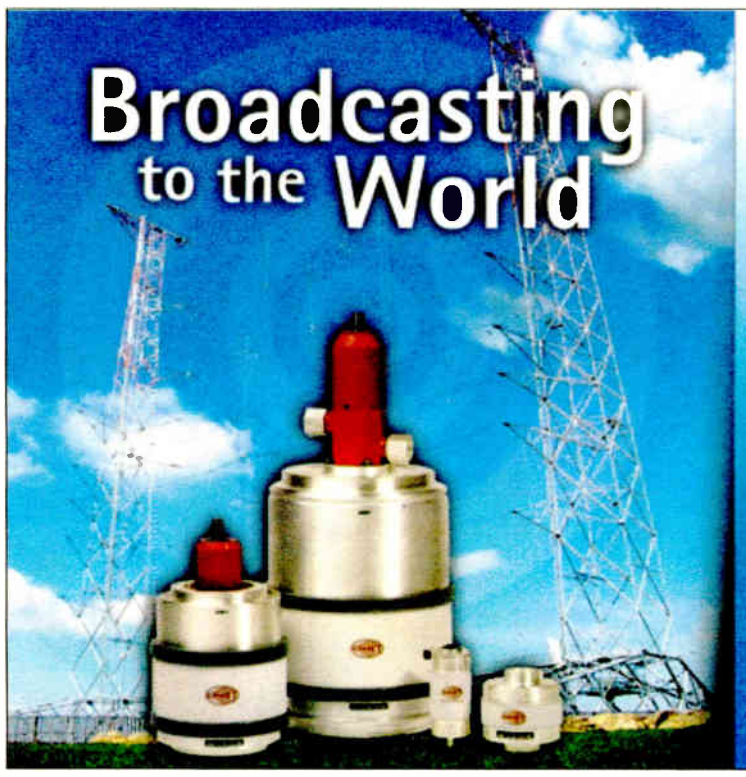

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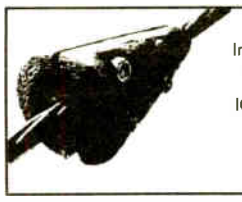

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AUTOMATION EQUIPMENT

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Scott Studio Gear – DOS. Complete systems and components. Please write for list and photos: scottgear@earthlink.net.

Scully 270 1/4" r-r tape decks (4); (3) Otari MX5050 1/4" r-r tape decks; (2) Ampex ATR800 1/4" r-r tape decks; (2) Dolby 361 NR Units; (1) Magnatek VE1000 Profiler; (1) RCA BCA 15A/BCA 15B automation programmer. All equipment is mounted in 19" racks & can be removed intact or taken separately. All reasonable offers considered. Equipment was working when removed from service, but is to be sold "as is". Paul Byers, WQED, 4802 Fifth Ave., Pittsburgh PA 15213. 412-622-1530; email: pbyers@wqed.org.

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Inovonics Model 222 "NRSC" (AM) audio processor with instruction/ maintained/operating manual, 1500. Don De Rosa, WAMF, 174 Lakeshore Rd, Fulton NY 13069. 315-593-1300.

Want to Buy

Teletronix LA-2A's, UREI LA-3A's & LA-4's, Fairchild 660's & 670's, any Pultec EQ's & any other old tube compressor/limiters, call after 3PM CST, 972-271-7625.

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Gentner VRC-2000, $1295; **Gentner VRC** relay panel, $150; **Gentner** remote control barrier strip panel, $95; **Gentner VRC** antenna monitor interface, $250. Gary Wachter, KKDA, 621 NW 6th St, Grand Prairie TX 75050. Email: garyw@k104fm.com.

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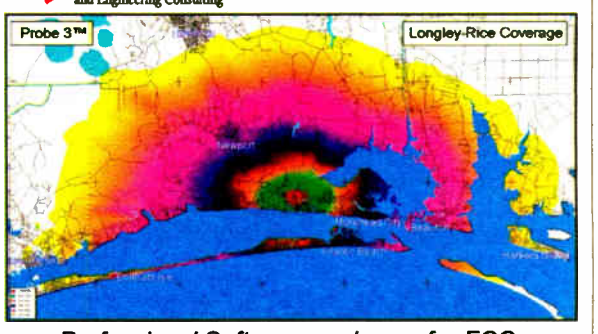

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Want to Sell

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Audio Arts 8400 Distribution Amplifier. We have about 15 of these as a result of studio renovation. They cost over $1,100.00 new but will sell "as is" for $175.00 each plus S&H. Contact Michael Raley at (704) 523-5555 or e-mail Mraley@rrb.org for a picture.

Audio Cord Cart machines. We have about Several "E" series playbacks at $20.00 each, 10 "DL" series playbacks and two "A" series playbacks at $20.00 each. Most of them have been refurbished. We also have one "A" series P/R mono, two "E" series p/r mono and two "DL" series p/r mono. No connectors are available. Will sell "as is". Shipping and handling charges apply. Call Michael Raley @ (704) 523-5555 or e-mail Mraley@rrb.org for some pictures.

Enberg BA - 6 Announciator. Have several of them in great condition with no more than eight years of use in them. Original cost was $359.00 each but we will sell them for $ 175 .00 each "as is" plus s/h. Call Mike R at (704) 523-5555 or e-mail Mraley@rrb.org for more information.

Ten Nidec motors for Audio-cord "E" series. 117v 6H 3.1w 0.2amp 12p and 600rpms. Will sell "as is" for $5.00 each. Working condition just somewhat noisy. Call Michael Raley (704) 523-5555 or e-mail Mraley@rrb.org.org for pictures.

STUDIOS (WTS) Cont.

TFT 713 AM Frequency and Modulation Monitor. Cost $3,400.00 new but will sell for $1500.00 plus S&H. Needs re-calibration. Call Michael Raley at (704) 523-5555 or e-mail Mraley@rrb.org for a picture.

Two Denon DNM 1050R Professional Mini-disc Rec/PB Deck. Both units manufactured in 2001 and were used on our test bench in our downlink room. Has low impedence and headphone jack. We are asking $5 00 .00 for each unit plus shipping and handling. I can e-mail two pictures and the "Main Features" portion of the manual. Please contact Mike Raley or Ron Muffley at (704) 523-5555 for more information or e-mail Mraley@rrb.org for pictures.

Two RTS 416 Distribution Amplifiers. Has slight problem pushing +4. Cost $1,173.00 new but will take $325.00 for each unit plus S&H. Call Michael Raley at (704) 523-5555 or e-mail Mraley@rrb.org for a picture.

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Drake Chenault time announce carts, Contempo 300 music reels, any condition. Chuck, 570-434-2782.

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TELEPHONE EQUIPMENT

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TEST EQUIPMENT

Want to Sell

Potomac QA-100 audio program analyzer, $750.00 Gary Wachter, KKDA, 621 NW 6th St, Grand Prairie TX 75050. Email: garyw@k104fm.com.

Want to Buy

3-5KW air-cooled 50-OHM dummy load suitable for FM or higher. Chris Hood, 5 Harrison St, Crafton PA 15205. 412-921-2911/leave message.

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McMartin BF-5K, 5kW FM. Factory rebuilt in perfect, like new condition, includes new tubes, tested & tuned on your frequency. Guaranteed, fully adjustable from 0 to 5.5 kW. Goodrich Enterprises Inc, 402-493-1886.

Broadcast Electronics FX-30, excellent condition, $1000. Carol or Hugh Ellington, WKNU, POB 468, Brewton AL 36427. 251-867-4824 between 8AM-4PM Central Time.

Collins 830-1D 1KW FM xmtr, tuned to 89.1MHz, includes 310-Z1 exciter. Located 30 miles south of San Jose CA, $2500/negotiable, FOB San Jose location. Brant Herrett or Terry Green, KUSP, 203 8th Ave, Santa Cruz CA 95062. 831-476-2800 or email: brant@kusp.org.

Collins 830-D, 1 KW FM transmitter with exciter, tuned to 89.1 MHz, good condition, $2500. Bill Barry, WAMB, 1617 Lebanon Rd, Nashville TN 37210. 615-889-1960.

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USED AM TRANSMITTERS

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TRANSMITTERS Cont.

Gates-Harris FM 3H 3000W transmitter, currently in use, being replace with new transmitter, $995. Carol Ellington, WKNU, POB 468, Brewton AL 36427. 251-867-4824.

Sparta-Bauer 602A/625A FM 25KW w/harmonic filter and 6-bay SWR #1 power antenna; also **Gates 3H3** 3.5KW FM w/filter,both working when removed from service, BO. Bob Zellmer, New Directions Media, 27610 N Desierto Dr, Rio Verde AZ 85263. 480-471-3533.

QEI FMQ series 6.0 to 9.6FM. This xmitter did a tour of duty in Argentina but some goofy laws in this country made it impossible to permit the station to operate at this power. To make a long story short it was only in operation no more than four months. Will let this go for $18 ,000.00. Call Mike Raley at (704) 523-5555 or E-mail Mraley@rrb.org for pictures.

Gates 3H3 3KW FM, newer tube and rectifiers, no exciter, BO. Kurt Tuckerman, Radio Marti, 4201 NW 77th Ave, Miami FL 33166. 305-437-7055.

RCA BTA1S 1000/500 watt broadcast band transmitter. New matched pair of 400-C power tubes in transmitter, with spares. AM crystal oscillator at 1300 in xmtr, with manual. Power tubes in service 11-22-03, xmtr out of service 6-15-03, $3000. Don De Rosa, WAMF, 174 Lakeshore Rd, Fulton NY 13069. 315-593-1300.

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Recent ABS grad, creative writer, a natural at production with great voice, willing to travel and do what comes naturally. Tony, 405-376-5169, 405-206-3322.

Recent ABS graduate proficient in boardwork, voiceovers, Cool Edit, on-air. Flexible in formats, willing to relocate. Jacqueline Snipes, 214-282-3155 or jdsnipes930@cs.com.

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Broadcasting School graduate, willing to relocate, can go anywhere, can do anything, digital to news, the right man for the job, call David, 405-408-9691.

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Energetic ABS graduate seeking a FT or PT job in radi or sports. Willing to relocate. Mike 405-229-9406.

Energetic sportscaster, with knowledge in sports and broadcasting, will travel to make your rating rise, contact David at 918-288-7924 or 918-606-0262.

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***Closing for listings is every other Friday for the next month's issue. All listings are run for 2 issues unless pressed for space or otherwise notified by listee.**

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ADVERTISER INDEX

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Radio World, April 7, 2004

A Classic Makeover for KRE

Historial Society Seeks Help as It Plans A Working Vintage Radio Station

by Mike Adams
Chairman of the Board
California Historical Radio Society

What do you do with an unused, unwanted radio station?

Normally you tear it down and walk away, and a piece of history is gone forever. Now, after a year of negotiation, the California Historical Radio Society has signed an agreement to take over the 1937 KRE(AM) building in Berkeley.

We plan to restore it to its 1950 appearance and use it for society headquarters as well as a Bay Area radio and broadcasting museum. CHRS will occupy 4,600 square feet — all of both floors except for a transmitting facility in the rear, which continues to be a working broadcast site.

KRE looked like this in the late 1940s and early '50s.

A front view of KRE today.

Wolfman Jack's part in the 1973 George Lucas film 'American Graffiti' was filmed in the KRE studios.

Inner City/KBLX(FM) President Harvey Stone hands over KRE to CHRS President Steve Kushman.

The volunteer clean-up crew poses in front of the building.

Technology roots

CHRS was chartered 30 years ago as a non-profit radio history organization. Our original goal: the study and preservation of old radio technology.

Although we are based in Northern California, heretofore we were "virtual." We maintain a presence on the Web and a newsletter with a San Francisco mailbox address, and we host monthly meetings, flea markets and displays. We were a major contributor to the fine old radio exhibit at the San Francisco Airport several years back. Many of our members are current and retired broadcasters and engineers. Our president is three-time Emmy winner Steve Kushman, a longtime KGO(TV) video editor.

KRE, a 1,000-watt station at 1400 kHz, was one of the original three-letter calls. According to John Schneider, Bay Area broadcast historian and sales representative for Broadcast Electronics, it was licensed in 1922; its ownership then passed among an electric company, a newspaper and several religious organizations.

In 1937, the Congregational Church built a single-story structure for the station, with two small offices, a studio complex and a transmitter room.

In 1950 a second story was added and used for sales offices, management, promotion, traffic and accounting. The studios, transmitters and production remained on the first floor.

In the 1970s, KRE followed the path of many low-power, local-channel AM stations. It changed format to try to hang onto a dwindling audience. It confronted the challenges of FM, deregulation, ownership changes and pressures to automate. It also faced the reality that in major-market California, many stations were worth more as real estate than broadcast properties.

The station was well situated for transmission. Built on landfill in the Berkeley wetlands, the facility is perfect for AM transmission. But the site — which was home not only to the entire KRE operation but also the air studio, sales and promotion offices of sister station KBLX(FM) — grew undesirable as it became surrounded by freeways in a low-income industrial neighborhood.

KBLX and KRE moved to San Francisco in 1993, but the back part of the building remains on the air as a transmitter site for KRE, now KVTO(AM), which airs Asian programming, as well as KFRC(AM), a highly-rated San Francisco oldies and sports station.

KRE had its 15 minutes of fame in the 1973 George Lucas film "American Graffiti." The parking lot, front exterior door and combo studio were seen in the Wolfman Jack sequences.

In 2002 we approached the owner of KRE/KBLX, Inner City Broadcasting, with a proposal to restore and occupy the studios and offices and dedicate them to radio history.

Attorneys worked out a long-term lease agreement: CHRS will not pay rent but is responsible for insurance, repairs, security and the non-transmitter part of the utility bills. Because some of our members are local broadcast engineers, Inner City trusts us to coexist with and respect the KFRC/KVTO technical facility.

Imminent domain

We took possession of the building on Jan. 1, but the public is only invited a few at a time, to observe the work in progress. If our plan comes to pass, visitors eventually will be able not only to visit our restored 1950-era facility but look through the old studio window and take transmitter readings every half hour if they wish to recall earlier days. (Younger readers will not remember that until the 1980s and deregulation, those all-important readings of the transmitter's vacuum tube plate voltage and antenna current had to be written down every 30 minutes, under penalty of FCC law.)

For the California Historical Radio Society, this is the "Now what?" moment: the difficult part, the restoration. This is why we are reaching out to the broadcast community.

As the photographs show, the building is a run-down graffiti magnet. While the California Department of Transportation continues to repair the fence, neighborhood kids seem to like this formerly abandoned location as a giant art studio. We will be installing security devices and painting with graffiti-proof paint, but keeping the exterior clean will be a challenge. We hope to have enough events and traffic to solve some of these problems, and hope to see fans of old radio happily picnicking on the banks of our adjacent lake after touring our radio station museum.

Photos wanted

CHRS plans an exciting future for KRE. We propose a working vintage radio station, a library and a radio repair shop. But we are just beginning the cleanup — tossing out old furniture and paper, storing any broadcast technology worth saving. This includes a half-dozen Ampex open-reel machines and other control room support technology as it was in the 1970s.

In the 1960s, KRE/KBLX partitioned the large main studio into several smaller ones. The original studio's double windows are intact under the partitions. We plan to bring the larger 1950 studio back to life with original furniture and technology and use it for meetings and historical presentations. On the second floor, a large room will house the extensive CHRS/James Maxwell library.

We have a business and restoration plan; we are seeking supporters who can donate paint, carpet, windows, furniture, equipment, time and cash. We are seeking carpenters and other restoration artists who can volunteer to bring KRE back to the way it looked in 1950.

To accomplish this, we need photos of KRE in the 1940s, '50s and '60s. We have Schneider's excellent history of Bay Area radio with a few 1930s KRE photos, but we need interior and exterior detail to make this tattered station sparkle again.

An appeal to broadcasters: Were you there? Did you ever work for KRE? Did you take any photos? Do you have any broadcast studio technology, signage or memorabilia that you would want displayed in our museum?

We want KRE to be a museum honoring all of broadcasting. We want you to be a part of this. We need plenty of help from the radio history community.

For more details on the proposal, the lease signing event, a history of KRE and many photos of the ongoing cleanup and restoration of KRE, visit our Web site at *www.californiahistoricalradio.com.*

The author is the chair of the department of television, radio, film and theatre at San Jose State University and advisor to its radio station, KSJS(FM).

◆ READER'S FORUM ◆

Healthy Priorities

I read with interest Guy Wire's RW Online article "Sobering Realities for Engineers," as well as Alan Peterson's "Rethink Those Personal Priorities" in the Feb. 1 issue.

Both articles made really good points, but to me there is one more important aspect of your self-assessment: your health.

Many of us are too busy to make that annual trek to the doctor. We figure we're not feeling that bad, and there's so much to do, so we put it off. In my case, I had put it off since the late 1980s.

It took feeling tired all the time to finally get me to the doctor last August. He informed me I had a severe case of Type 2 diabetes. The scary thing? I didn't have any of the classic diabetes symptoms, just the constant tiredness.

After nine months of treatment, the diabetes is under control and I feel a *lot* better. Another bonus: I dropped over 40 pounds by switching to a low-carb diet. I never realized how bad I was feeling before I went to the doctor.

So as you're assessing your goals in 2004, be sure to assess your health. It's better to know if something is wrong.

Rich Petschke
Radio Technology Manager
Fisher Radio Seattle
Seattle

Down on the Farm

The Feb. 11 issue features the article "Consolidation Muffles Farm Radio." This is not entirely true. Although many radio stations are dropping daily farm programs, farm radio networks are expanding. Advertisers would now prefer to buy entire states or regions instead of trying to figure out which local stations cover their prospects.

In many cases, farm radio is not muffled but expanded due to consolidation.

— Edwin L. Slusarczyk

We have two Cornell University School of Architecture grads voicing our programs, along with regular feeds from the USDA and farm organizations providing farmers with information they need to make management decisions. With 136 affiliates, we cover the Northeast. We have about 15 other stations that would like to join our network, and we will add some of them. It's not affordable to pay a farm radio professional in these days, as farm revenue is down for individual stations because networks deliver more farm listeners per dollar.

We belong to the National Association of Farm Broadcasters and have received their Hall of Fame award. Membership continues to decline as networks grow to the point where one or two farm broadcasters serve an entire state or a cluster of states. Surveys show that farmers depend on farm radio for educational, informational and profitable news, and listen for several hours a day.

In many cases, farm radio is not muffled but expanded due to consolidation.

Edwin L. Slusarczyk
President
Ag Radio Network
Utica, N.Y.

How to Submit Letters

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

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

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

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

We Need Better Documentation

It would be difficult to find an engineer who hasn't at one time or another been frustrated by the poor quality of the technical manuals that come with some of today's broadcast gear.

Among the complaints: setup and alignment instructions that are difficult to understand; errors in schematics and connector diagrams; incomplete information; and manuals that have been translated into English by non-English speaking writers.

All of this comes at a time when equipment is more complicated and specialized, and engineers are struggling to keep current with their technical skills. Ironically, some of the best-written manuals for broadcast equipment appear to have been created when cart machines, consoles and transmitters contained simple circuits that were easy to understand.

We're living in times of profound change. Information technology has revolutionized the radio industry over the past 10 years, and telematics — the merging of information and telecommunications technologies — appears about to revolutionize it again. Engineers need access not only to current online documentation about products they must install and maintain, but also supplemental information about the technologies themselves.

While many manufacturers provide electronic copies of manuals, many still do not. And there appears to be little interest on the part of companies in investing in the continuing education of broadcast technical personnel.

In the computer industry, one often hears the phrase "training and documentation," indicating the close alliance between the two disciplines. Seldom is this term heard in broadcast circles.

We commend those manufacturers who provide detailed, informative documentation. We feel the industry can do much better. A broadcast manufacturer who will take the lead in providing not only timely and accurate online documentation about their products but also background instructional material on the underlying technology would asssume a leadership role in the industry.

— RW

While reading through the Feb. 11 issue of Radio World, one of my favorite periodicals, I arrived at the article, "Consolidation Muffles Farm Radio." I agree with the author that farm radio is not what it used to be.

However, maybe the statement should be a question: What is farm radio?

We've heard about the loss of WGN(AM) and WCCO(AM) and other stations who have carried the banner of Farm Broadcasting for 50 to 75 years. It is sad to see them go. But thanks to the era of consolidation mentioned in the article, a new era is opened for small broadcasters.

KFLP(AM) is licensed to Floydada, Texas, and is beginning its ninth year of farm broadcasting in West Texas. What began in 1996 with 30-minute daily reports has grown into the only all-farm station in the state, serving the largest cotton-growing region in the United States and home to influential leaders in agriculture, including former Chairman of the House Ag Committee Larry Combest and his counterpart Charlie Stenholm, authors of the current Farm Bill.

So how can a small-market station deliver "All Ag, All Day?"

First, it takes a dedication by the station owners (locally owned) to commit the resources. We have two full-time employees who provide content for more than six hours of locally originated programming every day. It's not easy and the days are long, but it is truly a service to the listening area.

I agree with Mr. Root of the NAFB about the future of the Ag broadcaster. He expects to lose more members in the coming months due to cost-cutting measures by corporate owners. The future of terrestrial radio actually lies in the small markets where creativity still exists — and where breaking even is an accomplishment.

Thank you, WGN, for delivering the message over the last 50 years. We will miss you.

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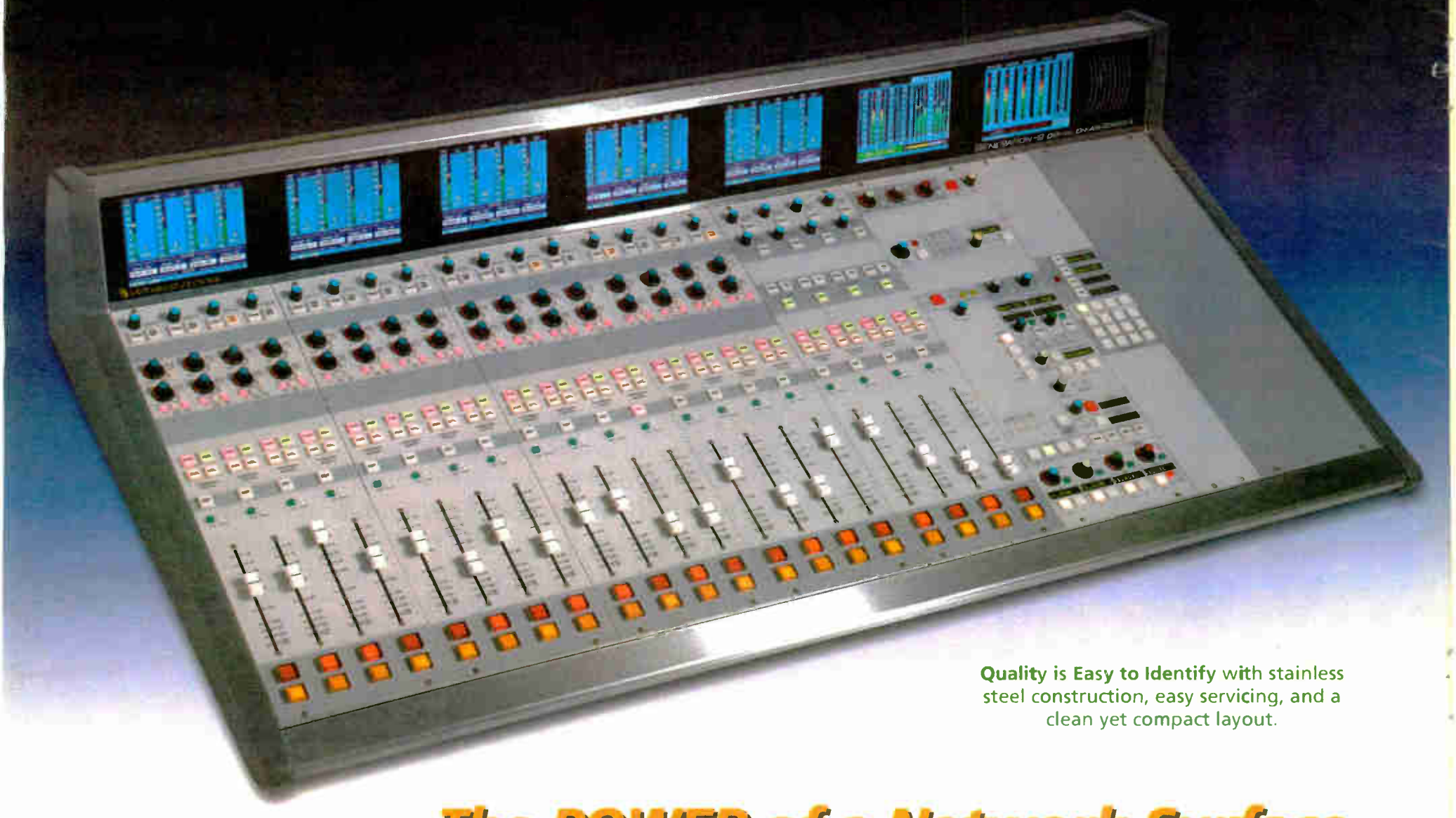

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