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# **IBOC, Pro and Con**

Digital radio is closer than ever. Is that good news? Two views.

# **Cumulus Rebound**

Lew Dickey eyes bigger markets and reflects on turbulent times.

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The Newspaper for Radio Managers and Engineers

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# STUDIO SESSIONS

▼ Audio restoration from Tracer Technologies and conflicting opinions on a Sony portable MD.



Radie Werld WHAT ENDERS' CHO

▼ In our new contest, RW awards a sophisticated ESE timepiece to a reader in Kansas.



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# Data U.S. Shuts Down

WARRENTON, Va. Litigation is pending in the wake of a decision by Management Data Media Systems to close its doors after two years of operation in the United States.

The German-owned media management company filed for bankruptcy on Oct. 2, 2001 following a move by its parent company to sell its two European-based affiliates, OmniBus Systems Ltd. and D.A.V.I.D. GmbH. Both companies continue to sell products in the United States.

#### Cash flow problem

Company officials declined to comment citing pending litigation filed by creditors.

A source close to the firm said the U.S. entity declared bankruptcy because of the parent company's inability to sustain cash flow due to delays in introducing software upgrades and a weak business climate worldwide.

In July 2000, the parent company, Management Data Media Systems AG, filed an appeal for insolvency in Germany after its primary stakeholder went bankrupt

See MD, page 8

# Management Pubcasters Fight **Shaky Footing**

Listener Support Strong, But Stations Still Worry About Future Corporate and State Funding

by Naina N. Chernoff

Many non-commercial radio stations have done well in recent pledge drives and are looking forward to 2002 on better financial footing than they had expected, despite the expected funding effects of terrorist attacks and the recession.

But many experts say public radio still needs to close the financial gap in its budgets left by shrinking funding from corporate donors, state agencies and the federal government.

At a time when the nation has been in recession and large numbers of people are donating to help victims of Sept. 11, public radio stations nervously began their pledge drives in the fall, not knowing what type of response they would receive.

See FUNDING, page 6



New Hampshire Public Radio's Shay Zeller, Producer, and Jon Greenberg, Director of New Media, at Flagship Station WEVO(FM), Concord



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**World Radio History** 

# **FCC Seeks Input** On FM IBOC

WASHINGTON The FCC wants public comments on a report from the National Radio Systems Committee, which recommends that Ibiquity Digital Corp.'s FM system be adopted as the in-band, onchannel digital radio system for FM in the United States.

This is the only terrestrial DAB system currently under consideration by the commission. Comments on MM Docket 99-325 are due Feb. 19.

The NRSC report evaluates the extensive laboratory and field-testing of the

Ibiquity hybrid mode FM IBOC DAB system, and contains conclusions and recommendations to the agency. The FCC seeks comment on the report, its conclusions and recommendations with respect to the commission's DAB policy goals and selection criteria.

In addition to the test results on file, additional testing is required. The Ibiquity FM IBOC tests evaluated by NRSC were conducted using MPEG-2AAC perceptual audio coding. Ibiquity intends to redo some tests using the Perceptual Audio Coder acquired in the merger with Lucent Digital Radio.

Ibiquity will submit a report for evaluation on the updated tests. In addition,

Ibiquity hopes to complete testing soon to determine the impact of FM hybrid mode operations on the reception of analog FM subcarrier transmissions. The FCC also will seek public comment on these results.

# Arbitron Ready For PPM Phase 2

**NEW YORK** Arbitron has completed the first phase of its Portable People Meter market trial in the United States and is aiming for broader use beginning this month.

The PPM is reporting higher total-day

average quarter-hour estimates for consumer use of electronic media, compared to the diary method of tracking ratings.

This, Arbitron says, means the metering system is tracking media exposure missed by current techniques.

Results are from the initial PPM trials in the Wilmington, Del., area. When expanded, the effort will include 1,500 people in the greater Philadelphia area.

'Our success in the first phase of the U.S. market trial keeps us on a fast track to deploy the Portable People Meter in local markets across the United States,' said Marshall Snyder.

Nielsen Media Research is providing financial support for PPM development and has an option to join Arbitron in the commercial deployment of the device in the United States.

# **Ownership Comment Deadline Extended**

The FCC has extended the comment deadline on the cross ownership issue and the associated waiver policy, to Feb. 15, 2002. Several groups said they needed more time to prepare comments.

The Newspaper Association of America opposed the extension, saying the review of the rule that bans one entity from owning both a newspaper and a station in the same town is long overdue. NAA called the request excessive.

The FCC said granting the public the extra month or so was in the public interest. The decision affects MM Dockets 01-235 and 96-197.

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OPINION

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# The Powell FCC, One Year Later

by Leslie Stimson

**WASHINGTON** The FCC saw several changes in 2001: not only a new chairman and three new commissioners, but also a shake-up in the balance of power in the Senate, the effects of a slowing economy and the impact of the Sept. 11 terrorist attacks on the industries regulated by the agency.

When the Bush administration selected Republican FCC Commissioner Michael Powell as the agency's chairman, succeeding Democrat Bill Kennard, Powell already possessed a deregulatory reputation. Since assuming the chairmanship in January, Powell has not disappointed observers who predicted that his attitudes about lessening government restrictions would prevail.

#### **Outdated rules**

During his first year as chairman, Powell directed the agency to review regulations he declared outdated, such as radio ownership regulations and radio market definitions that determine how stations are counted towards ownership limits. Like his two immediate predecessors, Powell pledged to Congress that he would rid the agency of unnecessary rules.

Indeed, in one day, the FCC reduced a backlog of 32 pending radio transactions and the remaining 10 soon after. Some deals had been languishing for a year.

"Avoidance and inaction is not a legitimate government policy," Powell said.

Also in March, Powell outlined plans for a partial reorganization, including the restructuring of the Cable and Mass Media Bureaus into a new Media Bureau, to be headed by current Cable Bureau Chief Kenneth Ferree. Within this bureau will be an Office of Broadcast License Policy, to be headed by current Mass Media Bureau Chief Roy Stewart. By the end of 2001, changes were underway.

In May, three new commissioners came on board to replace Powell and departing commissioners Susan Ness and Harold Furchtgott-Roth.

Kathleen Abernathy, a Republican, served as a legal adviser to former Commissioners James Quello and Sherrie Marshall and was most recently a vice president at Broadband Office.

Republican Kevin Martin previously served on the staff of Furchtgott-Roth and then joined the president's election campaign. He led the Bush transition team on telecom issues and was a special assistant to the president.

Democrat Michael Copps was chief of staff for Sen. Ernest "Fritz" Hollings, D-S.C., and served as assistant commerce secretary for trade development in the Clinton administration.

Commerce Committee Chair Rep. Billy Tauzin, R-La.

In September, the commission began reviewing regulations that bar companies from owning a radio-newspaper combo or a TV-newspaper combo in the same market.

#### 'Fractured' policy

By November, the FCC began a comprehensive review of the local radio ownership rules. It also adopted an interim policy that sets timetables for the commission staff to recommend how to



FCC Chairman Michael Powell

determine technical approaches and costs associated with conducting tests of potential interference and economic impact of LPFMs on existing full-power stations and on the ability of those stations to transition to digital.

It's not clear what happens if the tests do show interference, Powell has said. The FCC needs congressional approval to change channel protections in the LPFM

The end of the year saw a flurry of activity. The commission sought comments on a new broadcast equal employment opportunity proposal, as previous rules were struck down twice by courts as unconstitutional.

It also sought comment on a recommendation by the standards-setting National Radio Systems Committee that Ibiquity Digital Corp.'s system be adopted as the IBOC system for FM in the United States.

Still pending were permanent rules for the terrestrial repeaters for Sirius Satellite Radio and XM Satellite Radio; both were operating under special temporary authorizations.

The end of the year saw the commission one member short. Gloria Tristani left in September, two years before her term expired. She said she would seek the Democratic nomination to the U.S. Senate in 2002, challenging Republican incumbent Pete Domenici.

# Avoidance and inaction is not a legitimate government policy.

Michael Powell

Powell said several times that some media ownership rules needed to be reviewed. The outlook for such change was complicated in June when Democrats regained control of the Senate.

Hollings assumed chairmanship of the Commerce Committee from Sen. John McCain, R-Ariz., who had been committee chairman since 1994.

Powell opposed legislation, introduced in July by Hollings and co-sponsored by fellow Democrats Daniel Inouye of Hawaii and Byron Dorgan of North Dakota, to slow media consolidation.

The legislation, the passage of which was considered a long-shot by some experts, would require the FCC to submit an extensive report to the committee justifying proposed rule changes, and then wait 18 months before eliminating or relaxing the rules.

Several Republican members of the committee support relaxing broadcast ownership restrictions, as does House

resolve the pending assignment and transfer applications.

Powell called the agency's spectrum policies "seriously fractured," and wants them overhauled to help the commission keep up with the "relentless demands" for new spectrum.

He favors fostering the ability of users to transfer spectrum in secondary markets. Current rules impede the ability to do this, he said. Spectrum auctions still figure prominently in the FCC's plans.

LPFM moved to a colder burner in 2001 after being prominently fast-tracked by Kennard's FCC. By the end of the year. the FCC had fully licensed one station, KCJM-LP, Alex. La., and issued some 160 construction permits to others. More than 3,200 applications were pending.

MITRE Corp. was under contract to

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-

innovative solutions



"LPFM station applications are being accepted, and eventually this inefficient use of the spectrum will haunt FM broadcasters, just like the former 10-watt college stations in the commercial band once did. Hundreds of FM allotments are out there with no hope of construction permits being awarded in the near future.'

Fresh Powell

How is the Powell FCC different from that of his predecessors? A sampling of

SBE General Counsel Chris Imlay of Booth, Freret, Imlay & Tepper praised

"Powell is a breath of fresh air, as far as I am concerned. He is the first FCC chairman in my 22 years' experience working with the FCC who has admitted that

there are too few engineers working at the commission; taken steps to increase the

technical staff at the agency; and urged the public to provide technical training (the

FCC 'University' concept) to the incumbent staff. This is a long-overdue series of

on controversial issues such as the NextWave wireless spectrum auction dispute,

radio ownership and EEO. Enforcement actions, investigations and forfeiture pro-

However, doing business with the FCC continues to be difficult, he said.

time, thus money, in excess of the old 'inefficient' paper systems."

Charles Naftalin of Holland & Knight praises Powell for being willing to take

"The Powell commission has not worked out the kinks in the electronic filing,

Another attorney, who did not wish to be named, said that for radio, Powell is a

reporting and registration systems. They continue to be a labyrinth, costing users

comment from communications attorneys shows varied opinions.

policies at FCC. A big 'bravo' to the chairman for that."

ceedings have increased as well, he believes.

wash.

Powell's creation of in-house technical education for commission staff.

# Are You Being Paid Fairly?

by Paul J. McLane

The average radio chief engineer received approximately \$66,000 in total compensation in 2001, according to the NAB report "Radio Station Salaries: 2001." The average assistant engineer earned \$45,000.

How does that stack up against other job categories?

The highest engineering salary reported last year was \$150,000.

However, the top morning drive talent in the survey made \$1.6 million. I wonder which employee would be harder to replace if they quit tomorrow? Clearly, while engineering salaries may have increased over the years, our industry still undervalues technical expertise. C'mon, owners; these guys keep us on the air.

buying the rights to the "bee-doop" from the old Mutual network; hiring a low-paid female sidekick to laugh hysterically every time the announcer gives the time; and using the slogan, "You give us 22 minutes, we'll give you 22 minutes."

Radio World

Now comes a note from Ron Schacht, CE at Citadel of Wilkes-Barre, Pa.

"Paul, over the years, we have put together a series of 'liners' for WWV to use. Mind you, most of them have been thought of at 3 a.m. while using WWV as background audio at some wayward transmitter site.

"I would like to see WWV cart up some of the following:

- 1. WWV: Where the time keeps right on coming!
- 2. All the tick without all the tock!
- 3. WWV: All the time, all the time!
- 4. Your station for time.
- 5. WWV, where you're never more than 60 seconds from the latest time."

Personally I like No. 3 best.



A new radio series aimed at children, "My Wonderful Radio Show," is being produced in Baltimore by Trish MacDonald and Susan Allenback.

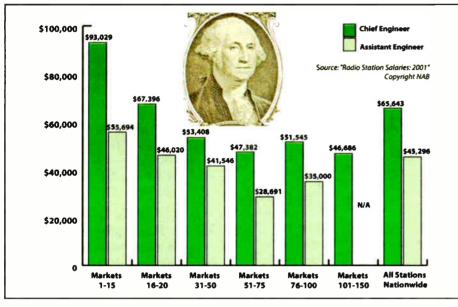
Airing Saturday mornings on WWLG(AM), it is available for syndication. It features wholesome content and — here's what really appeals to me — the format is in the style of old-time radio theater. Each episode features a new radio play, a story from classic literature.

This came to my attention because our long-time contributor Ty Ford plays a number of parts.

The 30-minute Halloween show was submitted to the Society of St. Paul Communicator Awards in Arlington, Texas, and won five awards in categories including excellence in narration, talent and characterization and in writing and creative concept.

If you are interested in programming for kids, how can you resist the likes of Gourmet Goose, Banker Squirrel and the voice of the Satellite Uplink?

Congratulations to the producers and to Ty Ford. For info about the program, call Trish MacDonald at (410) 542-1736.



Average Reported Total Compensation for Radio Engineers

According to the report, compiled by Miller, Kaplan, Arase & Co. in a survey of the top 150 markets, the average general manager received \$243,000; a typical top sales person brought home \$132,000; the average PD was paid \$106,000. The average morning drive talent made \$128,000.

These figures confirm the long-standing impression that engineers are not valued nearly as highly as other members of a station's management team.

In fairness, many other job categories at a radio station pay less than engineers, including the typical midday talent at \$55,000, promotions director at \$47,000 and receptionist at \$22,000.

And some engineers do well indeed.

Salaries vary widely by market size, format and station revenue. Anyone considering a serious comparison of these statistics, for their own careers or to help in managing others, can purchase the full report for \$149.95 from www.nab.org/nabstore.



A couple of months ago, I mentioned that the National Institute of Standards of Technology was surveying users of its time and frequency services, including www

Gary Liebisch of Harris had put together a list of 10 helpful suggestions that WWV could use to hype itself, including



After the smashing success of our Silver Sweepstakes, Radio World is pleased to announce a new prize program for 2002, our Readers' Choice Sweepstakes.

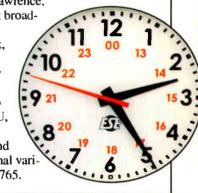
If you have not signed up for this new contest, do it now at www.rwonline.com and your name will be in the pot for the entire year.

Our first winner is Art Hadley, producer/engineer for Audio-Reader in Lawrence,

Kansas. His prize comes from ESE, known throughout broadcasting for its clock and timing systems.

The LX5116L is a 16-inch wall-mount analog clock, designed to operate as a time-code reader, stand-alone clock or impulse clock. It can read, decode and display time information from most master clocks or other source of time code. A DIP switch permits the clock to display time as received from a source of SMPTE/EBU, ASCII or ESE Time Code.

Features include battery backup, time-zone offset and loss-of-code indicator. The prize comes with the optional variable-brightness illuminated dial option. Retail value: \$765.



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# I Radio Goes to the Masses

# Early Adopter Reports Retail Rollout Mixed While Listening Experience Great

#### by Stephen Blum

Satellite broadcasting and retailing consultant Stephen Blum drove from his home off California's Monterey Peninsula to San Diego as XM Satellite Radio began its product rollout in retail locations in the southwest. He returned eight weeks later in mid-November as the rollout expanded and gave Radio World this account.

It works really, really well. That's the good news (or bad, depending on your particular interest) about XM Satellite

One hundred channels of radio, without a hiss, crackle or pop, all the way up and down the California coast.

When XM launched in San Diego in September, I drove down to see what the rollout looked like and to buy a unit for myself.

The sales floor experience was mixed. Of the six stores I visited, only one had a live, activated unit. Some stores didn't have any XM radios in stock yet. Kiosks were missing or half-built. No one had a Sony unit. Alpine and Pioneer were backing the launch, but cautiously.

XM, on the other hand, pulled out all the stops. Every store had some sort of display material visible and, except for Sears, had brochures and well-informed, enthusiastic salespeople.

## Retail floor standard

The benchmark I use for product launches is the introduction of satellite television in 1994. I worked for U.S. Satellite Broadcasting (USSB) then, and participated in the launch of the Digital Satellite System, or DSS, now generally known as DirecTV.

XM easily met the retail floor standard set by DirecTV and USSB, the two service providers for the digital satellite system platform. However, the manufacturers who make XM's consumer equipment fell short of the critical, bet-the-company effort mounted by Thomson Consumer Electronics and its RCA brand during the rollout of DirecTV and USSB.

In about six months, Thomson had shipped more than 600,000 DSS units and retailers had activated about half. It was the fastest new product introduction in consumer electronics history, and it built momentum that continues to drive DBS into millions of new customer homes every year.

Traditionally, consumer electronics products, including mobile electronics mainstays such as CD players and, earlier, FM radios, penetrate the marketplace more slowly. The early indication in San Diego was that satellite radio growth would follow the more traditional curve.

The best XM sales experience was at a Tweeters store in Encinitas, in northern San Diego County. A well-marked Alpine radio filled the demo room with XM's music and news. The sales guy nodded at me as I walked in, and then let me spend the next half hour happily surfing channels. When I was ready to ask questions, he was there with the right answers.

It took me several minutes of questioning to find something he didn't know, but he instantly picked up a phone and called the XM retail support line and got me a fast answer. He was the best of a generally excellent group of salespeople, a fact that I'm sure had something to with his initial objective of selling me about \$2,000 worth of car stereo equipment.

He finally worked his way down to his

billboard. It was the perfect location to deliver a very effective message. Heading south, the first opportunity to

shop for an XM radio was in San Luis Obispo, a college town with a Lombards store just off the freeway. Unfortunately, Lombards didn't have any product, and didn't know when it would be due in. About 35 miles further along, I found a Best Buy in Santa Maria, where I struck pay dirt.

The salespeople at Best Buy do not



XM sends specially painted and equipped cars to consumer electronic retail locations to demo its new service.

cheapest XM package: \$800, including antenna (sold separately) and installation.

I drove home empty-handed, relying on AM radio to get me through the long, radio-sparse stretch from Santa Barbara, up U.S. 101 to Monterey. There's one stretch between Paso Robles and King City that's about as close to the middle of nowhere as you can get, where good signals can't be found at all, and that's where I usually rely on my tape player.

But I resisted buying an XM radio because I wanted the Sony "plug and play" unit that would work in my office as well as my car. Otherwise, I'd have to buy two radios and pay for two separate subscriptions.

Nearly two months later, in mid-November, I hit the road again. Sony was finally getting product into the pipeline, and XM was expanding distribution, first throughout the Southwest, then nationally. This time, I was really ready to buy.

My first stop was a Circuit City in Sand City, just a couple of miles from my

Circuit City had XM-capable product in stock, but no activated units on the sales floor. Instead of XM-supplied display materials, the store relied on generic satellite radio signage that gave equal billing to XM and Sirius Satellite Radio, which is due to launch in February.

The sales guy was a little vague on what satellite radio was all about, but he did have an XM brochure to give me. While I was looking around, a 20-something guy was checking out the car stereos with his dad, and spontaneously started gushing about satellite radio.

He wanted to get it, but he was waiting for the price to come down. He knew more about it than the salesperson.

I headed south on U.S. 101. As I passed King City and entered the sparse radio zone, I saw something new: an XM rely on commissions, so the store tends to be laid out with the "do-it-yourself" shopper in mind. A large satellite radio kiosk was placed right at the front of the car stereo section, and it had a live Pioneer unit that I could play with to my heart's content.

The store even had a Sony unit on display, the first I'd seen in a retail environment. The kiosk had a push-button video display in which the technology, the programming, and both XM and Sirius were explained. The information was easily available and anyway, once you start playing with a live radio it sells itself.

#### A happy man

It took about 20 minutes to find a salesperson who actually knew anything about satellite radios, though. Once I found her, she explained things well and quickly found me a basic Sony unit and the optional home adapter kit. Total price, including tax, was just under \$500. I whipped out my credit card, declared that I would install it myself, and walked out of the store a happy man.

Just to be thorough, I checked out a couple more stores in Santa Barbara. Sears was hopeless, lacking product or salespeople with product knowledge. The Circuit City there was better prepared than the one further north. Circuit City had an activated unit, and Sony product in stock.

My girlfriend, Debbie, was with me this time, and she asked the questions. The best price she could get, though, was about \$700, which involved a higherpriced Sony model and installation.

See XM RETAIL, page 8



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All CT-6 master units also drive multiple analog impulse 12" clock displays. This is an excellent way to inexpensively add analog wall clocks to your CT-6 system.



# Funding

Continued from page 1

In the weeks following the recession declared by the federal government, many non-commercial stations have found themselves depending more on listener contributions as corporate underwriting declines.

Stations went into the drives fearing they would solicit pledges from tappedout listeners. They were wrong.

"With everything that's going on in the world, listeners have been telling us that they value our news coverage," said Joyce Schreiber, National Public Radio director of station development services.

"I think that even in a bad economy, people determine what their priorities are and what's important to them. They see the value of our news coverage."

According to Schreiber, several news and information stations reported successful drives and a rise in new members despite the challenges they faced in having to switch pitches with the type of appeal they were originally planning.

Right after Sept. 11, she and her staff reviewed the pledge-drive materials previously sent out to NPR member stations and made recommendations about what type of appeal would be appropriate for the listeners. She suggested stations not discuss the terrorist attacks directly, but mention the type of coverage they were providing on the events and the aftermath.

Among the stations that used that approach was Minnesota Public Radio, a group of 29 news and music stations in the state. During a 10-day pledge drive in late October, the stations raised nearly \$1.7 million, above its \$1.5 million goal, and saw a significant rise in new members, said Anne Hovland, senior vice president for development.

## 10,000 pledges

Among the 10,000 pledges MPR received, about 46 percent were new or restarting members, up from the one-third of new member pledges MPR usually gains each year. In addition, MPR raised \$85,000 during its pledge drive for WNYC, which needed \$8 million after the terrorist attacks (see sidebar).

Hovland said MPR announcers focused their case for support on the type of coverage MPR was providing on the tragedies and the war. "We didn't shy away from saying, 'We know why you're listening."

Like Schreiber, Hovland attributes the high number of contributions to the quality of news MPR provided as well as the way in which it meets listeners' needs. "We provided solace, a sense of comfort and a thoughtful way to reflect."

Meanwhile, non-commercial stations were getting positive feedback from listeners in terms of financial support by using a similar approach.

Hawaii Public Radio's staff was surprised when it started its fall pledge drive one month after the tragedies and reached its goal of \$247,000 two days early. The station received another \$3,000 in pledges after the drive ended.

"Going into the drive, we had a lot of misgivings because we felt no one would donate to anything other than Sept. 11 causes," said Michael Titterton, president and general manager of the group of five stations. "Because of high-quality news service, a lot of people gave. It's particularly appreciated here because we're so isolated."

While the announcers did not mention



Volunteer Jean Beatty,
Promotion/Development Director
Maureen McCormick and News
Coordinator Jeff Bossert of
WKNO(FM), Memphis, Tenn. The
station surpassed its fundraising goal
and pledged 957 new members.

the events of Sept. 11 directly, they did promote the value of the news service, said Judy Neale, HPR's director of promotion.

Out of the nearly 2,400 pledges Hawaii Public Radio received, Neale said more than 1,000 of those came from new members — a record for the tropical radio service.

But Titterton is hesitant about predicting the same success for the spring pledge drive. The state was just beginning to recover from a 10-year recession, and is now facing significant economic troubles with the decline in travel, which is expected to affect corporate underwriting for the five stations. In addition, traditionally, most non-commercial stations fare better during the fall fundraiser, rather than the spring.

Still, Titterton is confident that despite the recession, the state's loyal public radio listeners will continue to donate. The source of Hawaii Public Radio's financial strength is in the small giver, he said.

With the state of the economy and the reduction in corporate underwriting, many stations are relying more on individual pledges more than in the past.

Despite raising \$5,000 more than its \$175,000 goal in October 2001, WXXI(AM-FM) in Rochester, N.Y., is See FUNDING, page 7

# WNYC Receives Record Donations

**NEW YORK** An outpouring of public support from around the country helped WNYC(AM-FM) finish its late fall fundraising drive with what station officials say is the highest number of pledges ever recorded in public radio history.

The money will help the station cover expenses as it sets up its new antenna site, planned for this month.

After losing transmission immediately following the attacks on the World Trade Center and evacuating its office for nearly five weeks, the New York's City public radio station needed financial support to make up for the \$4 million it had to spend to cover expenses and a \$3.3 million license purchase payment that was due to the City of New York earlier this month.

During its eight-day drive in late October through early November 2001, WNYC received more than 27,000 pledges — three times the normal amount — bringing in a total of \$3.1 million, said WNYC Publicist Emma Dunch. The station is facing bills totaling \$7 million for expenses incurred after the terrorist attacks.

Dunch believes the city's strong spirit drove listeners to pledge to WNYC.

"People have really begun to understand what a community this is," she said. "It's a very strong sense of New Yorkers pulling together to put our city back on its feet."

Thanks to the efforts of other public radio stations to raise funds for the beleaguered station, WNYC will receive another \$250,000 from listeners across the nation in the coming months.

The effort originated from Minnesota Public Radio in October. MPR sent a message to other public radio stations encouraging the pubcasters to ask their local listeners for contributions to help rebuild WNYC. A half-dozen stations responded and used a template letter created by MPR to obtain a waiver from the FCC for the unique type of fundraising, said Anne Hovland, MPR senior vice president for development.

By December, WNYC had received or seen confirmation of donations from MPR, which raised \$85,000; Vermont Public Radio, which sent a check for \$57,000; KPCC(FM) in Los Angeles, which contributed \$36,000; and KCBX(AM-FM) in San Luis Obispo, Calif., which raised \$9,000.

Efforts at other stations were being explored, including KQED(FM) in San Francisco, which plans a fund drive for WNYC in the spring, and WYSO(FM), which began a drive in December.

According to Hovland, the stations saw the value of helping WNYC.

Despite what happened to operations on Sept. 11, "WNYC was able to provide coverage, which was extremely important to our coverage," Hovland said. "The effort reinforced the public radio community."

Though the \$3.1 million and the other pledges will help significantly, Dunch said WNYC is still facing a difficult financial struggle with corporate underwriting slowing down and a shortage of \$4 million to cover the rest of the expenses from the attacks and the license payment. The station was also planning to set up its new antenna site at the No. 4 Times Square building this month, when it hopes to return to full power.

"Even though the response has been phenomenal, there are still challenges for us," Dunch said. "We're fundraising all the time."

- Naina N. Chernoff

# **Public Service Announcement**

The BlueBox is a new POTS codec from Comrex. This codec delivers the audio quality of our Matrix and Vector codecs (15 kHz on a standard dial-up line) at the entry-level price of our HotLine, just \$2800. It also adds features such as wireless operation, field upgradability, and a cellular hands-free interface, and remains completely compatible with all our POTS codecs.

Since the HotLine is so popular, we decided to provide a "heads up" in advance of replacing it. To this end:

- The BlueBox will begin shipping in February 2002, and the HotLine will be taken out of production.
- 2) We'll continue to support the HotLine for many years to come.
- 3) If you can't wait for the BlueBox, you can buy our remaining HotLines at the new price of \$1995 (while supplies last!)

We at Comrex hope this helps. If you want to talk about the options or try a demo of any of the Comrex codecs, give us a call at 800-237-1776.

If you want a small 15 kHz POTS codec that can also work on wireless circuits but only want to pay

\$2800, you can wait and buy the BlueBox in February.

Choice A
The BlueBox: \$2800

Choice B
The HotLine:
\$1995

If you need a POTS codec today,
if 7 kHz is more than enough, or if you just want
to save money, you can purchase the HotLine for
\$1995. But don't delay, there is limited
stock available.



Comrex Corporation, 65 Nonset Path, Acton, MAOd 720 USA Tol: (978) 263-1800 Fax: (978) 635-0401 Email: info@comrex.com

# Funding

Continued from page 6 experiencing the domino effect of the lack of corporate and government support.

Many corporations have donated to Sept. 11 charities, so the amount of grant funds has declined, said Norm Silverstein, WXXI president and chief executive officer. In New York, he said, much of the state funding has gone to the terrorist attack victims and their families in New York City.

When it began its pledge drive in October, Silverstein said the station was making up some of the funds that went to providing extra coverage immediately following the events on Sept. 11. Because of the increased coverage, the news station actually brought in more pledges than its classical music sister station — a first in the six years Silverstein has served there.

He attributes the rise in pledges for the news station to increased news coverage and the heightened interest in international affairs, which he believes is public radio's strong suit.

In addition, the stations provided airtime for community forums, concerts held to raise funds for the Sept. 11 charities and other programs to help the community heal.

Like many communities, Rochester, the home to corporations such as Kodak, Xerox and Paychex, is showing signs of an economic slowdown. Silverstein is watching the situation closely and remains optimistic that corporate support for public radio will resume next year.

#### State pinch

The station's capital campaign is lagging for now, Silverstein said. WXXI has raised \$3.5 million so far of the \$8 million the station had projected.

"The state support is not there and there's not much federal support either," he said.

The station is working on becoming a major giving destination and implementing a planned giving program, he said.

Others are feeling the pinch from the lack of state funding indirectly.

WDAV(FM), a classical music station outside of Charlotte, N.C., that airs NPR news updates, raised more money during its October pledge drive compared to the previous fall. But Development Director Jill McGuire still worries about making up the difference. The station missed its \$125,000 goal by \$9,000.

#### Please note

The **Matrix** with its modular design is available if you want the ultimate in flexibility and future-proof ability.

If you need the convenience of an integrated 4-channel mixer, the **Vector** is available.

The Matrix Rackmount is an appropriate studio version for any of these portable codecs.



On the Web: www.comrex.com

WDAV receives no state funding, McGuire said. Because economic conditions are tough, the station now is competing for corporate grants against many more not-for-profit organizations.

Moreover, McGuire said, fundraising for music stations such as WDAV is a tougher sell compared to a non-commercial news station, especially at a time when people are tuning into the news more often.

#### Healing music

For that reason, WDAV changed its pitch this fall to focus on a singular theme: the healing power of music, or, as McGuire puts it, "music that moves you." Following Sept. 11, the station has played music corresponding to the feelings of the nation such as requiem masses.

Listeners, she said, valued the music,



New Hampshire Public Radio's Vice President Cathy Ives and Laura Knoy, Host of 'The Exchange,' a Statewide Call-In Program

turning to it as a source of comfort after the terrorist attacks, and appreciated the short newscasts at the top of each hour WDAV aired.

"It allowed them to stay in touch but not get inundated," McGuire said.

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#### Continued from page 1

During the early fall, the German company laid off half of its 300-person staff. It later announced it had found new investors and was planning to return to its core business, radio products for the European market.

#### **Customer support**

In October, the U.S. company followed suit, transferred some of its nineperson staff to the U.S.-based office of D.A.V.I.D, and laid off others. The company declined to comment on how many systems it had sold to U.S. broadcasters.

According to the source, sales were low because many stations in the U.S. market could not afford Management Data's large-scale products, priced in the six-figure range. The products, the source said, were appropriate for broadcast radio groups and networks because of their ability to manage up to 700 users.

Despite the bankruptcy, Management Data customers will get support for their products thanks to the spin-off of D.A.V.I.D.

D.A.V.I.D., which has a U.S. office in Management Data's previous building in Warrenton, Va., and is headquartered in Munich, will support the radio customers and provide updated contact information.

Ray Miklius, vice president of studio systems for competitor Broadcast Electronics, believes the products D.A.V.I.D. is selling have promise and could potentially create competition for other automation companies selling to non-commercial stations. The systems, he said, were designed for broadcasters

However, Miklius said foreign-owned companies face an uphill battle in building a customer base in the United States, especially during an economic slow-

An executive of another competitor, ENCO Systems, agreed.

"It's tough for somebody new to come into this market," said Don Backus, vice president of sales and marketing. "When people are buying these products, they're looking for a track record."

Backus said the automation market has not changed substantially since Management Data went into liquidation.

Miklius believes the hard-disk automation arena is in a period of vendor consolidation. Many broadcasters have purchased systems that will last them for the next few years while others are holding off on a purchase because of the economy.

"With advertising slowing down, these systems are being considered a discretionary expense," he said. "The strong will survive and the weak will get sucked up."

- Naina N. Chernoff



The Dorrough Loudness Monitor

NEWS WATCH

# TV Raises Liquor Issue Again

The soft economy has some broadcasters accepting ads they might have felt squeamish about before.

Following in the steps of some local stations, NBC-TV is the first network to break the industry's voluntary ban on liquor ads. Industry experts were watching during the holidays to see whether the network's move would signal the beginning of broader airing of ads for hard liquor.

NBC has 19-point guidelines for such ads, such as limiting them to hours after 9 p.m. and mandating that the actors in the spots must be at least 30 years old.

Some liquor categories have had flat sales for several years. In 1996, the Distilled Spirits Council of America began to lobby stations to air hard liquor ads.

DISCUS says some 400 local TV stations, 2,000 radio stations and numerous cable networks have aired such ads over the past five years. But NBC is the first network to do so.

Some broadcasters have feared a public backlash to liquor ads, worrying that Congress could then ban all alcoholic beverage ads, including beer and wine. Beer is a big ad category for radio. Beer companies reportedly spend about \$350 million in advertising; 85 percent goes toward print and \$55 million is split between TV and radio.

DISCUS argues that liquor and beer ads should not be treated differently and that liquor is a legal product. Its members "have a longstanding tradition of social responsibility. Their commitment to responsible advertising will remain regardless of the medium," said association President Peter Cressy.

NBC briefed members of Congress as well as the advocacy group Mothers Against Drunk Drivers in an effort to smooth criticism of its plan. MADD finds NBC's guidelines reasonable.

"It is our understanding that the ads will comply with MADD's alcohol-advertising position and will air late at night during programs that target 85 percent-adult audiences," MADD said in a statement. "MADD hopes these will be permanent standards and that they will be applied to all segments of the industry.'

One FCC commissioner disagreed. Democrat Michael Copps said, "A race to the bottom is never pretty to watch."

U.S. Reps. Frank Wolfe, R-Va., and Lucille Roybal-Allard, D-Calif., wrote to NBC urging the network to reverse its decision, saying they would hold hearings on the issue and might introduce legislation that would mandate a ban. But a representative for Rep. Billy Tauzin, R-La., said such a ban would come close to violating the First Amendment.

In an opinion piece for The Washington Post, NBC Television Network President Randy Falco wrote, "NBC's recent decision to begin airing television advertising for distilled spirits under strict standards does not mean that alcohol will now begin to be advertised on television — that is already happening. What it does mean is that the advertising will now be more responsible.

The first ad for Guinness UDV, producer of Smirnoff vodka, was to air in December.

— Leslie Stimson

# XM Retail

Continued from page 5
Installing my XM radio was a snap. The low-end Sony unit I bought plugs into the cigarette lighter and uses a cassette gizmo to hook into my car stereo. The antenna magnetically attached to the roof of my car, which is convenient but also a potential theft target.

Activating the radio was as easy as entering some information on the XM Web site, or calling an 800 number. The only issue I had was the activation fee, about \$10 via Web site or \$15 on the phone.

No fancy alignment work is required. As long as the antenna is outside, it picks up a signal. The signal passes through window glass and, as I later discovered, will even penetrate well inside a wood frame house.

In fact, I eased my concerns about antenna theft by mounting the antenna on my dashboard. So far, it's worked without a hitch, picking up a perfect signal in the canyons of Carmel Valley and even inside a 200-yard long tunnel in downtown Monterey. At my central California latitude, the satellite signal is incredibly robust and much better than promised or expected.

XM's satellite system, consumer equipment and programming are rocksolid. Reaction from shoppers and other consumers is very positive, once they understand the benefits, based on my conversations with them. XM's \$10 monthly subscription fee requires explaining, but doesn't seem to be an obstacle.

Retailing remains a work in progress. The battle for XM, and later for Sirius, will be to improve its presence on sales floors and in the minds of salespeople. and to bring down the cost of the units. The best price you can get right now is \$300, without installation. And you have to work hard to get it.

Commissioned salespeople are, naturally, steer customers toward the higherend models. That's fine for the early weeks of the launch, but 2002 brings with it expectations of rapid penetration.

If sales floors continue to lack wellmarked, live demonstration units, and the apparent price remains where salespeople are positioning it, in the \$700 to \$800 range, those expectations won't be met.

Blum is president, Tellus Venture Associates, a satellite and digital broadcasting consultancy.

Reach him at steveblum@aol.com. RW welcomes other points of view.



# CLEARLY NOT FOR EVERYONE

Your Grandmother is certainly a very nice lady, but a Porsche is probably not her ride.

It's the same with processing:

Some people should stick with the conservative stuff. Give them something too fast and they just won't know what to do with it.

Frankly, the new Omnia-6 is probably not for them. It's just too potent, too flexible.

On the other hand, maybe you are the sort who can run a fast machine.

Who loves the thrill of smooth power. Who revels in the admiration of others.

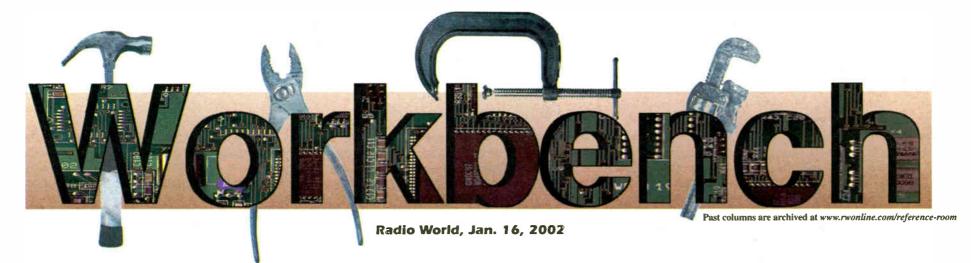
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Omnia is used in 4 of 5 leading stations in New York, 2 of the 2 top stations in Los Angeles and 5 of 6 of the most listened to stations in the US. It's on the leading stations in Paris, all of the BBC's local FM stations in the UK, and the number one stations in Canada, Ireland, Germany, Finland, Australia, India, China, Denmark, and Sweden.



# **Keep Your Transmitter Healthy**

by John Bisset

Robert Gonsett's CGC Communicator recently spoke of white-colored light-emitting diodes (LEDs) being incorporated into long-lasting flash-light products.

One offering from Petzl (motto: "To Each His Headlamp") has a variety of applications. The Zipka Headlamp is

turers during the AM/FM Transmitter Workshop.

For example, owners of Nautel Ampfet 1 through 10 transmitters should invest in a bottle of Caig Labs' Deoxit to clean the prongs of the Cinch-Jones plugs used on this transmitter's modules. A film can develop, causing intermittent module operation.

Also on this transmitter, it's a good

and other insects were caught on the outside screen of the air filter, their acidic body juices would eat away at the aluminum. Nautel engineers have replaced the aluminum filters with a two-piece plastic air filter.

Protective circuitry is only good when it works. Owners of the ND-10 transmitter should check the VSWR protection on an annual basis. During a maintenance session, the procedure is to reverse the FWD/REF power leads, located at the output filter. Then slowly bring up the power.

The VSWR protection circuitry should trip when the threshold is exceeded.

\* \* \*

Owners of the Harris MS-15 and MX-15 exciters would be wise to have on hand not only a spare exciter fan,

but also U-1 (for the MS-15) and Q-1 (for the MX-15). Should the fan fail on this exciter, many times this regulator is taken out, too.

If you have a Harris FM3.5K and HT-3.5, 5, 7 or 10 FM transmitter, check the tightness of hardware throughout the transmitter, but especially in the RF cabinet, every year. PA Screen or Plate overloads in this transmitter usually can be traced to a bad PA tube, a dirty arc gap in the PA or a power-supply component failure.

The FM-25K RF splitter and combiner are made up of a number of coaxial cables. As the transmitter ages, these cables can dry out and become brittle.

This effect can change the impedance of the cable to something other than 50 ohms. The same problem can occur on the IPA, so check these cables when you start seeing interstage reflected power or tuning instability.

Harris engineers replaced the older stainless steel arc gap with a carbon

See WORKBENCH, page 18



Fig. 1: The Petzl Motto: To Each His Headlamp. The Zipka model is worn like a sun visor.

worn like a sun visor, and the highintensity lamp can be adjusted to keep your hands free to do the work.

Find out more at www.petzl.com/ FRENG/frheadlamps/headlamp frame.html.

\* \* \*

At lat fall's NAB Radio Show, many useful tips were provided by manufac-

idea to check the security of mounting hardware in the RF filter annually, particularly mechanical connections between the capacitors, inductors and associated leads. As you inspect the hardware and connections, be alert for discoloration, which signifies overheating.

Nautel engineers discovered an interesting phenomenon involving module aluminum air filters. As flies



Fig. 2: Keep a spare fan for your exciter and verify a proper match into the transmitter.





# A GM's best friend is his Radio Systems Millenium Console

by Rusty Burchfield, Corporate Engineering Manager American General Media "LIKE A ROCK! Tough enough for a jock, but made for an Engineer." Those are just a few phrases that describe the Radio Systems Millenium series consoles. The RS12a and RS18 channel consoles are made tough, rugged and are very durable. These consoles have been known to withstand your everyday jock armed with a cheese burger and soft drink.

In today's busy industry and with the shortage of qualified Engineers, GM's and owners need to purchase low maintenance equipment. Radio Systems RS12a or RS18 channel consoles are just that, low maintenance. Those days of having to replace "lamps" on your console are over, The Millenium series consoles use everlasting LEDs! This is just one example of the low maintenance involved in owning a Radio Systems console.

I have personally installed over two dozen Millenium series consoles in small, medium and large markets. Almost all of the connections are made via a five pin, screw down connector which allows for quick wiring. Unlike most analog consoles there's no need for "spade lugs" or "crimping tools!" Radio Systems RS12a consoles are so friendly to install, I once had a GM do it himself. When you order your new console, ask about their optional item called "Studio Hub" that makes wiring even easier; this allows you to turn your RS12a or RS18 console into a "Plug n Play" install.

It's not often that you can call a manufacturer and ask to speak to the President and actually get through the gate keeper. Radio Systems has an open door policy and anyone can pick up the phone and ask to speak to Dan Braverman, President of Radio Systems. As an Engineer I sometimes have improvement ideas and have suggested a few of them to Dan, Gerrett (VP of sales) and Roger (Tech Support manager) and have seen my suggestions make it to the assembly line. It's not often you'll find great service like this!

Radio Systems Millenium series consoles are very well priced and range from \$5,495 and up. With many stations being automated in today's radio industry, we as the equipment decision makers, need to make sure we purchase equipment that is compatible with our automation needs. Radio Systems consoles are great companions to your automation system whatever it may be.

The ease and flexibility of the Millenium series consoles make them a must have for a station that depends on their equipment to perform top notch every time. In many of my markets, my staff is overwhelmed with projects and rely on their equipment to function without much technical maintenance. The Radio Systems RS12a and RS18 channel consoles make a great low maintenance item for the busy engineer, not to mention a good friend to the GM due to the price!



601 Heron Drive, Bridgeport, New Jersey 08014 (856) 467-8000 voice (856) 467-3044 fax www.radiosystems.com THE BIG PICTURE

# Is It Platinum — or Iridium?

An 'Elementary' Examination of Satellite Radio's Prospects as a Significant New Medium Is Born

by Skip Pizzi

Many readers will recall from highschool physics that one of the metric system's references for the standardized length of a meter was a rod of platinum-iridium alloy.

Those two metals provide a different kind of metric for today's media industry, however. Platinum is the mark of success for a music release, signifying a million-selling title, while Iridium is now associated with Motorola's notoriously failed satellite telephone system — the Edsel of lowearth orbit. The two elements once paired in a harmonious definition are now diametrically opposed in their connotations.

#### Success or failure

Such are the polar opposites that exist as possible fates for satellite radio. Within the next few years, the success or failure of this bold new enterprise will be determined. There will likely be no intermediate option.

Will satellite radio become No. I with a bullet, or just another contribution to the growing collection of space junk? Interestingly, we are now in a period of absolute equilibrium between the two extremes, in which either outcome seems equally plausible. Momentum in one direction or the other has not yet been clearly established.

This blissful state will likely not last for long.

Aftermarket XM Satellite Radio receivers are now widely available at consumer electronics retail outlets in most areas of the United States, and factory-installed units will be offered in some 2002 model-year vehicles in upcoming months. Many more carmakers will offer the receivers in 2003 models.

Gauged by the rule that it's not real until consumers can buy it, satellite radio now is clearly a genuine article.

It is to XM's credit that it was first to market, given the general sense that the competing service, Sirius Satellite Radio, was further along in its development up until about a year ago. Also, XM's use of geostationary satellites, as opposed to the highly elliptical orbit system used by Sirius, has a greater reliance on terrestrial repeaters, so XM needed to establish a large, reliable network of these repeaters before launching their service. So far, no significant complaints about signal coverage have been reported.

While satellite radio wasn't the must-have gift for the 2001 holiday season, it received reasonably high profiles in stores and the press, and most reviews have been moderately to strongly positive. Fortune magazine named XM its "Product of the Year" for 2001, and Time and Popular Science both featured XM among their top new technologies of 2001.

The initial commercial inertia faced by any new product seems to be dissipating, based purely on XM's marketing efforts so far. One can only assume that when Sirius joins the fray later this year that satellite radio's incipient momentum will build further.

Of course, the real metric of success for satellite radio will be the size and growth rate of the subscriber base.

In this respect, the new service is less like terrestrial radio and more like cable or satellite TV. Users must be convinced to buy new hardware and pay a monthly service fee. It's the latter element that crosses into new territory.

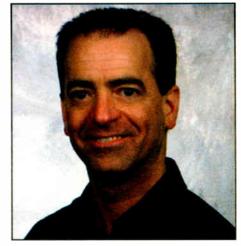
Will consumers buy radio service—and will they keep buying it indefinitely? The scourge of any subscription service is churn, by which the service's growth is partially cancelled out by the departure of existing sub-

which seems about right for the purpose, but month-to-month service is offered. (It's unknown if service contracts will be structured any differently for factory-installed systems, when they become available.)

Also, one area where XM has taken some heat in the press is its requirement for multiple radios within one household to each pay the same, full service fee. There is currently no "family plan" or multi-receiver discount offered.

#### Finite lifespan

For satellite radio to succeed, subscriber base growth targets will have to be hit and maintained, even in the early years. Although the bulk of any DBS service's investment is front-loaded, satellites are not immortal. They have a finite lifespan (shorter than originally forecast, in this case),



Skip Pizzi

radio's business model in other ways.

For example, personalized messaging or other custom content could be delivered to individual receivers at a premium price. Or targeted commercials could be delivered to specific receivers, providing a new paradigm of access for advertisers to certain desirable demographic groups nationwide.

Recently a tempest has brewed over the possibility of satellite radio providers finding loopholes in the rules for the content carried by terrestrial repeaters. Traditional radio broadcasters are concerned that local content (i.e., advertisements) will be downloaded to individual satellite radio repeaters and inserted into programming. They feel this violates the spirit of the original regulation for the service, which prohibited carrying anything other than an exact duplication of the satellite signal on terrestrial repeaters, for purposes of technical signal-coverage improvement only.

In comments filed by the NAB, the FCC has been asked to tighten the regulatory language governing the content carried on these repeaters, and also to deny satellite radio's requests for increased maximum power levels on the repeaters.

Many open issues will be settled by the marketplace in coming months. The stakes are high, and fortunes of a significant new medium hang in the balance. Only time will determine whether satellite radio will splash or soar.

Skip Pizzi is contributing editor of Radio World.

# Will satellite radio become No. 1 with a bullet, or just another contribution to the growing collection of space junk?

scribers who no longer find the service sufficiently valuable. The initial deal of "100 channels for \$9.95 per month" soon fades to the five or six channels any consumer ends up using for that monthly price, and the value is soon recalculated.

For some, it will remain worthwhile, but probably not for all. This is likely the greatest unknown that satellite radio faces, and the most pivotal issue to the ultimate success or failure of these services.

#### Skin in the game

One way to minimize churn is to offer only long-term subscriptions, or for factory-installed mobile systems, to include a long-term service contract in the purchase price of the vehicle. Another method is to make the cost of the receiver high enough to make the owner feel guilty about not keeping the subscription going, but not too high to be prohibitive to getting the service in the first place.

The latter effect is called "skin in the game," by which the consumer feels like an investment has been made in the hardware purchase, and its value would be wasted if the service subscription were not kept up. (A similar function is served by the initiation fee at a health club.)

Some validating experience comes from the satellite TV environment, where DIRECTV offered hardware that had to be purchased, and (the now defunct) Primestar provided the hardware free. Primestar's churn rate typically was about double that of DIRECTV's.

XM's approach is mixed in this respect. Aftermarket receivers are priced about \$500 installed, to start,

and contracts for their replacements' construction and launch will have to be drawn years in advance of this date.

This means that decisions on the second generation of satellites will hinge substantially on satellite radio's performance in its first five years or so. New funding for satellite radio is still forthcoming from investors — no mean feat in today's economic environment — but this can change quickly if bad news circulates.

Another unique element of satellite radio is the addressability of receivers. While this is primarily required for controlling and enforcing conditional access to subscription content, it also could eventually figure in satellite

MARKET PLACE

# CartWorks Adds apt-X Flexibility

dbm Systems and APT have developed an apt-X software plug-in for the CartWorks line of digital audio systems. dbm says this is the first digital audio system that can play WAV, MPEG Layers 2 and 3, apt-X and many other formats.

"The apt-X digital audio format has long been a favorite among broadcasters," said President George Thomas. "Many manufacturers have used it in their digital audio systems. Unfortunately, there are only two audio cards that support apt-X. These cards do not offer the new features of WAV/MPEG cards, they only play apt-X files, and both are based on older ISA standards."

Thomas said many radio stations have stored their music libraries in apt-X format.

"While the audio quality is still superb, they now are locked into older technology hardware. If they wish to play other formats, they must re-record all existing audio and replace each workstation."

dbm Systems' new apt-X plug-in for CartWorks allows apt-X playback and recording with virtually any sound card.

"We also have a fast, stand-alone apt-X / WAV file converter, for those who just want to convert between formats," he said.

For information contact the company in Mississippi at (800) 795-RADIO or (601) 856-9080 or visit www.cartworks.com.

# Rave Reviews!

"Excellent Product" — Doug Walker, Clear Channel, Cincinnati

"Telos has taken two great products [the Zephyr and the Zephyr Express] and made them better.

They listened to the customer." — Raul Velez KNBR, KFOG, Susquehanna Broadcasting of San Francisco

"Telos asked us what we wanted and they put it in there... you can't ask for anything more than that." — Paul Burt, Clear Channel, New Orleans

"It's even easier to use than the original Zephyr."

— Michael Black, WEOS, Geneva, New York (NPR affiliate station)

"The most popular ISDN digital transceiver in the country has a fresh new look... Zephyr Xstream, a slick, updated version of [the] familiar Zephyr."

— Steve Kirsch, Silver Lake Audio, New York

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News of recent contracts and projects in the radio industry. ...

Cox Radio chose Wheatstone for six audio consoles and seven suites of cabinetry in a new facility housing three Cox stations in Birmingham, Ala.

WBHJ(FM), WBHK(FM) and WAGG(AM) went on the air last summer. The consoles include two Wheatstone D-5000s, three Audioarts R-60s and one MR-40 multitrack board....

Antex Electronics said its SC-22 sound card was being used by Clear Channel to digitize programming for rebroadcast over the Web. Approximately 280 SC-22s were in use in the top 50 radio markets. ...

Romania's state-owned broadcast organization chose Harris Corp. as its prime supplier for a three-year program to upgrade and expand its

nationwide broadcast infrastructure. The contract is valued at \$85 million, the largest in the history of Harris' Broadcast Communications Division.

A formal signing of the contract took place during a recent visit by the Prime Minister of Romania Adrian Nastase to Washington. Nastase, other Romanian officials and Bruce M. Allan, president of Harris' Broadcast Communications Division, participated.

Harris will provide radio transmission systems for approximately 90 sites in Romania, microwave links and centralized network management systems, plus engineering, installation and other services. ...

Elsewhere, Harris Broadcast Europe delivered 150 more decoders to Télédiffusion de France for feeding synchronous FM transmitters via satellite.

The transmitters enable motorists in France to receive entertainment and

traffic information over one VHF channel without the need to retune their receivers during long drives.

ITIS Products, part of Harris, has been working with TDF to improve synchronous FM systems along French motorways. Harris initially provided two uplink chains and 237 synchroing for WKQX; Vic Dresser is engineering supervisor. Hodroff, Dresser and Ron Mitchell of Ram completed the facility in less than 12 weeks. ...

In Australia, **TieLine Technology** won the Emerging Exporter category award in the 2001 WA Export Awards.



Bruce Allan of Harris, left, signs an \$85 million radio contract as Prime Minister Adrian Nastase of Romania watches.

nous FM decoder units. The additional 150 decoders were to be installed by the end of 2001 ...

Emmis station WKQX(FM) in Chicago chose Ram Broadcast Systems to design and build its new facilities.

Showcase studios at the Merchandise Mart include two air studios, two production studios, one news studio and one performance studio.

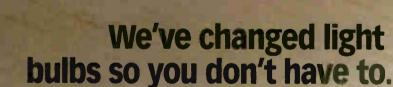
Joel Hodroff is director of engineer-

which recognizes outstanding achievement in the area of enterprise and global export.

TieLine offers digital audio transmission technology for the transfer of 15 kHz, broadcast-quality audio over a standard telephone line in real time. ...

Telos/Omnia provided Omnia-6fm processors for Radio One's WTTB(FM) in Minneapolis and Italy's Modena Radio City. In India,

See WBW, page 20

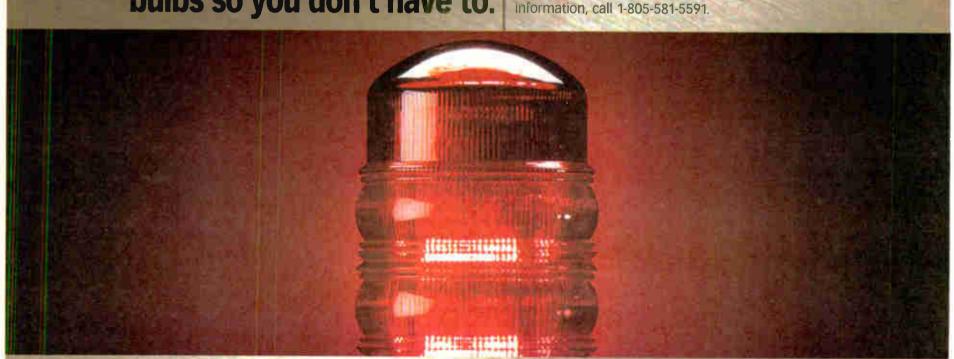




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GUEST COMMENTARY

# **IBOC** Is Full of Possibilities

by David Maxson

Thanks to Aaron Read for sharing what must be on the minds of many broadcasters regarding the benefits of inband, on-channel digital radio in the Nov. 21, 2001 issue of Radio World.

His commentary is entertaining and, as the Brits say, cheeky, but unfortunately not tuned in to the technology.

The National Radio Systems Committee has recently completed its detailed evaluation of the independent lab and field tests of the Ibiquity FM IBOC system and released it to the public. There are impressive opportunities offered by IBOC technology.

At the top of my personal list of exciting possibilities is the fact that with IBOC, consumer radios will be operating with the first universal, mass-market data broadcasting standard on existing AM and FM stations.

All the digits a station transmits will go to all the IBOC receivers tuned to it. The possibilities for enhancing the listener experience are limited only to what the industry can conjure up with the manufacturers. Being a truly digital medium, IBOC offers economies of scale that RDS and digital subcarriers could not possibly hold a glowing LED to.

#### **No-brainer**

On the point of improving current analog services, it is hard to understand where the claim that digital radio "won't sound any better in the car" could have come from.

Automobile manufacturers know how particular people are about their analog radios, and spend tremendous resources developing clever analog ways to mask the artifacts of mobile reception, because the successful sale of each car depends on it.

In spite of all their techno jury-rigging, car companies still are not satisfied with the way analog car radios work today. With car dashboards going more digital every year, the auto manufacturers are hot to trot on satellite digital radio, GPS features, and transportation telematics opportunities. Terrestrial digital radio is a no-brainer in this environment.

Meanwhile, home FM reception almost never relies upon the original plan—the 30-foot-high outdoor Yagi antenna on a rotator—and remains as susceptible to multipath and interference as reception on portable radios does.

Face it, while FM broadcasting has the specs to be as clean and dynamic as anyone needs for high-fidelity listening, the way people use FM radio exposes them to hostile channel conditions. Digital broadcasting promises to address the channel impairments of FM reception, and provide really good reception in places within a station's coverage area where reception today is less than stellar.

Mr. Read also challenges the benefits of in-car digital listening by suggesting the poor acoustical environment of the automobile trumps the need for audio quality. He says MiniDiscs sound fine in his car, but not at home. Yet he complains about the fatiguing audio processing on his favorite station.

So what's the point of going digital if the listening environments are awful and stations process their audio to the density of black holes? Consider the reasons stations process their audio hard. Loudness makes the station jump off the "dial" (remember the dial?) as you spin it to find a station. It's a competitive advantage with an analog radio with a tuning knob — much less important with digital.

Loudness, in the form of dense modulation, also helps mask the impulsive out penalty, even in the noisy automobile, because loudness in the digital world does not have to mask noises caused by multipath and other interference.

Without this factor in the domain of digital radio processing, other factors, such as dynamic range control and signature sound characteristics, can be less encumbered.

With IBOC, consumer radios will be operating with the first universal, massmarket data broadcasting standard on existing AM and FM stations.

sounds of noisy reception conditions, another non-issue for digital radio. Finally, processing can be tailored to create a characteristic sound for a station, a sonic signature as it were, that helps maintain the brand.

Indeed, processing for this reason may still leave Mr. Read feeling like he ran 10 miles after listening to his local rocker for 20 minutes. However, digital radio may be able to offer a more open sound withThen there is the question of whether IBOC is the Death Star that will somehow kill Class D, LPFM and small Class A stations because they won't be able to "foot the bill" for a digital transmitter.

The good news about the whole IBOC concept is that stations that remain analog-only will still be receivable by the hundreds of millions of analog radios out there, and by all IBOC radios when they hit the market. The smaller-budget sta-

tions will not be penalized for waiting to upgrade.

At the time when IBOC receiver use is plentiful, these stations will wonder why they didn't upgrade sooner, because the choice is clear (thanks Sprint); clearer reception means more listening. Smaller stations may benefit disproportionately with IBOC because they often have rather low antenna heights that exacerbate multipath reception problems, which IBOC helps eliminate.

Also, Mr. Read does not have to worry that WBRS, the Class D Brandeis University station with which he works, would be forced off the dial by IBOC. This station, squarely overlapping two third-adjacent stations in the Boston market, would remain unscathed if both of the third-adjacent Class Bs added IBOC.

Finally, AM IBOC is getting its day in the sun as the NRSC evaluates the independent tests of the Ibiquity AM IBOC system.

IBOC technology, a long time in coming, is close to fruition. Be sure to check it out and challenge it for yourself.

In addition to doing broadcast engineering work in Cambridge, the author is a member of the National Radio Systems Committee and technical consultant to Impulse Radio, the company that is developing with Ibiquity an open data protocol for IBOC. Opinions expressed in this letter are not the opinions of the NRSC or its sponsors.

RW welcomes other points of view. 🌯

GUEST COMMENTARY

# IBOC: New Is Not Always Better

by Gary D. Sharpe

I agree with Aaron Read in his commentary about inband, on-channel digital radio in the Nov. 21, 2001 issue of Radio World

All too often in my broadcasting career, I would run into the attitude "if it is new, it must be better." This has proven itself to be false at least half the time.

Now we have "If it is digital, it must be better!"

Any real audiophile will tell you that isn't necessarily so. And the average listener already thinks FM sounds pretty good. With all the processing, if the average listener still thinks it sounds very good, what is the improvement with digital? The average listener will not really know unless you do the digital stuff without processing.

But then, you could improve the quality of analog FM today by just removing the processing. I've had personal experience with this. When the processing was removed, the station started receiving phone calls about how much better we sounded. So perhaps the average listener can discern some improvements.

#### Point by point

Audiophiles aside, Read's points about car radios are correct. The car is a terrible listening environment if you care about audio quality

Some processing might be good for listening in a car, certainly enough to provide some overall reduction in dynamic range to overcome background noise during softer parts of the music; and a good RMS AGC will help level out different program elements such as the mic and the commercials and promos.

However, I have never seen anyone choose an FM station because it was the loudest on the dial. And, with most radios today having digital tuners, finding the station is not a problem as long as the listener knows the dial position.

So exactly what is the improvement in quality that digital provides? Lower noise? You'd never know in a car. Better frequency response? The car radio's speakers couldn't reproduce it anyway even if the listener could hear the improvement, which I assure you he can't. No multipath? No, just dropout. But it's digital, so it must be better. Somehow.

Radio stations with obnoxious processing already are competing with CDs with no additional processing. If you believe

that improvements in audio quality can be heard by the average listener, and that the average listener really cares about it, then radio had better just give up except for news, weather and traffic reports. The CDs will win, hands-down.

What the proponents of IBOC digital are telling us is that the listener wants better quality (they really don't, they are happy with what they have), that the listener can tell the difference (if they could, they would only play their CDs for music and listen to an AM radio for news, weather and traffic), that listeners would rather have the station just disappear from hearing instead of putting up with some intermittent multipath (I don't think so), and that the analog FM will be just a fall-back in those instances where the digital signal just fails.

# I guess when the market is saturated, we just change the rules and force everyone to buy new stuff.

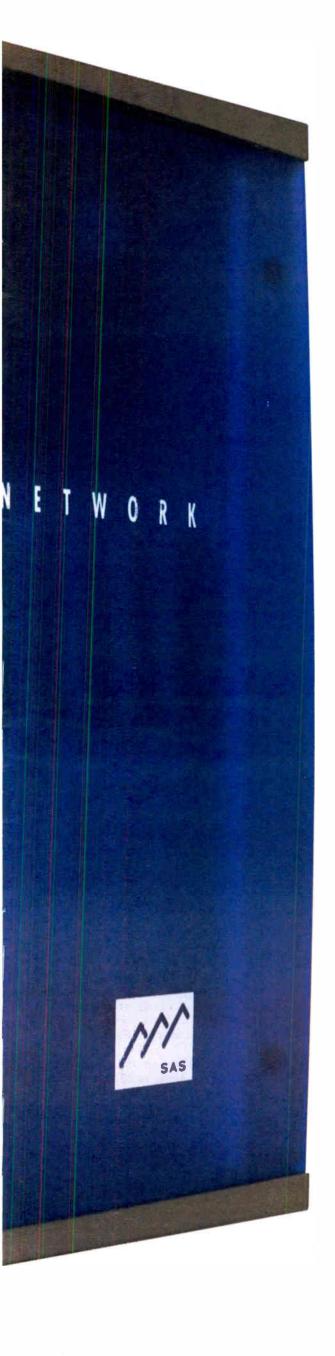
Personally, I just cannot see any justification for IBOC digital except as a way for equipment manufacturers to force up a sagging market. Except for digital, most of the transmitters on the air today could still be on 10 or 15 years from now. Same for a fair percentage of exciters, STLs and analog mixing consoles. I guess when the market is saturated, we just change the rules and force everyone to buy new stuff.

Read is correct about another thing. The small stations serving smaller markets in a local fashion — those that are still independently owned and still serving their communities — won't be able to afford to make the changeover and will go under or be bought up by a large group that really doesn't give a damn about serving the community.

We are unfortunately already committed. Too bad. We've lost creativity in radio, now we are going to lose listeners entirely.

The author is North American technical sales manager for SCOTTY Tele-Transport Corp. of the Americas and a veteran broadcast engineer. Reach him at g.sharpe@scottyus.com.

RW welcomes other points of view.



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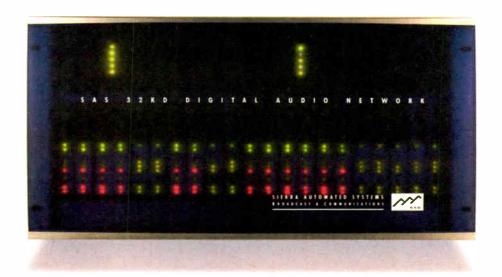
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# Workbench

Continued from page 10 arc gap, which is easier to maintain.

When seating tubes in these transmitters, the tube is seated properly when the screen ring is covered by the contact assembly. If you monitor filament voltage to extend tube life, Harris recommends lowering the voltage until the power just starts to drop. At that point, raise the filament voltage to 10 percent above that drop-off level.

Did you know that even three missing fingerstock on a tube socket can affect the transmitter's efficiency? Check your tube socket not only for cleanliness but also for missing finger-

stock when you change your tube.

\* \* \*

Martin Cooper is president of Transcom Corp., a transmitter reseller. Martin has good tips for keeping the resale value of your transmitter. Keep the rig clean. Avoid home-brew modifications. When you must create one, document it on the schematic.

If you're looking for a home for a transmitter built prior to 1975, keep in mind that there is no real fair market value

Transmitters built prior to 1978 must have PCB filled capacitors removed. Martin warned that selling a transmitter laden with PCB capacitors to someone does not obviate your responsibility as the "original owner"

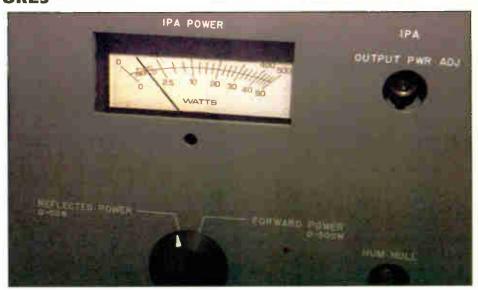


Fig. 3: Monitor IPA reflected power regularly.

cleanliness but also for missing fingerresponsibility as the "original owner" WEER WIVER WINDOWS 24 BIT OVERSAIVIPUING BATE WILMIN POSSIBILIT **EULL SYNCHRONIZATION** Introducing the sound card without limits: the ASI6114. It handles just about any format: analog, digital, MPEG, PCM, and even MP3. And our unique MRX multi-rate mixing enables playback, recording, and mixing of multiple audio streams at multiple sample rates, so there's no need to resample. Add flexible synchronization and Windows/Linux drivers, and you've got a card with capabilities that are almost, well, infinite. www.audioscience.com +1-302-324-5333

of the PCB-filled caps.

Martin suggested contacting your local power utility company for removal and disposal. Their rates are much more reasonable than the environmental companies that provided this service when the EPA's ruling first came out.

One of the biggest life-shortening threats is heat. Martin cautioned to get the heat out of the transmitter. You can dump the heat from tube transmitters into the adjacent building, but make sure a fan or blower ensures a constant flow of air to prevent back pressure from developing and reducing your cooling.

John Bisset has worked as a chief engineer and contract engineer for more than 30 years. He is a district sales manager for Harris Corp. Reach him at (703) 323-8011.

Submissions for this column are encouraged, and qualify for SBE recertification credit. Fax your submission to (703) 323-8044, or send e-mail to jbisset@harris.com.

## MARKET PLACE

# Bird Calibration Service

The Bird Service Center has expanded services to include the calibration of a broad range of equipment beyond the Bird brand.

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The service center has applied for accreditation with A2LA to ANSI/ISO/IEC 17025.

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For information contact the Bird Service Center in Ohio at (440) 519-2345 or send e-mail to bsc@bird-technologies.com.

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Loren Olson of LifeTalk Radio has been using BSI's digital automation for over 2 years...

December 7, 2001

Broadcast Software International 1925 Bailey Hill Road, Suite A Eugene, Oregon

As a team leader, I've learned to be happy when my team is happy. When our on-air product was suffering under a sub-standard automation system, we knew a change to something reliable was absolutely critical. We entered the process of locating such a package with a little bit of fear and trepidation because you can never be sure of what you're getting and have not once regretted on BSI's digital automation system brought to our on-air sound is a 200% improvement. Being unmanned we now have the confidence to walk away from the studios knowing that feeds.

I've been particularly impressed with the tech support personnel. One night we had to reformat the hard drive and reload Windows. BSI's tech rep was right there with us till 2:30 am, talking as softly as she could so as not to wake up her sleeping little boy. BSI's products, despite their from the old radio tradition of manually pushing every button, that's saying something. But perhaps the greatest benefit is the affordable price. Small to medium market stations like ours need something we can reasonably get into. So now my announcers are happy, and my CFO is

oren Olson lirector of Broadcast Operations feTalk Radio Network

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# **WBW**

Continued from page 15

Horizon Broadcast sold four Omnia-3fm audio processors to Radio City FM for use at stations in Bangalore and Lucknow.

Minnesota Public Radio is using the Zephyr Xstream ISDN codec as a back-up for the main audio feed of "Prairie Home Companion." ... Sports station Team 990AM in Montreal recently purchased an Xstream system. ...

Clear Channel Communications chose Sierra Automated Systems to provide its Atlanta broadcasting center with the SAS 64000 Audio Routing Switcher.

The Atlanta Clear Channel broadcast center consists of five commercial stations and the Georgia News Network....

Emmy-nominated composer Russ Landau went on location in Africa to collect native sounds and music for the CBS "Survivor" series with the help of HHB's MDP500 Portadisc MiniDisc recorder.

He visited 15 Kenyan tribes, field-recording songs and music unique to each, and recorded to Portadisc and his Macintosh Powerbook's hard disk....

ECONCO received a \$7.7 million U.S. Navy contract to provide rebuilt power tubes for the AEGIS Weapon System. AEGIS ships employ power tubes to pulse powerful radars in an

integrated radar and missile defense system.

The Navy also presented ECONCO a second Award for Excellence for support to the AEGIS system. ...

Radio Free Asia purchased two ARES-C portable recorder/editors and four C-PP post production versions, all with the internal ISDN codec feature.

Nagra USA officials said the "Auto Answer" feature of the machines was influential in the purchasing decision. This feature enables the device to enter playback or record mode automatically when it receives a call via the ISDN line.

"This allows reporters all over the globe at all hours of the day to transmit stories in MPEG digital to RFA's offices in Washington, where they are



Steve Fluker is chief for the Cox stations in Orlando, Fla.

accumulated on 1 Gigabyte PCMCIA cards," said Dan O'Grady of Nagra. "No personal attendant is required."

RFA also purchased two ARES-P machines to supplement the recording capabilities of the ARES-C. Plans are to interface the field recorders with satellite phones from Thrane and Thrane via the ISDN connection for uplink/downlink and digital audio from remote locations....

AP said more music-intensive stations added its services as demand for news coverage grew last fall. In one eight-week period, 45 stations, including 40 music-intensive formats, added AP audio networks.

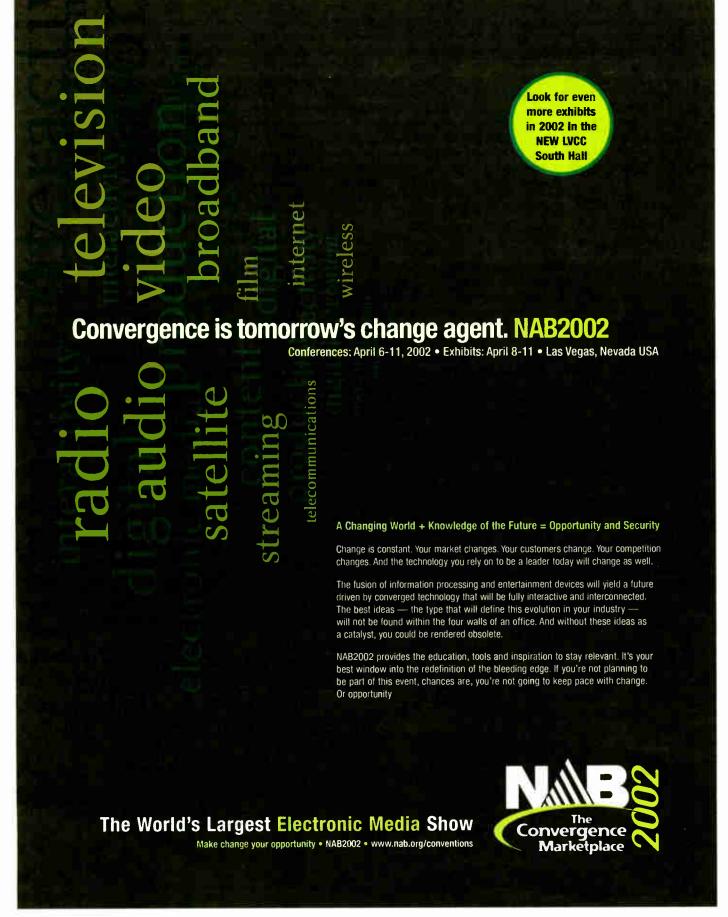
Also, the weekly magazine show, "Newsweek On Air." produced by AP Radio and Newsweek, added 15 new affiliates, signed by The Jones Radio Networks....

Cox Radio in Orlando consolidated six stations into one building in the nation's first installation of a Computer Concepts EpiCenter multistudio management system. Steve Fluker is director of engineering for the project.

The project involves six control rooms, seven production rooms, two news booths and a mix booth. Among its hardware choices, Cox used two dozen Symetrix 628 Digital Voice Processors and eight Symetrix 506E six-channel headphone amplifiers.

The 628's processing allows Fluker to give each DJ a sound that compliments his or her voice and matches the type of music the station plays.

"Who's Buying What" is printed as a service to our readers who are interested in how their peers choose equipment and services. Information is provided by suppliers. Companies with news of unusual or prominent sales should e-mail information and photos to radioworld@imaspub.com.





Dow Steps Down Page 22

Radio World

Resource for Business, Programming & Sales

January 16, 2002

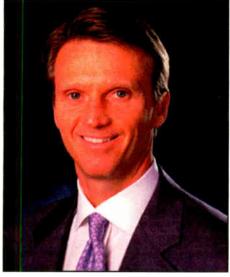
NEWS MAKER

# Cumulus: The Comeback Kid

Lew Dickey Eyes Top 150 Markets, Reflects On Recent Turbulence

## by Scott Fybush

At barely five years old, Cumulus Broadcasting already has traveled from the top of the market to near financial disaster, only to recover and again become one of the strongest performers in the broadcasting industry.



Lew Dickey Jr.

Lew Dickey Jr., who was literally born in radio — his father, Lew Dickey Sr., owned a cluster of stations in the Midwest — and veteran broadcaster Richard Weening formed the company with the intent of building See DICKEY, page 26

BROADCAST LAW REVIEW

# FCC Reviews Ownership, EEO Rules

by Barry D. Umansky

As 2001 came to a close, the FCC began a pair of significant rulemaking proceedings that afford radio broadcasters a new opportunity to help control their regulatory destiny.

The proceedings deal with two of the most important issues relating to station competition and operation: the rules applicable to local radio ownership and the possible reintroduction of FCC equal employment opportunity

#### **Comment period**

Radio broadcasters now can have their opinions and desires heard as the FCC gathers a record in support of — or perhaps opposition to — some or all of the proposals embodied in the two proceedings.

Here is an outline of what's at stake.

Radio Ownership Proceeding — This asks for public comment on whether there should be any changes in the commission's rules limiting multiple radio station ownership in local markets. The FCC seeks direction on how it should balance competing influences on FCC regulation. Comments must be filed by Feb. 1; reply comments must be filed no later than March 11.

Under its long-standing statutory directives found in the Communications Act of 1934, the commission issues new radio licenses and approves assignment or transfer of those licenses only when that would be consistent with the "public interest, convenience and necessity."

Based on this public interest authority, the commission generally has sought to promote diversity and competition in broadcasting by limiting the number of radio stations a single party can own in a local market.

However, a portion of the Telecommunications Act of 1996 provided new congressional guidance. That statutory provision directed the commission to revise its local radio ownership rule to relax the numerical station limits in the ownership rules.

It's nearly six years since the Act became law. Now the FCC is reviewing the effects of the rapid consolidation that followed on stations and on service to the public.

The commission is considering several changes to its local radio ownership rules.

based" classification scheme that was not tailored narrowly enough to support a compelling and well-defined government interest.

#### Redux

Several years ago the FCC was on the receiving end of a similar court ruling — finding unconstitutional provisions — concerning the EEO system adopted in 1991.

Although the latest court decision didn't reject Option A, it found that this option was an integral part of the overall regulatory system and could not be separated from the unlawful Option B.

As a result, on Jan. 30, 2001, the

# These proceedings signal possible important shifts in FCC regulations.

The EEO Proceeding — This follows two direct court rejections of previous incarnations of the agency's attempt at crafting meaningful and lawful equal employment opportunity regulatory schemes.

In ruling on the most recent judicial challenge to the FCC's EEO regulations — the ones that gave broadcasters a choice between "Option A," requiring basic and supplemental outreach, and "Option B," mandating collection of detailed race and genderbased data concerning job applicants — the U.S. Court of Appeals for the District of Columbia Circuit held that Option B was an unlawful "race-

FCC suspended the outreach, record keeping and reporting aspects of the EEO rules.

Non-discrimination in employment is the law of the land, and it always will be. Indeed, although the paperwork and outreach aspects of the last set of EEO rules was suspended, the basic anti-discrimination requirement in the commission's EEO rule has remained — the only FCC EEO rule that currently exists.

The FCC's new proposals — the text of which had not been issued as of the first of this month — are largely a new attempt to adopt only the former "Option A" requirements.

See UMANSKY, page 28



# David Dow, 29 Years at CBS

by Peter King

Few people in our business are almost universally liked. Long-time CBS News Radio correspondent Davis Dow is not only liked but admired and respected. I am among his biggest fans.

After 29 years with CBS News, the last decade or so on the radio side, Dow retired from the network Nov. 30, 2001.

#### Glowing

CBS News President Andrew Heyward called him warm, caring and unfailingly a gentleman. CBS News Radio General Manager Constance Lloyd called him a class act.

He covered the steps leading to the handover of the Panama Canal. He recalls getting lost "over a horizon-to-horizon carpet of deep green jungle in Bolivia" in a small plane.

His most unusual assignment? The two weeks he covered efforts to dislodge three stuck whales off the Alaskan coast.

"Who can forget interviews on the frozen waters of the Beaufort Sea with bobbing whales as a backdrop and a wind chill factor of minus-55?"

Dow's most fun assignment was covering the space program. He was there for many milestones, including the early space shuttle flights. I was fortunate to work with him on several college freshman biology," he said.

Then there was his extensive coverage of the O.J. Simpson case and trial. CBS ran long-form coverage with Dow as anchor and reporter during the trial in the mid-1990s. He stuck with the story for two years. While many of us would have gone crazy, his time in court produced many exclusives and led to his co-authorship of a book, "Cameras in the Courtroom."

Add the scores of natural and manmade disasters he covered, from earthquakes to riots, floods, twisters, fires and volcanoes. No wonder CBS News Radio's Lloyd will miss him.

"His experience and professionalism made him unflappable — especially in the demanding world of breaking news. Whatever we threw at him, he delivered, whether it be a live shot on 10 minutes' notice, or an indepth story for morning drive," she said.

## Not slowing down

David Dow may have "retired" from CBS, but he is anything but the retiring type.

His plans include teaching and writing. He's proud of his work for Los Angeles' Union Rescue Mission. I suspect he'll be seen enjoying more base-

David Dow

ball games at Edison Field and Dodger Stadium.

He also hopes to work, perhaps part time, in public radio.

Remember Yogi Berra's quote, "You can learn a lot by watching"? I learned a lot about writing and reporting for radio by listening to David Dow's work.

His is proof that in a business full of land sharks, one can have the positive attributes of humanity and still succeed.

Peter King is a correspondent for CBS News Radio. He's been trying to convince baseball fan Dow to visit Florida for a spring training vacation.

# Whatever we threw at him,

he delivered, whether it be a live shot on 10 minutes' notice or an in-depth story for morning drive.

-- Constance Lloyd

While Los Angeles been his home base since 1978, Dow could have called the world his office. His assignments took him all over the United States and to foreign countries, including two and a half turbulent years in Latin America, which he calls his most memorable assignment.

It was in Chile that Dow interviewed Gen. Augusto Pinochet, who possessed what Dow says were "the coolest, most steely-blue eyes I've ever faced."

broadcasts during which shuttles landed at Edwards Air Force Base in California.

Dow covered NASA's interplanetary probes from the legendary Jet Propulsion Laboratory in Pasadena, Calif. He succeeded in translating difficult concepts into understandable and interesting stories.

"I've had a wonderful paid education in physics, chemistry, astronomy, geology and orbital engineering — not bad for a guy who darn near flunked

# 'Miss Congeniality' Spot Honored

Outstanding radio creative was the topic of the day last month as the General Sales Managers Council of the Southern California Broadcasters Association honored Delta Dental Plan of California and its agency Gardner Geary Coll Inc.

The "Best Spot of the Month Award" for September recognized the "Miss Congeniality" campaign, which features a humorous look at the fictional Miss Congeniality USA's secret to success, Delta Dental.

GGC President Bob Gardner said, "This award is particularly flattering because it comes from Southern California where the creative field is very competitive and great creative is prevalent throughout the market."

Maureen Knoll, director of corporate communications for Delta Dental Plans of California, stated that radio has played a major role in its media mix because it delivers for the organization.

"We get the creative that works because we continually put ourselves in the customer's place and we know what ads get our attention. We also know our spots reach our intended audience because we test them every year. That's why 'Miss Congeniality' has been so successful for us. It cuts through the clutter and catches the listener's attention," Knoll said.

Representing SCBA's GSM Council for the presentation were Mary Beth Garber, president of the Southern California Broadcasters Association, and Michael Masterson, GSM of KNX(AM) and the GSMC's creative committee chairman.

# STATION/STUDIO SERVICES



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STATION SERVICES

# A Free Acoustic Folk Music Show

"The Woodsongs Old-Time Radio Hour" is a live-audience, weekly grass-roots music radio show. It is broadcast and Webcast from the historic Kentucky Theater in Lexington, Ky., with host folksinger Michael Johnathon and airs on 185 stations in the United States and to the World Wide Web.

The show, produced and distributed by PoetMan Records USA, is sent free to radio stations on CD. Samples of the show are available at the Woodsongs' archive at www.woodsongs.com.

The show also supports local chapters of "Woodsongs Coffeehouses." Listeners are encouraged to start one in their hometowns where talent for the show may be found. The artists discovered in the Woodsongs Coffeehouses have the opportunity to appear on the national radio show.

For more information on the show, contact Woodsongs in Kentucky at (859) 255-5700 or visit the Web site at www.woodsongs.com.

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**World Radio History** 

# Dickey

Continued from page 21

clusters in small and medium markets.

Though still shy of his 40th birthday, Dickey already had experience as a station owner through his family's Dickey Brothers Broadcasting Co. and as an analyst at Stratford Research, a media research firm.

Founded in the wake of the Telecommunications Act of 1996 that

flirted with the \$3 mark.

Radio World's Scott Fybush spoke with Chairman and CEO Lew Dickey about the company's outlook and goals.

RW: A year and a half ago, many in the business were giving your company up for dead. What did it take to turn Cumulus around?

Dickey: First and foremost, we had to change the culture of the company, inject a healthy dose of discipline into the organization.

'It was 125 acquisitions that came together very quickly, so there wasn't enough time to create one. It was sort of a rudderless ship.'

lifted caps on ation ownership, Cumulus quickly accumulated more than a hundred stations in less than a year in markets from Bangor, Maine to Odessa, Texas.

By early 2000, Cumulus owned more than 300 stations. It also had attracted nearly a dozen class-action lawsuits from investors after restating financial results for most of 1999, revealing that the company was out of cash.

Instead of collapsing, as some analysts had predicted, Cumulus rebounded, selling some of its assets to Clear Channel in exchange for cash to keep the rest of the company afloat.

Dickey was able to bring the company back to financial health; today, analysts regard Cumulus as one of the stronger stocks in broadcasting.

In recent months, the reborn Cumulus spent \$230 million to pick up 18 radio stations in the wealthy northern suburbs of New York City from Aurora Communications.

When the latest round of deals is complete, Cumulus will own 243 radio stations in the United States, placing it within the top 10 radio groups in America in revenue — more than \$268 million in 2000, according to BIA Financial Network — and second overall in number of stations.

And while Cumulus stock is far from its high in early 2000 (trading at one point at more than \$55 a share), it's now more than four times higher than its low point in late 2000, when it

We had to realign expenses to be more in line with companies like Citadel and Clear Channel in the markets we compete in. We're the only (radio) company to grow EBITDA (earnings before interest, taxes, depreciation and amortization) over the last four quarters as a result.

RW: What had the company culture at Cumulus been like?

**Dickey**: It was 125 acquisitions that came together very quickly, so there wasn't enough time to create one. It was sort of a rudderless ship.

We created a very strict budget discipline and cost controls. We've got a group of people focused on looking at ways to cut costs wherever possible without cutting into product. Our focus is live and local; we eschew the notion of "do it from a box," and I think our ratings have been extremely positive as a result.

RW: What's your outlook on ad revenue for 2002?

Dickey: I can't make too many predictions, but we're optimistic that a turnaround will happen and we'll be there when it happens.

**RW**: What about the after-effects of September 11?

Dickey: It was a huge factor; it took 5 percent off the industry's growth rates for the year and I think 2002 will be affected by it as well.

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The John Bayliss Broadcast Foundation directors are giving away two pairs of VIP tickets to their annual Radio Roast.

The 16th Annual Bayliss Radio Roast will take place in New York City on March 14. Stu Olds, CEO of Katz Media Group, is this year's roastee; Bill Stakelin, president of Regent Communications, is MC.

For a chance to win the ticket contest, visit www.baylissfoundation.org/contest.html before Jan. 31.

The proceeds from the Radio Roast fund the

John Bayliss Broadcast Foundation Scholarship for college students who are preparing for a career in radio. To date, more than 245 recipients have been awarded the scholarships.

To purchase tickets, visit www.baylissfoundation.org/tickets.html.

to announce a big acquisition since then. Let's talk about the purchase of the Aurora group and of Dickey Brothers Broadcasting Company's three Nashville stations, which Cumulus bought from you in December. Dickey: We had two opportunities that were controlled by members of the board or insiders. These were fungible assets and rather than monetize them for cash, you had insiders willing to step up to the plate and say, "We'll take the company's paper instead of cash." It's a show of confidence in the company. (Ed. Note: Aurora was controlled by major Cumulus investor Bank of America, while the Dickey stations were privately held by Dickey and his family.) RW: You founded the company on a

RW: Cumulus is one of the few groups

RW: You founded the company on a base of small and medium markets, but you're expanding into markets such as the New York suburbs, Nashville, Houston and Kansas City, the latter two through innovative FM signal move-ins. Is this a change of focus for Cumulus?

RW: What's your view of satellite radio now that XM has launched?

Dickey: I hear it's sound technically, and I never doubted it would be. But I think their demand forecast model is unrealistic ... I don't see them getting to a break-even rate anywhere near where they do.

It really has no impact on Cumulus; we're 88 percent local (in advertising sales) and they're not competing in our local markets.

RW: What about IBOC digital?

Dickey: We're definitely behind that (Ibiquity) platform. The fact that it's backward compatible, so people can listen to the same stations they're familiar with, is important.

RW: Any new formats we should be looking out for?

Dickey: I don't believe in gimmicks or fads. I spent a lot of time earlier in my career studying the preferences of listeners and I'm a fundamentalist.

We spend a lot of time going after mainstream formats — urban contemporary, adult contemporary, country

# 'Our median market size is now 162. I would look for Cumulus to be focused in the top 150 markets going forward.'

Dickey: Our median market size is now 162. I would look for Cumulus to be focused in the top 150 markets going forward. We've worked hard on some of our smaller markets in the 200s and we have no intention of letting them go.

(FM move-ins) are one component of our growth strategy that enables us to create some real value, but they're just part of the strategy.

RW: In recent weeks, we've heard industry leaders call for a relaxation of the FCC's "eight to a market" radio ownership cap and broadcastnewspaper cross-ownership rules. What's your perception of the atmosphere now at the Powell Commission? Would you support an increase in ownership caps?

Dickey: I would tend to define the market not as radio but as advertising overall. Our average in-market revenue share is 42 percent, but we're only taking 6 or 7 percent of the overall advertising pie. Would we like to take more against the newspapers? Sure.

and mainstream AOR.

RW: You grew up around top-40 AM radio, at your father's station WOHO(AM) in Toledo. Do you miss those days?

Dickey: Yeah, I do. I think it was good for our business and with our emphasis on local talent I think we can reignite that. When you see Clear Channel voicetracking smaller markets, it's hard to develop that talent. There's nobody out there recruiting them and teaching them the content side of the business.

RW: Does that extend to developing new engineers as well?

Dickey: That's tough. We're paying good wages in that field and we have to. I was hoping there'd be more availability (of talent) after the dot-com crash but I don't see it.

In 2001, technical is the only side of the company that saw an increase in expenses.

Scott Fybush is editor of NorthEast Radio Watch.

# Wertheimer Takes on New Assignment

Linda Wertheimer has been named National Public Radio's first senior national correspondent, effective this month.

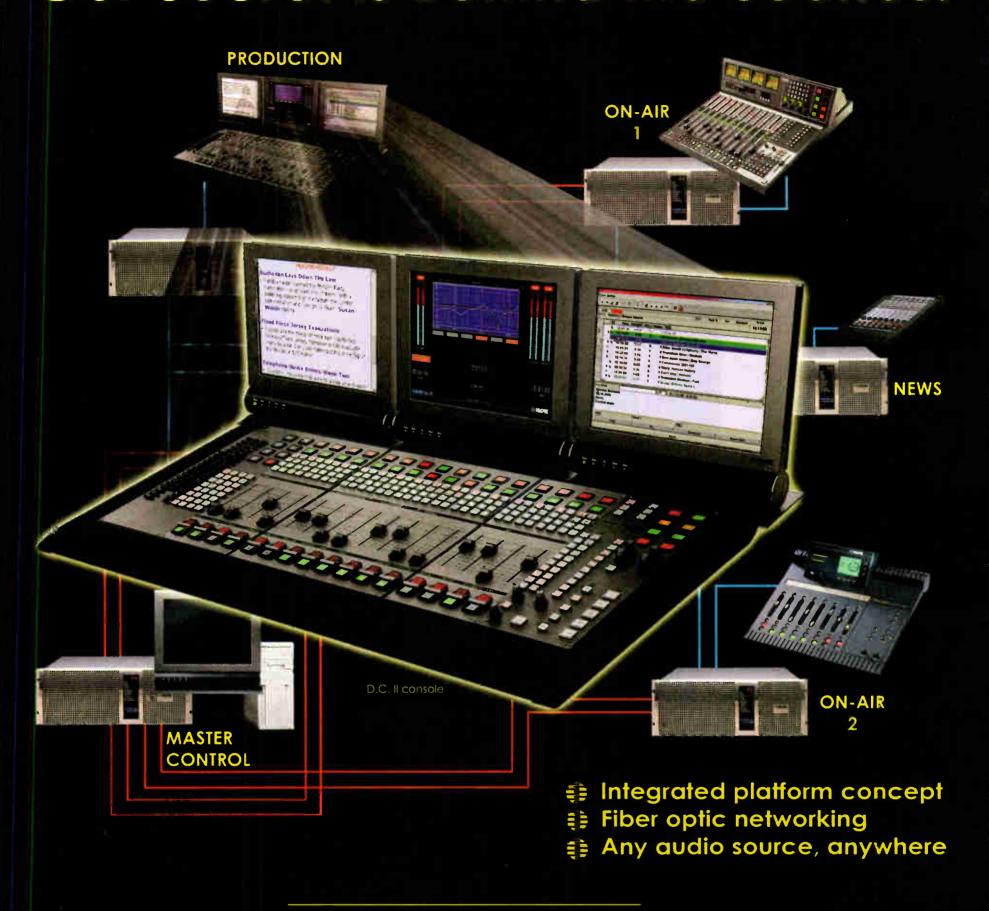
After 13 years as a host of the newsmagazine "All Things Considered," Wertheimer will provide major story and event analysis and perspective pieces for ATC, "Morning Edition with Bob Edwards" and other NPR news programs.

Bruce Drake, vice president for news and information, that a search is underway to find a successor to fill Wertheimer's role as ATC host.

During her career at NPR, she has received numerous journalism awards including an Alfred I. duPont-Columbia University Special Award for her live broadcasts from the U.S. Senate of the Panama Canal Treaty debates in 1978.

Wertheimer shared a second duPont-Columbia University Award for NPR's coverage of the first 100 days of the 104th Congress, the period that followed the 1994 Republican takeover in Congress.

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# Umansky

Continued from page 21
The Option A-style system would require broadcasters with five or more full-time employees to disseminate information widely about job openings to all segments of the community.

In addition to recruiting for every full-time job opening through broad outreach, the commission also would require stations to conduct two supplemental recruitment tasks: send job vacancy announcements to recruitment organizations that request such notifications and conduct a specific number of non-vacancy specific approaches, such as job fairs, internships and periodic meeting with educational and community groups.

The commission again would require stations to place an annual EEO report in their public inspection files. These reports would describe the station's outreach efforts.

Also, the FCC plans to require submission of annual employment reports. The FCC said these reports are likely to resemble the former FCC Form 395-B, which has been suspended since January of 2001; although the commission will accept comment on possible changes.

However, there are two aspects of the commission's new EEO proposals that could result in significant improvements from the last set of EEO rules.

#### Raise the bar

For one, the FCC asks whether the "under five full-time employees' exemption should be raised to a higher number of employees, thus exempting many more broadcast stations.

Also, the FCC does not propose to reinstate the every-two-years "Statement of Compliance" requirement. Instead, the commission asks for comment on whether it only should require radio broadcasters with more than 10 full-time employees to undergo a "mid-term review" at the end of the fourth year of an eight-year radio license term.

In the Notice of Proposed Rulemaking on multiple ownership, FCC01-329, the commission first recounts the history of its radio ownership regulation, which dates to 1938.

For some time a broadcaster only could hold an AM-FM combo in a local market, though sometimes waivers were granted to allow additional ownership locally. The first big changes in local radio ownership regulation were adopted in 1992.

The rule changes that went into effect late that year allowed common ownership of up to only two AM and two FM stations in all markets with 15 or more radio stations. In smaller markets, a single party could own up to three stations, of which no more than two could be in the same service.

The commission also adopted a provision that, in markets with 15 or more radio stations, "evidence that grant of any application will result in a combined audience share exceeding 25 percent will be considered prima facie inconsistent with the public interest."

The commission said this provision was designed to prevent "excessive concentration," even if the combination didn't exceed the two AM and two FM limit.

The commission's 1992 decision also

altered the market definition for calculating the numerical caps. Instead of using Arbitron markets as the standard, the commission adopted a contour overlap market definition.

To determine audience share, the commission used Arbitron markets. If Arbitron data were unavailable, the FCC would look at share data in the counties covered by the contours of the stations to be combined.

The commission permitted applicants to make alternative showings to demonstrate that the proposed combition had produced financial benefits for the radio industry, the commission expressed concern that consolidation could be having an adverse affect on local advertising rates and could reduce diversity.

#### Contour method

The 1998 biennial review also saw the commission examining the method by which it defines the relevant geographic market and counts the number of commonly owned and independent commercial radio stations.



FCC Headquarters

nation would not lead to excessive concentration.

The 1996 Telecommunications Act forced some dramatic changes in the

In addition to eliminating completely any limits on how many stations a broadcaster could own nationally, the act gave specific direction for FCC rule changes:

(a) In a radio market with 45 or more commercial radio stations, a party may own, operate, or control up to eight commercial radio stations, not more than five of which are in the same service (AM or FM):

(b) In a radio market with 30 to 44 commercial radio stations, a party may own, operate or control up to seven commercial radio stations, not more than four of which are in the same service;

(c) In a radio market with 15 to 29 commercial radio stations, a party may own, operate or control up to six commercial radio stations, not more than four of which are in the same service, and

(d) In a radio market with 14 or fewer commercial radio stations, a party may own, operate or control up to five commercial radio stations, not more than three of which are in the same service, except that a party may not own, operate, or control more than 50 percent of the stations in such market.

Responding to Congress's directive, the FCC issued an order in adopting the statutory numerical limits and abandoning the presumption that an audience share of greater than 25 percent was prima facie inconsistent with the public interest.

In 1998, the commission began the first "biennial review" — required by the 1996 Act — to examine whether the local radio ownership rule was necessary in the public interest as a result of competition.

In its first biennial review report, the commission concluded that the answer was "yes" and that the rule continued to serve the public interest.

Although recognizing that consolida-

The commission questioned whether its current method of defining radio markets might be yielding strained results, particularly when combined with its method of counting stations in a

The commission now is seeking additional comment to supplement that which it received when it began a rulemaking proceeding in December 2000 to consider changes to its system for defining markets and counting the number of commonly owned and independent radio stations.

In several FCC decisions issued since 1996, the commission undertook public interest analyses to consider the potential competitive impact of proposed transactions. In August 1998, the commission began issuing "flagging" public notices of proposed radio station transactions that, based on an initial analysis by the staff, might result in a level of local radio concentration causing public interest concern for maintaining diversity and competition.

The commission now flags proposed transactions that would result in one entity controlling 50 percent or more of the advertising revenues in the relevant Arbitron radio market or two entities controlling 70 percent or more of the advertising revenues in that market.

Most of these flagged applications that proposed radio concentration levels that were consistent with full commission precedent were granted. But, some proposing greater concentration levels are still pending.

In essence, the commission now is trying to determine to what extent it is bound by the 1996 Act from revising the rules - revisions that would be based on the exercise of the agency's overall "public interest" authority to promote diversity and competition.

The commission is attempting to see the effects of its current rules on "viewpoint diversity," i.e. whether the public has access to a wide variety of diverse and sometimes antagonistic opinions and interpretations; "outlet diversity," whether the audience has access to multiple distribution channels, such as radio, TV, newspapers, etc.; and "source diversity," whether the audience has access to information and programming from multiple content providers.

The FCC also is looking at the competitive effects of its current ownership rules - including the economic benefits and harms of permitting various levels of local radio station consolidation. To complete such an analysis, the commission is focusing on a few "case studies" of particular radio markets.

There are many possible outcomes to this proceeding. They range from the FCC doing nothing to its adopting new "bright line" numerical limits or a method for case-by-case competitive analysis. It also is taking a fresh look at LMAs and JSAs, insofar as they relate to station ownership rules.

The commission stated that if it were to make changes to the local ownership rules, it then would have to decide whether to "grandfather" existing combinations, require divestiture of stations or perhaps limit assignment/transfer of "non-compliant" local groups of stations.

So there is at least the potential for radical shifts in the radio ownership landscape. But the nature of the FCC's ultimate decision will depend, in large part, on what broadcasters and others place into the FCC record of the proceeding.

#### In the interim

Pending a final resolution of this commission's new rulemaking proceeding, the FCC stated that it still will apply its "flagging" policy. It also will continue request additional competition and concentration-related information from applicants that have been

One new feature is an FCC staff "shot clock." It requires the FCC staff promptly to prepare proposed decisions on applications that are flagged and need full commission review.

You should work with your communications lawyer in putting together a submission that tells the commission - in terms specific to the situation of you, the broadcaster — why the FCC should choose one course of action over another.

While you surely can voice a bare opinion, it is better if you provide concrete reasons why you've taken such a position on the FCC's proposals. Put it in terms that relate to your own station.

Comments in the radio ownership proceeding are due on Feb. 1. The deadline for comments in the EEO proceeding had not been posted at the time this article was written, but the commission expected it to be filed shortly after the New Year. Your communications lawyer will have this information.

These proceedings signal possible important shifts in FCC regulation. A responsible broadcaster — clearly with a stake in both rule makings — should exercise his or her right to help fashion the outcome of each proceeding.

Barry D. Umansky, the former deputy general counsel of the National Association of Broadcasters, now is with the communications practice group at the law firm of Thompson Hine LLP in Washington. Contact him in Washington (202) 263-4128 or via email at barry.umansky@thompson



Two Sony MZ-B50 MD Evaluations

Pages 31 & 32

Radio World

Resource for Radio On-Air, Production and Recording

January 16, 2002

PRODUCT EVALUATION

# **Tracer Tools Audio Restoration**

by Tom Vernon

Audio restoration tools are more important than ever. Even though broadcast audio is recorded on digital tape, edited on digital workstations and stored on CDs, with more than 50 years of radio shows, airchecks and syndicated programming archived on 1/4-inch reels and vinyl discs, there is quite a bit of material to be cleaned up for posterity.

Tape hiss, record surface noise and miscellaneous clicks, pops and hum need to be removed.

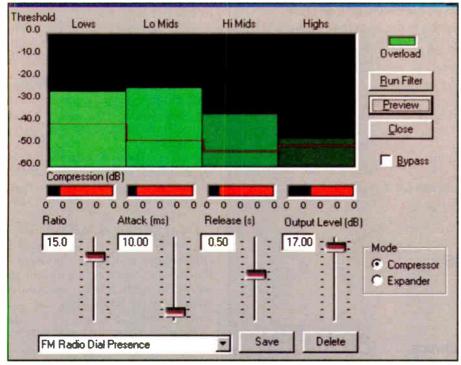
Tracer Technologies' Diamond Cut 32 audio restoration tools have long been among industry leaders in this field. The recent upgrade to 4.0 includes new tools and enhancements.

The Diamond Cut software CD contains an array of precision audio tools at a low price (\$99; \$19.95 for upgrade). Noise-reduction devices include filters such as impulse noise, continuous noise, dynamic, low pass, high pass and de-essing.

#### Filters, special effects

An azimuth correction tool takes care of stereo image "smearing" caused by misaligned tape heads. Speed change filters deal with such problems as cassette or reel recordings recorded too fast or too slow.

In addition to the filters, special effects are available. Reverb, paragraphic EQ, and a Punch and Crunch processor are a mouse click away. Especially cool is the virtual valve amplifier (VVA), which simulates a variety of tube amplifier circuits.



Screen Capture From the Diamond Cut 32

The controls for the VVA can add warmth to your recordings and create extreme effects like guitar amplifier overload or fuzz box, as well as a few other tricks. Advanced menu options allow selection of simulated tube circuits, such as 12AX7 triode preamps, 6EJ7 pentodes, two-stage class A and transformer class AB. Relief is at hand for those who lament the cold, crisp digital sound of CDs.

The Harmonic Exciter mode varies the distribution of harmonics that are generated by the VVA. This tool can be used to synthesize upper register harmonics that may have been lost through tape wear or poor high-frequency response in the master recording.

It can be used to add presence to a vocal recording or create a more up-front sound on more modern recordings.

Additional tools facilitate the CD-burning process, including gain normalization and finding and marking silent passages.

#### Step-by-step restoration

Following software installation, the entire audio restoration process is a series of simple steps. Connect an audio source to the sound card, set levels and click on the record button to start recording.

It is better to err on the conservative side when recording; you can always normalize levels later. If you clip on recording, you will have little head room left for applying any equalizer boost or other effects without distorting.

After saving and naming the audio file, Diamond Cut will draw the waveform in the top (or source) window. Whatever tool is applied affects the top window, and results show in the bottom window.

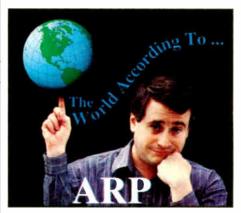
In a typical session, several filters and effects are applied one after another, making the destination file the source file each time. This allows the user to return

See TRACER, page 34

# 'Ere Now, What's All This, Then?

by Alan R. Peterson

One of the aspects of my wanting to be a jock all these years was how colorful the lingo used to be.



My favorite DJs, especially the oldline jazz guys in New York City back in the '60s, would use such dazzling metaphors and slick turns of phrases that I would not only hang on every word, but would also try to figure out what exactly they were really saving!

they were really saying!

"Mr. Jay's Appliance in Williston
Park," went one live ad, "where you
won't be Jaked out of your hard-earned
long green." Translation: You won't get
ripped off.

Once I got in the driver's seat myself and had my own show, I did my best to tint and color my delivery with fancy metaphors and slick lingo inspired by my idols

Unfortunately, my early tinting and coloring was done with all the subtlety of See SLANG, page 30



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# Slang

Continued from page 29 a Maaco automotive spray gun.

It took me a while to grasp the notion that slick DJ talk is like salt: a little works wonders, but a whole shaker of the stuff will cause sickness and, in some cases, severe dehydration.

## Delightfully twisted

Eventually, I shook the beat-poet thing and found my own voice, but still managed to twist and pervert the English language delightfully to a creative end.

Here's the biggest drag of all: By the time I got it right, the days of the on-air poet were numbered. The role of air talent was becoming vanilla-ized. "Inane DJ

chatter" was the label given to utterances or grunts beyond the audience's interest in a particular song. This chatter had to be excised at all costs.

In some markets, the most creative adlib a jock is permitted is, "Yo, wassup, wassup?" before delivering the backsell.

I cannot place blame on this trend

Male jocks learn the hard way not to line up blind dates with listeners after they end up with their first bunny boiler.

This has gone on to the point where we have arrived today: time, temp, title and all 'tracked from a studio 500 miles

anymore than I can expect to yank the clock backward to a day where the smooth, hip, jazzy jock can again be at the top of the pile.

So what I will do instead is look forward to a new source of euphemisms and metaphors to drop some sparkle and humor into my delivery:

Onward across the Atlantic to the United Kingdom.

I am not talking of the typical American observation of, "Gee honey, they call gasoline petrol over in England!"

I am talking about adopting the pub slang, the conceptual images, the amusing word substitutions that, when heard, will make Monty Python fans here drive off the road.

Thanks essentially in whole to J.M. Duckworth, the man who maintains www.peevish.co.uk/slang, a definitive Web site devoted to slang of the U.K., there is now an entire universe of colloquialisms available to all that will come in handy when no other words are appropriate.

#### Try these out

Duckworth granted permission to quote and reuse some of his material for this article. Try a few of these on your audience and gauge the results.

Ackers, a noun that means "money." Derived from the Egyptian word akka, this word gives a whole new twist to big prize giveaways: "Be the 107th caller and win a pile of ackers!" Listeners will call to find out what ackers means, while the station crosstown scrambles to give away its own pile of ackers.

All mouth and no trousers. A phrase applicable to most ego-driven morning talent, it means being boastful with no real reason.

"As the actress said to the bishop ..." Drop this in as a nonsequiter before relating some dull lifestyle story. It grabs a listener's attention because of its risqué

Bang on. The U.K. equivalent to inane DJ chatter, it means to talk incessantly and uninterestingly. Usually practiced by someone who is all mouth and no trousers.

Driving the porcelain bus or talking on the big white telephone. Two euphemisms that mean "throwing up." Practiced extensively at station-sponsored club nights, it is also quite often the reason why the Sunday morning. jock is never on time.

Bumwad. Normally found next to the big white telephone: toilet tissue.

Bunny Boiler. Male jocks learn the hard way not to line up blind dates with listeners after they end up with their first bunny boiler (an obsessive, psychotic woman). The concept originates from a pivotal scene in the movie Fatal Attraction.

Clock. Not the pie-shaped thing on the wall showing the music rotation, but a euphemism for face. "Hey, check out the clock on the new sales assistant."

Cock a snook. This one will make the phone ring. Wait until a few callers express their horror at your choice of words, and then tell them it means, "thumbing your nose." But boy, does it sound nastv

Collywobbles. Rather a childishsounding word, it means nervousness, perhaps with stomach discomfort. Useful during phoners: "Ready to play our High-Low Jackpot game? You don't have the collywobbles now, do you?"

Dog's breakfast. The studio appearance after a particularly great show. It See SLANG, page 31





Dear Radio World Reader: Last year, many of the greatest names in our industry teamed up with Radio World for a year-long sweepstakes extravaganza that resulted in almost \$50,000 in prizes given away. Due to

the overwhelming response from you, we've decided to do it all again in 2002 as a way of showing our appreciation to our loyal readers.

Throughout 2002, Radio World will conduct 26 random drawings.

Prizes and winners will be announced in every issue of Radio World.

Thesis 26 changes to win!

To enter the contest you need to complete these three easy steps:

- Go to our Web site: www.rwonline.com
- Click the Readers' Choice icon on our home page.
- 3 Follow the instructions and fill out the electronic entry form —that's it, you're done!

This is your chance to participate in our Readers' Choice program and win great prizes from these fine Radio World supporters:

























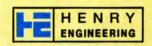


























Contest Rules: To enter the drawing, simply register online at www.rwonline.com/sweeps. 26 drawings will be held throughout the year. Contest registration expires Dec. 4, 2002. Final contest prize announcement on Jan. 1, 2003. One prize per winner. All contestants MUST reside in the United States and have a valid mailing address. Winners should receive prizes within 30 days of notification; however, actual delivery time may vary and is not guaranteed by IMAS Publishing. Federal, state and local tax laws may apply to prizes and are the sole responsibility of the winner. Employees and affiliates of IMAS Publishing are not eligible.

PRODUCT EVALUATION

# Sony MZ-B50 MD Means Business

by Carl Lindemann

Sony's latest offering in the MiniDisc market is a cut above the consumer portables that have become a radio field recorder standard.

The MZ-B50 is billed as a "business recorder" and replaces the popular MZ-B3. Like its predecessor, the MZ-B50 incorporates a built-in microphone and speaker.

The new unit distinguishes itself with the latest upgrade to the ATRAC codec and its controls, which are a vast improvement over the mini portables. It is still not quite the fantasy digital recorder, but is a long step toward it.

#### Ahead of its time?

The previous business recorder, the MZ-B3, was released just before the big boom in MD. It was pricey at \$995 list, and had an earlier codec than the CD-quality ATRAC 4.x that finally sparked major attention for the format.

Still, it was a solid, reliable recorder and gained currency with broadcasters.

While interesting, the high price and middling sound quality of the MZ-B3 took backstage to the smaller, cheaper units that soon followed. My point of reference with consumer MiniDisc recorders is the Sony MZR-55 that I have carried around for the past two years. This is one of the first "MD



Jacket" sized units — barely larger than the MD media itself.

The downside here is that miniaturization had reached the point of diminishing returns. The controls were too

small. Aside from the most obvious functions, many important controls were accessed through not-so-intuitive menus. Having the manual along was key

The controls on the MZ-B50 are almost exactly what I would have wished for after endless fumbling with the MZR-55. Part of this is possible simply because there is more real estate with the bigger form factor.

Beside the fact that the buttons are larger, two key menu-driven commands are actual control buttons: Erase and record mode (stereo/mono) functions are now mounted on a button and a two-position switch.

Making mono recordings with the

menu mode is a total hassle. After setting the recording on pause, one must toggle through the menu to set it. Here, the option for double-length recordings is set before you even get started.

#### Warning prompts protect

Also, erasing to clear a track or to make a fresh disc with the earlier MZR-55 requires going through numerous prompts. Now on the new unit, a single button saves much effort. At first, I was concerned that this could make recordings vulnerable. The unit has sufficient warning prompts to protect from accidental erasure.

Other additions here include improved cuing and search capabilities. A double speed playback allows for skimming through a recording. The Easy Search function jumps forward or backward in one-minute increments.

If you are not snapping in track marks during a recording session, finding sound bites in lengthy recordings can be a daunting task.

The cue/review basically is a fast forward/reverse control, but without the feel of working a cassette. Hitting the cue/review button does not bring instant gratification. There is a pause of a few seconds while the audio information is loaded for quick review. (Ed. Note: For another take on this function, see related story, page 32.)

For all the advantages of digital, jumping back and forth looking for a splice is still somewhat cumbersome.

The MZ-B50 is about twice as large as the smallest recorders. This increase is marginal when compared to the older MZR-55 with the attached battery pack.

This screw-on accessory holds two AA batteries and is a necessary enhancement to the tiny rechargeable incorporated into the case. The MZ-B50 simply includes the two AA cells in the body

Battery life seems completely adequate. It made it through a 4-hour-plus recording test on a single recharge of NiMH batteries.

See SONY, page 32

# Slang

Continued from page 29 means simply, *a mess*.

The British have a remarkable body of words and phrases that are used to define "ugly."

Assuming the clock on the aforementioned sales assistant is none too pleasant, it may be said that person has a faceache; a face like a bag of spanners (wrenches); a face like a bulldog chewing a wasp; a face like a wet weekend; a face like the back end of a bus; or that he or she is spuggly, as ugly as a spud.

Of course, if that person is also somewhat disputatious or objectionable, they are a *plonker* or as *rough as a badger's bum*. Someone at the station wasn't paying close mind to whom they hired, were they?

But say the day comes when an employee must be dismissed. Whether due to budget concerns, bad ratings, whatever; it happens.

That's the day the employer must give someone their P45. In the street slang of the U.K., this means to end a relationship. Otherwise, a P45 is an official form explaining tax details that are needed by a future employer.

The intolerant employee may respond with, "Sod this for a game of soldiers," a phrase the meaning of which has been somewhat lost over the years, but still sounds serious.

The HR director may come back with, "No need to throw a wobbly" (become very angry). The upset employee would retort, "Same to you with brass knobs on," which would certainly indicate some contempt on the part of the employee.

The HR director, anxious to get the belligerent employee out the door, hands

him his severance check, containing a *skerret*, or a tiny amount of money, then tells him *to put the wood into the hole*, or "shut the door."

He grunts, "Fine, play silly buggers all day, then," which roughly means to be uncooperative. The director replies, "I don't need any GBH of the ear'ole, you know!", which dismisses his incessant complaints (grievous bodily harm of the ear holes).

On his way out to his car, he cannot help but *prang* (damage) the remote van's door with his foot, and treating himself to a hearty *fnarrr fnarrr* as he does (equivalent to "har-de-har-har" here, adapted from Finbar Saunders, a comic character in a U.K. publication).

As if we needed the translation, right?

## **Best friends**

Some of the greatest friendships forged between jocks early in their careers last for decades.

Old *muckers* (friends) can sit for hours talking about the old days ... how much beer they used to *neck* (drink) in their youth, those *Melvins* (wedgies) they used to give each other when the mic was open, the food in the station fridge that started to *hum* (smell bad), and how *narky* (annoyed) the PD would get when logs were improperly filled out.

Yeah, I think the way to go for me is to begin lifting a little slang from the Queen's English to freshen up my delivery.

It's fun, it makes folks wonder what I'm up to, and it gets me back into using language I really enjoy without getting too wonky (unstable).

And that's strewth (the truth).

Visit the dictionary online at www.peevish.co.uk/slang. Web site contents copyright 1996 J.M. Duckworth and used with permission.



PERSONAL BROADCASTER

# Sony Misses Target on Updated MD

During the political campaign season of 1996, I took Radio World's review sample of Sony's then-new MZ-B3 MiniDisc recorder to ABC Radio's newsroom in New York City.

I wanted some opinion about the first MD machine designed for "business" use. Instead, the MZ-B3 helped launch a radio revolution.

ABC News Correspondent John Lyons was about to begin the network's "Rolling Across America" tour. He would spend the next six weeks sampling political opinion in 30 states. Lyons planned to record his interviews on DAT, edit on his laptop and feed the sound files to ABC via modem.

#### New plan

The plan changed when the veteran reporter was shown the B3. Impressed with its excellent performance, portability and ease of use, Lyons asked for and got his own B3 for the upcoming tour.

He became so comfortable with the recorder that he abandoned the DAT format and adopted the B3 for his onlocation interviews. From then on, the use of MiniDisc spread rapidly across

Over the ensuing six years, the Sony B3 portable has become a workhorse for audio journalists. It is light, offers good battery life on AA cells and is about as reliable as any electronic device can get. Since 1996 I have logged hundreds of interviews on my pair of B3s and have yet to lose a recording due to a technical failure.

Understandably, the release in 2001 of a successor model from Sony, the MZ-B50 (\$599.95), was greeted with some excitement among those recordists who are heavy users of the MiniDisc format.

The new model is lighter, has longer battery life and features a built-in stereo microphone, rather than the mono mic in the B3. On paper, the MZ-B50 appears to be a winner.

That is, until one discovers the fatal flaw.

In designing the B50, Sony engineers somehow missed one of the most important ways reporters use the venerable B3 — for fast written transcription of audio material. When recording interviews, news conferences or speeches, key sections are labeled with a "track mark." When a good candidate for a usable sound bite appears, the reporter simply hits a button to ID that location. Later, when navigating through the recording, track marked sections can be found quickly.

For transcribing interviews, the B3 adds to the convenience by allowing the easy backward and forward shuttling of the recording while in the play mode. This way, when one misses a word, one simply presses the rewind button and the recording gently moves back a few seconds.

This audible mode usually works quickly, taking from one to two seconds to activate once the user presses and holds the appropriate RW or FF button on a B3.

Not so on the B50. Reverse movement takes much longer to activate -

once the user depresses the rewind button. Forward movement, in my tests, was never less than eight seconds.

Not only does one have to wait for what seems to be an eternity for the machine to respond, but the round

move forward or backward through a recording in one-minute increments. While Easy search is a nice feature, it is no substitute for the unreasonably long time it takes the B50 to activate the FF/RW buttons in the play mode.

It is a surprising ergonomic faux pas for Sony to make such a design mistake in updating a successful product.

RW/FF buttons on the B50 are so tiny they dig into your fingers as you hold them down.

It is a surprising ergonomic faux pas for Sony to make such a design mistake in updating a successful product. The bottom line is that the B50 is so awkward and frustrating to use for transcription that I finally abandoned it and went back my trusty B3.

#### User groups notice

Although this problem has been noted on Internet message boards for months, Sony offers no fix, pointing users to a new feature of the B50 called Easy Search.

As online reviewer Daniel Robinson put it, "The main problem - the one that is almost fatal from a professional standpoint — is the FF/RR, which makes using the MZ-B50 and searching for portions of recorded material like walking in molasses."

Other than this serious deficiency, the B50 performed well as long as I used an outboard microphone. Motor noise was often apparent when recording with the built-in stereo mic, a common problem that plagues many recorders with this design.

When stereo recordings are made on the B50, a new feature called Voice Up has been added to enhance voice clari-

ty during playback.

Voice Up mode emphasizes the leftright orientation of individual voices, making them easier to distinguish and hear. The function is most effective when using headphones to listen to stereo recordings made at meetings and conferences.

For some reason, Sony chose to limit Fast Playback, another useful feature from the B3. In the older model, the playback speed can be set to either 1.6 or 2.2 times as fast as normal playback. In the new B50, fast playback is fixed at 1.6 x.

#### New model coming

Although the Sony product managers will not say so on the record, it appears the manufacturer may have recognized the problems with the B50. A new model, the MZ-B100, has been announced in Japan; expected U.S. release is spring of 2002.

I could not find anyone who has had hands-on experience with the B100, but a product sheet for the new model highlights a "jog dial for easy speed control and editing."

A playback control function varies speed from +10 percent to -20 percent, according to the product sheet. It was not clear whether the shuttle problem has been solved with the upcoming model.

I hope the new B100 will be more responsive than the B50 to the realworld needs of journalists who use MiniDisc in their daily work. In meantime, the B3 — in this user's opinion remains the gold standard for portable MD recorders.

Frank Beacham is a New York Citybased writer and producer. His Web site is at www.beacham.com; e-mail him at frank@beacham.com.

Continued from page 31

The larger size of the MZ-B50 is attributed to the built-in speaker/stereo microphone. The mic is geared for business recorder applications. The quality is fine for documenting a busiproblem. But the plug-in power for cheap electret mics is a serious issue when using dynamic microphones.

#### Snaps & crackle

Aside from generating a noticeable hiss, jiggling the connector can spoil a recording by sparking snaps and crackle.

The MZ-B50's controls are almost exactly what I would have wished for after endless fumbling with smaller recorders.

ness meeting or interview for print with a voice-operated trigger to start recordings.

As with most integrated microphones, it is really not broadcast-quality. The speaker is welcome as it allows checking a recording without having to hook up headphones. For all these increases in size and features, the unit weighs less than 8 ounces without bat-

The only marks against the MZ-B50 are the 1/8-inch jacks, the absence of a manual recording level setting and the limited remote control. Yes, the 1/8-inch jacks are, in and of themselves, not a

You can fabricate your own special XLR-to-1/8-inch cable with DC blocking capacitor to work around this. There is no such workaround for setting levels. While the automatic recording level setting is actually pretty good, it is nice having the option of doing this manually.

As it is, the only option here is the two-position mic sensitivity switch. It would be terrific if a manual control emulating an analog recorder's jogwheel were built in. Also, a backlighting option to the display would be help-

Also on my wish list is a full-func-

**Product Capsule:** MZ-B50 MD Recorder Thumbs Up √ Terrific size ✓ Improved cueing and search capabilities **Thumbs Down** No manual recording level ✓ 1/8-inch jacks✓ Display not backlit Price: \$599.95 For more information from Sony call (800) 222-7669 or visit www.sony.com.

tion remote control. As it is, the wired remote only controls playback. Being able to start, stop and/or pause a recording with it would be nice. Mysteriously, the three-volt AC adapter is not included in the kit. Better to trade the cheesy headphones supplied with it for that.

Despite some shortcomings, the MZ-B50 is far more field-friendly than the tiny consumer portables. Obviously, it does not have near the amenities that the full-sized pro recorders do.

This unit lies about halfway between those ends of the spectrum and will no doubt appeal to many radio reporters. I like it enough that it has replaced the MZR-55 as my primary field recorder.

**World Radio History** 

Innovation begins with a fresh look. How are we doing so far? Copyright 2001, TLS Corp. SmartSurface Telos and the lefos

# ◆READER'S FORUM◆

#### **ARMA**

I read with interest your comments regarding the cancellation of the New England ARMA show (Dec. 19, "How Many Owners are Too Few?").

There is no question that Vince and Robin Fiola's stewardship has been invaluable to the continuation of the ARMA organization and trade-show efforts. In my opinion, without them the organization would have ceased to exist some time ago. My hat is off to these two friends of all broadcasters.

While it is true that the lack of vendor support ultimately caused the New England cancellation, I would respectfully suggest that attendees also share a small responsibility to support these regional shows by attending.

Strong support shows vendors that devoting the resources to attend is worth-while. A good show occurs when many vendors and attendees participate. Attendees get to review a wide range of offerings, and the synergy of many attendees and exhibitors is what we find behind all successful trade events.

While some regional shows do well, sadly many have been sparsely attended in spite of significant promotional efforts to encourage attendance. This legitimately raises questions about the viability of such shows.

I know that many manufacturers like Telos and Omnia would like to support a few select regional shows, providing that they are well-attended. With sufficient attendance from local and regional broadcasters, these shows can be a great resource for broadcasters and a lot of fun, too.

Marty Sacks National Sales Director Telos Systems/Omnia Cleveland

#### Women in radio

Although I left the radio industry two years ago, I devoted the first 30 years of my working career to that industry. Your publication is one of my lifelines to what is happening inside radio.

The Dec. 19, 2001 issue featured an article by Vincent Ditingo, "Women: Key in a Tough Economy." It was somewhat amusing to see that recent research confirms what we programmers knew 25 years ago: that the more a woman matures, the less likely she is to tune in to play a radio contest; and that mothers need a station they can listen to with small children present.

This should be entry-level knowledge.

How many radio stations or groups of stations are actually researching the "brand" of their stations? The sales staffs sell branding campaigns often without knowing what a brand really is.

The station promotion department runs promos telling the listener what the station stands for. That is not branding, it's positioning.

But does the program management actually know how a listener feels about the station? That is your brand. If you don't know your "brand," the "positioning" may create a false "brand promise." That leads to a disappointed listener, and we all know what enough of those can mean.

Why is knowing your brand so important? How can you deliver what really matters to the listener without knowing how they feel about listening to your station?

Does McDonald's sell hamburgers? No. They sell fun. Does Volvo sell cars? No. They sell safety. Research has revealed the "brand," and now they promote their "brand promise."

Maybe all the major radio groups and consultants are doing this. I don't hear the results of such research at the grass-roots level.

Our firm has conducted numerous branding surveys. As a result, many of our clients have changed the way they communicate with their customers, and it's working. It surely will work for radio stations.

The conclusion? Radio can't rely on researching the obvious. To move profitably into the 21st century, radio must include branding research as a part of its strategic planning.

Bob Foster Regional AE Mathis, Earnest and Vandeventer Cedar Falls, Iowa

#### Digital broadcast book review

The Aug. I issue included Rick Barnes' review of the book "Digital Audio Broadcasting — Principles and Applications," edited by Wolfgang Hoeg and Thomas Lauterbauch. However, Rick doesn't mention the problem of concatenation of psychoacoustic data compression algorithms.

The MPEG-2 algorithm is used for the emission stage of DAB, the last stage of the delivery from studio to receiver. If care in the use of compression has not been exercised back down the program chain, what the listener hears may not be acceptable.

# Deadhead Sticker on A Cadillac

Fans of '80s music recognize the headline from the Don Henley song, "The Boys of Summer." Following this memorable image was the line, "Don't look back, you can never look back."

In the New Year, we have much to look forward to. More widespread acceptance of XM digital satellite radio as new subscribers sign up. The anticipated emergence of Sirius as a competitor.

IBOC too. In mid-December, for example, not far from the Radio World offices, a Washington AM station participated in extensive on-air testing of the AM in-band, on-channel digital model. Listeners and broadcasters alike rang in with their opinions on a Washington radio/TV Internet forum.

Changes are coming up fast in that Cadillac mirror. For the small- or mediumsized operation — even for large stations not owned by giant corporations — being complacent or even ignorant of these changes could prove disastrous.

Megastations will continue to slash staffs and voicetrack with out-of-market talent. Should you do the same, or offer your listeners living, breathing *local* talent?

Should you stay with a winning formula that has been in place for decades, or shift to ultra-tight niche programming? Is it time to shed a "heritage" image, or reinforce its stability in the community?

Will you investigate IBOC more, or leave that little detail for the next owner or engineer? Is your audio digitized yet, and are you using the Web to your advantage?

One should not become stuck in a 1980s radio mindset. Yet the cries of, "Just give me a cart machine and a turntable," or "We used to do *real* radio," goes up at more stations than we care to realize, especially after the on-air computer crashes for the fifth time in three days.

An attachment to the old days is healthy and pleasant. But when your station and your image are locked in a time warp, the competition will blow right by you.

The sticker and the Cadillac are scrap. Don't look back, because it will never again be the way it was when we thought we were doing "real radio." It's always been real.

It's 2002. Time to forge ahead.

--- RW

The audio at the input to the DAB transmitter may sound okay, but at the output of the receiver it may be another story. Multiple passes of high psychoacoustic compression in an audio chain may, at the last moment, introduce audible artifacts.

Delay is another problem. Imagine a program presenter monitoring a DAB transmitter "off-air" on headphones, and the STL circuit includes a codec with 100+msec of delay plus the delay on the emission side. Unless he or she is very experienced, a cumulative delay of any more than 50 msec makes life difficult.

Nonpsychoacoustic or ADPCM algorithms are available. These algorithms will not conflict with the DAB emission performance. Apt-X is renowned for its robustness and sustained performance in multiple coding situations. With a delay parameter of 2 msec it is the ideal algorithm for the intermediate stages of an audio chain.

Apt-X uses accurate prediction techniques that enable the removal of quantifiable data from the PCM audio during encoding. This reduces the bit rate demands, and then similar amounts of data are added back in the decoder.

It is advisable to use the highest bit rate possible if further use of compression is

required, particularly in the early stages of a digital audio chain. Performance thresholds set by earlier stages of high compression cannot be improved upon with lower compression in later stages.

I'm sure Rick's doctorate paper would be enhanced by some research and reporting on the use of digital audio data compression algorithms. Data compression has been around for 50 years — we just need to respect it and learn how to use it successfully.

Fred Wylie
Technical Consultant
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- All electronic switching
- Separate mic & line inputs
- Eight or twelve input channels
- Two stereo Program busses
- Two Mono/Mix-minus busses Full-featured monitoring
- Twin VU meter pairs (PGM & switched)
  Opto-isolated control logic
- Built-in cue and headphone amps



# AUDIDARTS DIGITAL D-70



The D-70 digital console from AUDIOARTS not only utilizes the latest in digital technology and chip sets, it can be ordered with a serial interface that lets it integrate with most popular automation systems and

station routers; it even has WHEATSTONE's exclusive VDIP™ software system.

Plug-in modules let you have any combination of mic, analog or digital line inputs, and the 4 stereo busses give you plenty of flexibility (each has both digital and analog outputs). With sample rate conversion on all digital inputs plus se-

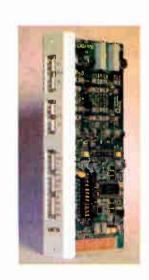


WHEATSTONE'S VDIP™ Virtual Dipswitch Software lets you configure D-70 input channels with a laptop computer. Once configured console runs stand-alone.

lectable console clock rates of 32, 44.1 or 48KHz (and an optional external house sync) the D-70 can fit right in with all your facility's present equipment.

With a compact, tabletop-mount footprint and a modular rear connector system that utilizes plug-in

submodules for easy analog-to-digital field switches, the D-70 can be configured onsite quickly and easily. On the functional side, fullscale digital peak <u>plus</u> simultaneous VU metering, LED illumination everywhere, built-in machine interface, automatic timer and clock (standalone or ESE slave) all come standard, along with separate source selection for control room and studio plus built in talkback. You can even order the D-70 console with a SU-



PERPHONE module to support two callers with automatic digitally generated mix-minus. Both digital and analog line selector panels are also available.

THE D-70 DIGITAL AUDIO CONSOLE—benefit from WHEATSTONE's experience—at an AUDIOARTS price!



