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 Skip Pizzi finds increased productivity a mixed blessing.

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Radio World



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The Newspaper for Radio Managers and Engineers

March 10, 2004

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Hope Springs Eternal for Low-Profile AM

Richer Plans Photon; CFA, EH and Kinstar Proponents Press on
 by Randy J. Stine

FARMINGTON, Conn. The odds of seeing the experimental crossed-field antenna approved for use in this country any time soon appear slim, especially now that the company that was leading its development in the United States plans to market a different low-profile AM antenna.

Yet developers of other, similar AM antennas hope to have more details about their test results and certification plans in time for NAB2004.

The perception that broadcasters need to lower the visual impact of antennas has coincided with increasingly stringent local tower ordinances limiting the height of new towers.

Advanced Antenna Technologies Inc., based in Farmington, Conn., is the successor company to Crossed Field Antennas Ltd. Businessman Robert Richer, former president of CFA Ltd., is president of the new company.

AAT is preparing to manufacture and sell the Radio Photon Antenna, which the

See ANTENNAS, page 3

Antenna Group Widens Its Reach

by Naina Narayana Chernoff

WASHINGTON A group formed to lobby on behalf of antenna owners is launching a new campaign to attract hams, CB users and shortwave listeners. It has lowered membership dues as part of the effort.

Equipped with a new lobbyist and the effort to attract more members, the National Antenna Consortium is preparing to address three key issues before lawmakers and regulators this year.

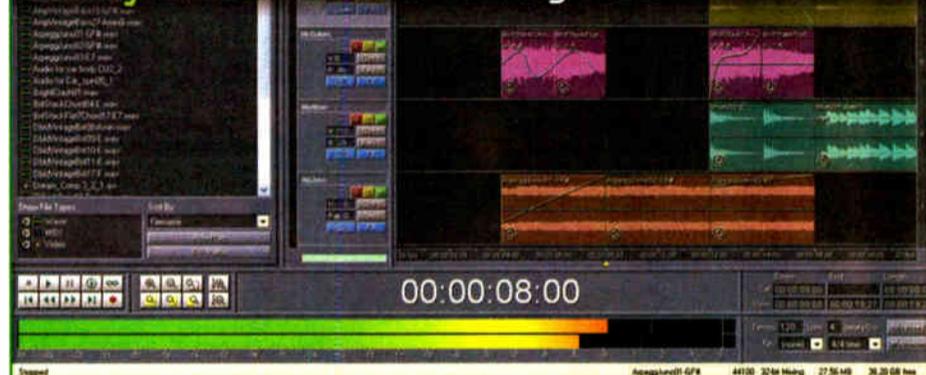
The coalition, formed to lobby for the rights of broadcasters and tower owners, is

expanding its mission significantly. NAC is calling upon Congress and the FCC to create a cohesive set of residential, state and federal policy for all antenna owners, including hams, shortwave listeners and citizen's band (CB) operators.

The NAC plans to push legislation to end private-sector bans on amateur radio antennas by homeowners' associations and work with environmental groups to create a mutually-acceptable approach to expedited approval and siting of communications towers.

See NAC, page 5

Digital Audio Production Buyer's Guide, Page 22





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◆ NEWSWATCH ◆

FCC Proposes BPL Deployment

WASHINGTON The FCC has proposed changes to certain Part 15 technical rules that it says will foster broadband deployment using the nation's power grid.

Such "broadband over power line" systems, advocates say, will use existing power lines to provide high-speed communications to rural and isolated areas.

BPL systems use power lines as a transmission medium to provide communications by coupling RF energy onto the power line. This has some spectrum users worried about interference (see story, page 5).

FCC Chairman Powell said the rules would safeguard existing services against harmful interference.

The proposed changes set forth procedures to measure the RF energy emitted by equipment used to provide BPL and establish particularized interference mitigation requirements. These would ensure BPL devices stop operations, dynamically reduce transmit power, and/or avoid operating on specific frequencies to prevent harmful interference.

Also proposed was a database that would include location, operational frequencies, and modulation type of devices, to help resolve interference issues.

The agency seeks comment on RF mea-

surement guidelines (ET Docket 04-37) for BPL devices and other carrier-current systems. These guidelines would ensure that emission measurements for these systems are consistent. The FCC has not proposed changes to applicable emission limits.

Group to Ridge: Improve EAS

WASHINGTON The Partnership for Public Warning sent Secretary of Homeland Security Thomas Ridge an assessment of the Emergency Alert System and recommendations for strengthening it.

It was prepared by emergency managers and public warning experts from various government and private organizations. It cites challenges that have diminished the effectiveness of EAS as a public warning system.

Among the concerns: "National cable program suppliers and other national networks are not part of the national level EAS; the current system includes outdated plans, missing communication links and inadequate training; and no significant effort has been made to incorporate new technologies such as cell phones and pagers," states PPW.

The group asks the department, among other things, to provide management oversight of the EAS system and guidance on new technologies; upgrade the Primary Entry Point system; designate EAS responsibilities among various authorities; and provide funding to operate EAS.

The group's chairman, William Craig Fugate, director of the Florida Division of Emergency Management, stated, "We once had a strong civil defense program that tested warning systems and educated the public. Unfortunately, with the end of the Cold War, we became complacent and paid little attention to issues such as the Emergency Alert System.

"Sept. 11, 2001 was a wake-up call," Fugate stated. "Adoption of the PPW recommendations can result in a more effective EAS quickly and for relatively little money."

Read the EAS assessment at www.partnershipforpublicwarning.org.

PPM Is 'In' In Canada

TORONTO An audience measurement firm in Canada has adopted Arbitron's Portable People Meter as its technology standard for TV and potentially for radio. That means as BBM Canada "expands into new markets or replaces its current meter technology in existing markets," it will use PPM, according to spokesman Mike Ferreira.

For TV, that process begins now; for radio, PPM testing could begin this year.

See NEWSWATCH, page 3 ▶



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Antennas

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company claims will be a simpler, smaller, more stable form of the crossed-field antenna.

According to the company's literature, "The Radio Photon Antenna is specifically designed for use by MW (medium-wave, or AM) and LW (long-wave) stations. It is compact (and) safe, requires no ground system and a minimal amount of land."

Richer declined requests for an interview and would not comment on his new company.

A contract dispute in 2002 between Richer and one of the CFA's co-inventors, Dr. Fathi Kabbary, led to the dissolution of the CFA Ltd. partnership. Kabbary and Dr. Maurice Hately developed the CFA in the 1990s. Kabbary and Richer formed the partnership in 1999 with the intent to pursue worldwide distribution.

The development of the crossed-field antenna had intrigued broadcasters faced with stricter land use and zoning processes for building their broadcast towers.

The antenna developers claim that the CFA outperforms conventional AM arrays using shorter towers, which are typically less than 30 feet tall. They said users could enjoy reduced costs due to smaller real-estate requirements.

Construction of a CFA test antenna in Shropshire in the United Kingdom began in early 2000 with hopes developers could record enough data to gain FCC approval of the technology in the United States. The Shropshire antenna was dismantled in 2002 after numerous construction delays.

Richer told Radio World in 2002 that engineers had problems phasing the test antenna properly. CFA Ltd.'s plans called for Ben Dawson, a partner in the Hatfield and Dawson technical consulting firm, to run tests on the Shropshire CFA. Those tests never happened.

Critics of the CFA have questioned whether the design, which uses small discs and round radiating elements to create the RF signal, is an effective radiator.

According to Kabbary, CFA antennas are in use in Egypt, Italy and China. He is seeking an agreement with another

company to market the CFA in the United States.

"We are looking for a well-known radio organization in the U.S.A. to do it," Kabbary said. "We hope to build the first high-power CFA in the United States soon."

Antenna manufacturer LBA Technology Inc. announced in 2000 it had secured exclusive manufacturing and marketing

Star-H Corp. and Kintronic Labs Inc. are partnering on a low-profile AM monopole called the Kinstar. Star-H officials say they are moving forward with plans to submit a formal report to the FCC this spring seeking the commission's certification.

Star-H officials say the Kinstar antenna provides effective levels approaching that of a conventional quarter-wave antenna.

experimental license from the FCC with 250 watts on 1680 kHz at the test site. The Kinstar antenna's height will be scalable with frequency, Star-H officials said.

EH antenna update

Meanwhile, the developer of yet another small antenna design, the controversial EH antenna, is prepared to present details at NAB's Broadcast Engineering Conference in April.

The EH antenna, in the form of a vertical dipole, is shorter than a quarter-wave antenna and requires no ground radials. EH Antenna Systems President Ted Hart said the antenna could be placed on a building or free-standing tower. He met with FCC officials last fall regarding the certification process.

"We have had good conversations with (the FCC). They agree that it works, but they are not sure about my theory since it doesn't comply with classical theory," Hart said.

Hart said plans call for building an EH antenna in Williams, Ariz., after the FCC issues a construction permit, which it is expected to do later this spring.

"The FCC will require full radiation tests on the first few antennas we build before issuing blanket certification," Hart said.

His latest version of the EH antenna, called "Star," measures just eight inches in diameter and is less than 10 feet long, he said.

Hart will present details during the "Radio RF and Transmission Development" session at NAB2004 in Las Vegas.

Several companies are racing to develop a short AM antenna.

rights for the CFA throughout the western hemisphere. However, according to LBA President Win Donat, the company is no longer marketing the CFA.

"After thorough evaluation of the data made available to us by the inventors, as well as anecdotal field information, we concluded that LBA Technology could not market (the CFA) as a viable technology for broadcast use," Donat said.

Kabbary said his company, CFA International, is the only company licensed to sell CFA antennas worldwide.

"Any short antenna system with two feeders coupling two elements is definitely a CFA," he said.

Richer declined to describe AAT's Radio Photon Antenna further, citing a "major announcement" coming in the spring.

Photons at the ready

Ed De La Hunt, associate chief of the FCC's audio services division, said he was not familiar with the Radio Photon Antenna.

"We have not heard anything regarding the use of this antenna for AM broadcast."

Sources say AAT would need FCC certification to market the low-profile antenna effectively in the United States. Without certification, a licensee would have to propose using the antenna via application. The FCC typically places multiple conditions upon such uses, including full non-directional proofs of performance to establish the antenna system's minimum efficiency and non-directional characteristics.

Other antenna manufacturers have joined the race to develop a short AM antenna that meets the FCC's minimum radiating requirements.

"There is no magic or novel technology associated with the operation of the antenna," said Mike Jacobs, director of research and development for Star-H. "It's our ability to run multivariable computer optimization in the design phase that allows us to get the performance and size levels we want."

Jacobs said he was awaiting final word from Ron Rackley of duTreil, Lundin and Rackley Consulting Engineers regarding their "technical argument" before submitting the filing to the FCC.

Field-strength measurements collected from a Kinstar test site constructed near Bristol, Va., in late 2002 showed levels 98 percent as efficient as a quarter-wave antenna.

The Kinstar test antenna was 45 feet high and 105 feet in diameter over a full 120-radial ground screen and braced with wooden poles.

Kinstar developers received a special

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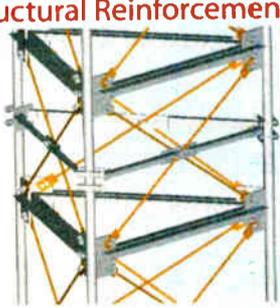
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NEWSWATCH

► NEWSWATCH, continued from page 2

The board noted the interest in adopting PPM for radio in Canada. The audience measurement firm has begun encoding radio stations in Montreal in anticipation of a radio PPM test as early as this fall.

BBM first acquired the rights to use the PPM in Canada in 1992, according to Arbitron.

Littlejohn Named To Ibiquity Board

SAN ANTONIO Jeff Littlejohn, senior vice president of engineering for Clear Channel Radio, has been appointed to Ibiquity Digital's board of directors. He replaces Al Kenyon, Clear Channel's pre-

vious representative, whose job was eliminated in late fall.

Ibiquity confirmed that because the open slot was a Clear Channel seat, the broadcast company would choose Kenyon's replacement on the nine-member board.

In his role with Clear Channel, Littlejohn oversees technical aspects of the radio division. He is a member of several industry committees including the National Radio Systems Committee and various groups within the NAB. He is a former director of engineering for AMFM Inc. and Chancellor Broadcasting.

"Clear Channel was one of the early investors in Ibiquity and has always been a strong supporter of HD Radio technology. As such, we have worked closely with Jeff Littlejohn for a number of years," stated Bob Struble, president and chief operating officer of Ibiquity.

A Happy 40th to the SBE

In observing anniversaries, we have the opportunity to pause to appreciate those who are important to us.

The 40th anniversary of the Society of Broadcast Engineers allows us to say thanks.

The society salutes that milestone during the spring NAB convention at a membership meeting on Tuesday, April 20, in Las Vegas.

It was John Battison, then editor of Broadcast Engineering, who kick-started the SBE, writing that the time had come for a new organization of engineers.

According to the official history, the early 1960s was a time of discontent over a merger between the Institute of Radio Engineers and the American Institute of Electrical Engineers, which is now the Institute of Electrical and Electronics Engineers.

Battison took it upon himself to act as organizer, publishing an application form and writing letters to 5,000 North American engineers. This led to an informal meeting in Binghamton, N.Y., in 1963, and the first official meeting of what was called the Institute of Broadcast Engineers at the 1964 NAB convention in Chicago.

It was a gathering of approximately 100 engineers in Willard Room "C" at the Conrad Hilton Hotel. (Were you there?)

The acronym IBE sounded too much like that of the electrical union IBEW; so mem-

bers changed the name to the Society of Broadcast Engineers. Battison, fittingly, was its first president. Forty years later, SBE has 5,500 members in 107 chapters.

I tip my hat to the SBE, Battison and all those who have worked to make the organization effective over the years including its present staff. SBE's certification programs, work with the FCC, volunteer frequency coordination and educational initiatives on the national and chapter levels are an indispensable part of our industry.

You can become a member by visiting www.sbe.org. Tell me about your SBE memories via e-mail to radioworld@imaspub.com.

★ ★ ★

It's not easy to rise early during NAB week, but dozens of broadcast folks will do just that on Saturday morning April 17 to do a good deed and play some golf.

Organizers have set up the second annual Scott Beeler Memorial Golf Benefit, the proceeds of which help the family of the late Beeler, known to many for his work in equipment sales for Allied, Harris and ERI. His widow, stepfather, mother, sister and other family members plan to attend.

Last year, 60 players helped raise about \$22,000. The timing was good; Scott Beeler Jr. was born around that same time.

The event is on the Revere Golf Club's Concord course, which features several picturesque holes overlooking the Vegas strip.

The cost is \$800 per foursome, including cart and green fees; about 30 percent goes to Beeler's family. Club rentals are available. A shotgun start is at 7:45 a.m.; the event is followed by a trophy presentation and lunch.

To find out more or to inquire about next year's event, contact Brian McConnell at (702) 897-0275, Cam Eicher at (513) 339-1430 or Mark Goins at (352) 622-7700.

★ ★ ★

Two familiar suppliers have new owners. DRS Technologies recently completed its acquisition of Integrated Defense Technologies. As part of that deal, Continental Electronics, a subsidiary of DRS, merged with IDT, which had owned Continental Electronics since 2000.

Continental has had several owners since 1946, including founder James Weldon, LTV, Varian Associates and Tech-Sym.

Separately, Broadcast Electronics sounds reenergized after the purchase of the company by an equity firm. Thompson Street Capital Partners and some of the management at BE have joined to buy out Hoak Capital Corp.

Look for new products and initiatives at the coming NAB show from both of these long-time industry suppliers.

Meanwhile, we'll watch with interest at the convention to see what 25-Seven is all about. The new company, reported on page 14 of this issue, is headed by Geoff Steadman of Orban and CartChunk renown and involves several other names familiar to readers.

New companies, new owners and fresh products are important for radio, now as ever. It's good to see.

★ ★ ★

I wrote recently about the tiff between NAB and XM over the latter's intentions regarding localized programming. One read-

From the Editor



Paul J. McLane

er replied he's not surprised by how many people like the satellite services.

"The musical content goes way beyond what the big corporate guys have been making us listen to the last umpteen years," he stated, repeating a common refrain. He's tired of the worn-out 150 tunes on classic rock stations, for example.

This reader felt that the NAB is complaining only because it now realizes that the satellite systems' coverage area "surpasses all of the 'technical hopes' of the IBOC thing." He loves his XM service, listens to radio only for local traffic and weather, and thinks that monopoly of traditional radio, too, will soon be history.

I agree with this reader that our industry has left itself open to this competition; it's something about which we've editorialized many times. And I would not be surprised to find myself a satellite subscriber at some point. People are excited by it.

I am annoyed, though, at how XM has gone about this; and I predict a lot more dodge and feint at the regulatory level to win the ability to provide broader services.

Ironically, many consumers who have spoken out about how good XM and Sirius are also complain about the impact of consolidation on media. Then they pay money to subscribe to one of only two national satellite services.

If the local broadcast system we all know ever truly becomes profitless, do we really prefer any medium that gives us only two prominent national owners? And do we really believe that, once they are established, they will keep to their promise of airing few or no commercials?

I doubt it. ☹

We Ask for Your Vote

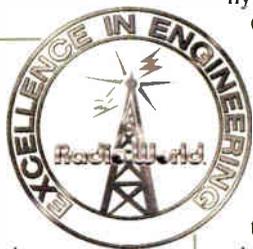
As a Radio World reader, please take a moment, if you haven't already, to log on and cast your vote for one of your colleagues to receive our new Radio World Excellence in Engineering Award. Vote at www.rwonline.com/vote.

There's an added bonus: You will read fascinating answers by the nominees to questions we provided — answers that offer "mini biographies" into the lives of people you may have thought you knew pretty well.

Shortly we'll close the balloting and tally the results, which we'll announce in time for the NAB convention.

The award recognizes individuals for excellence in U.S. radio broadcast engineering and allied fields. Nominees were chosen by a panel of Radio World advisers, contributors, suppliers and other industry experts. The winner is chosen from among the nominees by your vote.

The nominees represent the highest ideals of the U.S. radio broadcast engineering profession and reflect those ideals through their contributions to our industry. I congratulate all of them for their contributions.



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NAC

► Continued from page 1

NAC also is hoping to prevent the regulatory approval of proposed "broadband over power line" technology, believing it to be detrimental because of potential interference with emergency communications by amateur radio service operators, shortwave listeners and CB users.

Don Schellhardt, a government relations attorney and policy adviser recently hired by NAC, said the group hopes to attract new members to build support for this year's agenda.

In January, NAC reduced its membership dues for corporate members to a range from \$100 to \$1,000 based on gross annual revenues. Prior, dues had been based on whether corporate officials wanted to serve as board members, and ranged from \$1,000 to \$10,000. The group also reduced individual annual membership dues to \$20 from \$50.

"We're trying a bunch of new things," said Schellhardt. "There's an opportunity to cut some new ground here."

Schellhardt estimated that the three-year-old organization has a couple of dozen corporate and individual members. He believes the number will grow to 200 shortly.

Schellhardt said NAC chose its three priorities for 2004 carefully.

"It's an assessment of the most important issues," he said. The group's agenda, he said, was influenced by taking into account agendas of other groups already involved with different issues of concern to broadcasters.

Lifting homeowner association bans against amateur radio antennas is NAC's first priority. According to the Community Associations Institute, there are 250,000 residential condominium, cooperative and homeowner associations in the country. In many metropolitan areas, HOAs forbid amateur radio operators from installing antennas on top of their homes. Schellhardt said this restriction denies communities access to emergency communications systems afforded by amateur radio systems.

NAC plans to launch a bipartisan campaign to push a House bill, H.R. 4720, sponsored last year by Rep. Steve Israel, D-N.Y. The measure would require homeowners' associations to reasonably accommodate amateur radio communication. NAC is seeking a sponsor for a companion bill in the Senate.

Under current law, the FCC requires states and localities to make reasonable accommodations for amateur radio antennas; each state or municipality must set their own laws for antenna limitations. The policy does not apply to private sector organizations such as homeowner associations.

Israel's legislation seeks to ensure that amateur radio operators are available for emergency communications in all sections of the country, regardless of whether they live in a development such as a retirement community or townhouse subdivision.

NAC hopes to draw in more members to support this effort. If NAC can attract more from the group of estimated 700,000 licensed amateur radio operators, 5 million to 7 million CB users and estimated 1 million shortwave listeners, Schellhardt hopes to bring more clout to NAC's fight.

"By drawing out shortwave and CB users, we could have 5 to 10 million voters involved in this debate," he said. "That's more than enough to get Congress to listen."

Schellhardt hopes the removal of antenna bans will be the first step in a long national campaign to cut back on HOA authority.

Shu Bartholomew, a Washington area-based homeowners' activist, agrees reform is

necessary to providing a secure national emergency communications system.

"The mindset of many HOAs is that they have a rule, and regardless of whether it makes sense, they will enforce it," she said. The reasoning to keep the rule is flawed, said Bartholomew, who hosts a cable access show "On the Commons" in Fairfax County, Va.

"In the late '60s, they banned all antennas because they were considered eyesores. The antennas are much smaller nowadays."

Schellhardt said the CAI has not yet mounted a lobbying initiative against the proposed measure.

In addition to helping a broader range of antenna users, NAC wants to help commercial broadcasters and tower owners by speeding the approval process for tower applications.

In some localities, the application process for proposed towers can take months and in other cases years, said Gerald Agliata, NAC executive director. State policies vary, he said, pointing to almost non-existent zoning and planning laws in Texas to strict policies on height and type of tower in California and New York.

NAC will call on the FCC to issue a partial preemption for local governments, in which the veto power of municipalities would be restricted when deciding tower applications. "We don't want to exclude local government completely," Agliata said. "There needs to be a mix of federal, state and local control over this."

The consortium also plans to ask for faster regulatory approval of applications from proposed tower owners pledging to abide by tougher environmental standards. Schellhardt plans to start discussions with environmental and regulatory groups about standards for towers.

Agliata said he hopes to get federal, state and local officials to agree to a mandatory 180-day review period for tower applications.

A tower expert and lobbyist for ham radio operators, Agliata said the three main arguments used to oppose new towers are invalid. Depressed property values and the harmful health effects of RF are simply "not true," he said, adding that the third common argument — towers damaging the aesthetic nature of a community — is subjective. ●

Protection From BPL

One of the goals of the National Antenna Consortium is to help defeat the authorization of "broadband over power line" technology, which would allow providers to send data over power lines.

BPL systems use existing electrical power lines to provide high-speed communications. Because those lines are ubiquitous, proponents say, BPL systems have the potential to bring high-speed communications to rural and isolated areas.

The idea is to give consumers a choice of high-speed communications providers, such as cable, DSL, wireless, satellite, and to the extent possible, power line.

BPL systems use existing electrical power lines as a transmission medium to provide communications by coupling RF energy onto the line. This has some existing spectrum users worried about the potential for interference, especially to emergency communications and ham radio operators.

In a joint letter to Congress in January, NAC and two other groups, the Amherst Alliance and the North American Shortwave Association, urged lawmakers to intervene if the FCC approves the technology. Don Schellhardt, a government relations attorney and policy adviser recently hired by NAC, also is president of the Amherst Alliance, a part-time position he handles concurrently with his NAC duties.

The organizations, along with the American Radio Relay League, a national association for amateur radio, are protesting the BPL technology because of potential interference to receivers. The AARRL launched an independent study by an outside contractor. The group contends that studies by amateurs and regulators demonstrate that BPL that uses HF or VHF spectrum will cause serious degradation of the communications capability to nearby receivers on those frequencies.

In February, the FCC began a rule making on BPL. This followed a Notice of Inquiry on the subject that garnered more than 5,000 comments. The proposed changes include procedures to measure the RF energy emitted by equipment used to provide BPL service. The commission proposed rules that would require BPL providers to take certain steps to prevent interference to existing spectrum users.

The commission contends that any interference problems can be resolved. Chairman Michael Powell said the Part 15 rules would protect existing services, such as public safety and amateur radio, against harmful interference from BPL.

Although Schellhardt believes the proposed rules would be an improvement, the NAC wants the FCC to take no action until it has reviewed studies being conducted by the ARRL and the National Telecommunications and Information Administration, one of two federal agencies that expressed broad concerns about BPL interference. The NTIA is studying the interference potential by conducting evaluations of field test sites.

The Federal Emergency Management Agency also objects. FEMA warned that sending data through power lines could disrupt its National Radio System, a backup shortwave command and control medium designed to communicate with the radio systems of other agencies during times of disaster.

In filings last summer, NAB expressed broad concerns of interference from BPL to existing communications services.

Powell pledged to support BPL while protecting other services from interference in a speech at the National Press Club in January.

The joint letter to Congress helped to begin a dialogue on BPL, Schellhardt said, adding that the groups are getting lawmakers' attention in hopes that they will overturn any FCC ruling approving BPL in the future.

— Naina Narayana Chernoff




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(6AM- 3PM EST)

Indecency Gets Spanked on the Hill

Look for Fines to Rise; Lawmakers Also Discuss 'Three Strikes' and Other Ideas

by Leslie Stimson

WASHINGTON By this month, the FCC hopes to have the tools in place to increase fines for instances of broadcast indecency violations. At the least, fines will rise; Chairman Michael Powell supports that, and so do all four fellow commissioners.

Lawmakers in February were discussing other possible steps to rein in

license revocation procedures for "egregious and continued disregard" of the decency laws and begin treating multiple indecent utterances within a single program as constituting multiple indecency violations.

Yet he stopped short of endorsing one broadcaster's call for "clear guidelines," telling one lawmaker, "That's a trap."

The guidelines are clear, he maintained.

process to take the burden of proof off those who make the complaints and graphic violence should be added to the indecency standard. Cable and satellite broadcasters need to be part of any voluntary conduct code, he said.

Indeed, Commissioner Kevin Martin echoed this thought. "Radio personalities that we have fined for indecency violations just move to satellite radio."

Ten-fold

Upton's Telecom Subcommittee passed a bill to raise broadcast indecency penalties drastically in February. The full House Energy and Commerce Committee was expected to take up the measure later in the month.

If passed by both Houses of Congress, H.R. 3717 would increase the basic fine for an indecency violation from the current \$27,000 amount to \$275,000 per violation with a cap of \$3 million.

Upton, the bill's sponsor, hoped to have the measure ready for the president to sign by this month.

found to be airing indecent programming more than three times; making the networks responsible for paying the fines, rather than affiliate stations; having the broadcast indecency guidelines also cover violence; and restoring the broadcast programming code and requirements for stations to save recordings of programs.

As lawmakers grilled the commissioners as well as Viacom President/COO Mel Karmazin and NFL Commissioner Paul Tagliabue, the NAB announced it plans to hold a private "All-Industry Summit" to address topics related to responsible programming.

"The first-of-its-kind meeting, to be held in early spring, comes in response to growing concern over program content from parents, Congress and the Federal Communications Commission," NAB stated.

"Broadcasters have a long history of being responsive to community needs, whether it be Amber Alerts, coverage of local issues, emergency weather warnings or providing airtime for charities," said President Eddie Fritts. "The time has come for a full and frank dialogue with our media colleagues on voluntary pro-



Telecom Subcommittee Chairman Rep. Fred Upton, R-Mich.

broadcasters, including license revocations, restoring a version of the old broadcast programming code and adding a requirement that stations keep tapes of all programming for a specified amount of time.

The five FCC commissioners testified before Congress over broadcast indecency in back-to-back hearings in the Senate and House in February. Powell urged lawmakers to pass bills to raise the levels of fines for broadcast indecency violations "at least ten-fold."

"We need this increased authority to ensure that our enforcement actions are meaningful deterrents and not merely the cost of doing business," Powell said.

He's challenged broadcasters to reinstitute a voluntary code of conduct.

Additionally, Powell pledged to begin

Powell traditionally has shied away from having the FCC regulate content.

The American Civil Liberties Union says the ambiguity of current law, coupled with higher fines, would have a chilling effect on free speech.

Powell took heat from lawmakers for a backlog in processing and collecting on indecency fines. According to House Telecom Subcommittee Chairman Rep. Fred Upton, R-Mich., of the seven indecency fines levied by the FCC in 2002, only two have been collected so far by the Justice Department. Only one in three in 2003 was collected.

Powell said many more cases are pending and that they would be handled soon.

Commissioner Michael Copps said the FCC also should reform its complaint



NFL Commissioner Paul Tagliabue (left) and Viacom President/COO Mel Karmazin chat before the hearing.

Leading up to the vote were hearings on broadcast indecency.

Lawmakers discussed adding various provisions to the legislation. These include revoking the license of a station

gramming responsibility."

Fritts said local broadcasters, network representatives and others would be invited.

See INDECENCY, page 7 ▶

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Indecency

► Continued from page 6

Viacom President/COO Mel Karmazin says the indecency standards used to be clear, but no longer are. In testimony before the House Telecom Subcommittee, he said the vagueness of indecency standards makes them hard for broadcasters to follow and the FCC to enforce. He urged the commission to begin a rulemaking on indecency.

"We will fulfill whatever laws the FCC and Congress enact."

When asked by Upton about the infamous Opie and Anthony "Sex in St. Patrick's" incident at WNEW(FM) in New York, Karmazin said even though he thought the material was offensive and that it shouldn't have aired on the station, that doesn't make it legally indecent. That, he said, is why Infinity is appealing the fine.

"We fired the PD, fired the GM, fired the producer and fired the hosts," Karmazin replied. "We changed the format of the station from talk to music." The material did not conform to Infinity's standards, he said.

Many lawmakers said fines for violating indecency rules must be raised because big media companies see them simply as a cost of doing business.

Clear Channel has announced a 'Responsible Broadcasting Initiative.'

Rep. Edward Markey, D-Mass., said, "Washing their mouths out with soap would have a greater deterrent effect than the few and paltry fines the FCC currently levies."

In the meantime, Karmazin's company is cooperating with the commission's investigation of the Super Bowl incident in which singer Janet Jackson's breast was exposed.

Viacom is reviewing its ads to ensure they fall within internal guidelines. Infinity radio stations "that produce their own potentially problematic live" programming will continue to use tape delay systems, and Infinity will continue to discipline employees, including firing them, should they fail to use those systems, Karmazin said.

Asked if he supports making the networks responsible for paying indecency fines, rather than the stations, Karmazin said he had "no problem" with the concept.

In February, Viacom/Infinity ordered profanity delay equipment for all 180 stations and ordered all on-air interviews to be taped in the interim.

"When in doubt, leave it out," became Karmazin's motto in a management-wide conference call.

The company also created a new legal position specifically for ethics questions. Henry Moinz was named vice president, associate general counsel, compliance.

Before an appearance before the same committee by Radio CEO John Hogan, Clear Channel fired controversial Florida host Todd Clem, "Bubba the Love Sponge." The show, originating from WXTB(FM) in Clearwater, had led to a record broadcast indecency fine of \$755,000.

Clear Channel Communications in late February launched the "Responsible Broadcasting Initiative," a zero-tolerance policy towards broadcast indecency including training and automatic suspensions "for anyone that the FCC alleges has violated indecency rules," according to a press release.

President/COO Mark Mays stated that in such a case, the jock would be suspended. After a quick investigation, any DJ found to be violating the FCC's indecency rules would be terminated.

Clear Channel also announced it would modify new on-air contracts to ensure jocks share financial responsibility for paying a fine if they say something on the air that's determined to be indecent.

The company also said it supports a Decency Task Force, volunteering to take part with representatives from broadcast,

cable and satellite industries to develop a response to indecency and violence in the media.

In a hearing of the House Telecom Subcommittee, Rep. Heather Wilson, R-N.M. literally shook her finger at Karmazin and Tagliabue over the Super Bowl show. Lawmakers thought the entire halftime broadcast, including the ads, was tasteless, not just the one incident in which Jackson's breast was exposed.

The FCC received more than 200,000 complaints from the public about the broadcast.

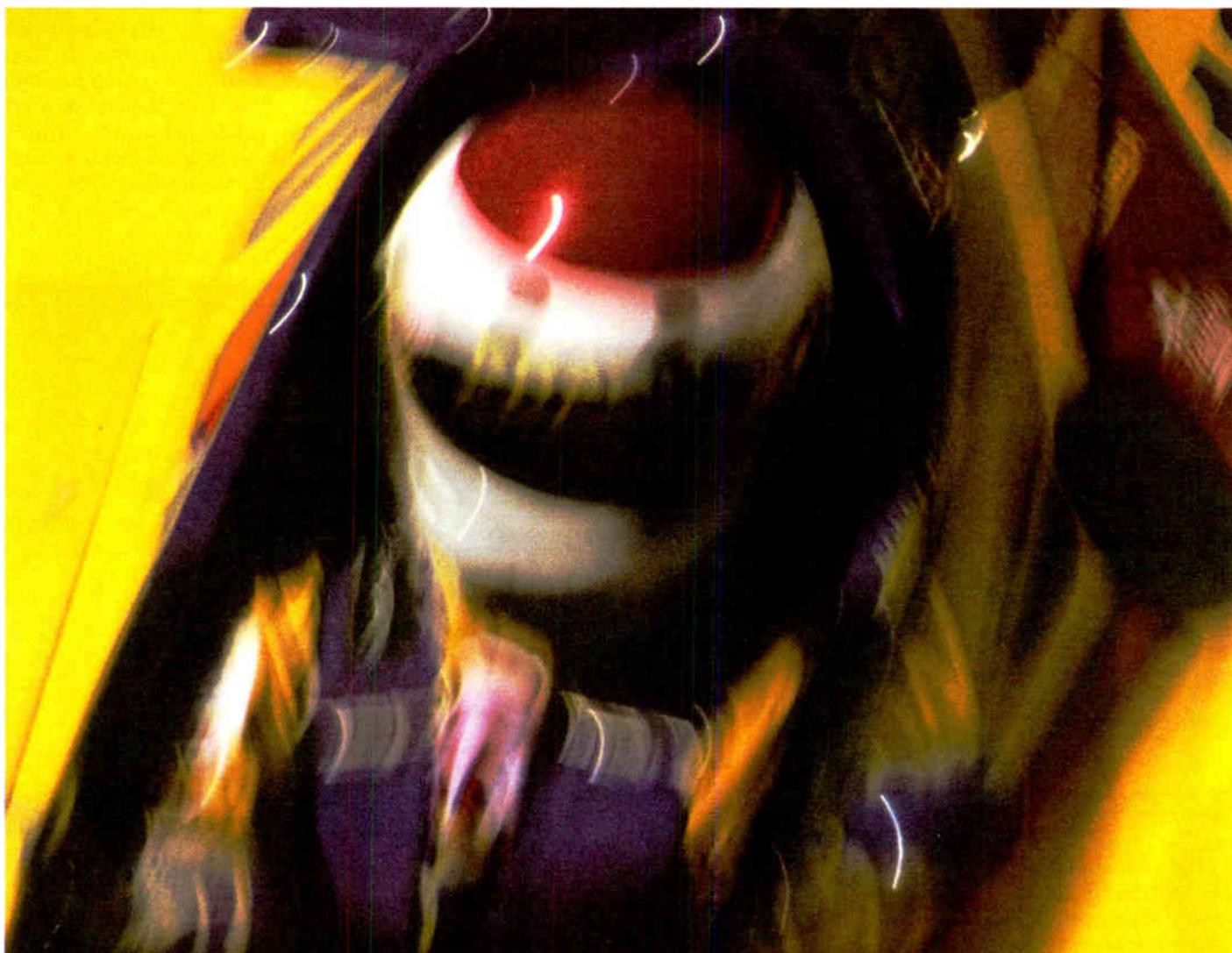
Wilson said her son thought the broadcast was "nasty." She said, "If the fourth-grade boys at a public elementary school in Albuquerque can tell right from wrong, we need to ask ourselves where you corporate CEOs lost your way."

"You knew what you were doing. You knew that shock and indecency creates a buzz that moves market share and lines your pockets."

Tagliabue said the NFL was "deeply embarrassed" by the broadcast and took responsibility for it.

Karmazin said, "It should not have happened," referring to the Jackson incident. Yet, he told lawmakers "You're just wrong" to assume CBS/Viacom knew what was going to happen.

"We are not in a race to the bottom," said Karmazin, referring to a phrase used by several politicians. CBS used a five-minute tape delay at the Grammy Awards, its next live telecast after the Super Bowl. Karmazin said he instructed his staff to stop the telecast, and go dark if necessary, if it appeared a participant would cross the indecency threshold. ☹



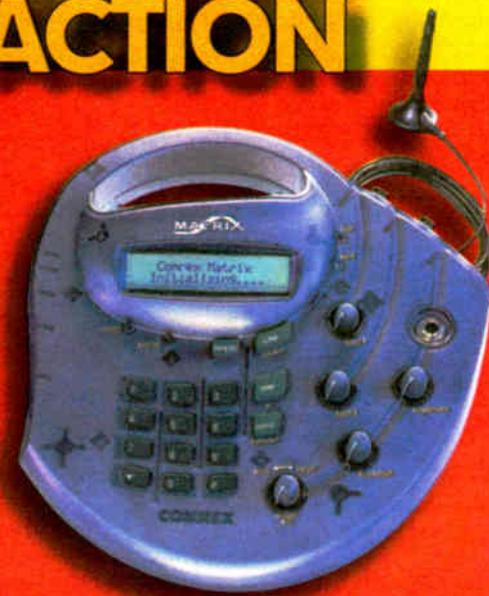
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Radio World, March 10, 2004

Past columns are archived at www.rwonline.com/reference-room

Beware the Pulsing Mattress

by John Bisset

Bob Gonsett's CGC Communicator newsletter had an interesting item recently, about an electric mattress pad that generates radio frequency interference, or RFI. The interference destroys reception of Channels 2 through 6, as well as stations operating in the FM broadcast band.

The engineers from Communications General Corp. found the problem is caused by an inadequately shielded switching-type AC-to-DC power supply.

pulses. Under the right conditions, CGC found that the interference can extend up to 250 from the source.

The pad and power supply are manufactured by Perfect Fit Industries, and the product is not FCC Part 15-compliant. CGC found no Part 15 sticker on the system it inspected. To make matters worse, when both Perfect Fit and the power supply design engineer were questioned by CGC, they were unfamiliar with the FCC's Part 15 requirements that prohibit the marketing of

to develop a Part 15 compliant power supply. CGC stumbled upon one such complaint at www.eham.net/forums/RFI/161.

This entire case has been turned over to the FCC, and the NAB has been notified. If your station maintains an engineering page on its Web site, this is one link you may want to include. It might save you some time in tracking down an RFI problem, and inform your listeners of a potential problem at the same time!

ine the reason there hasn't been is that without the proper tools, this kind of repair is pretty rough to do in the field.

Scott had to repair a couple of distribution amps damaged last summer from a big lightning strike. He fixed the first one without too much trouble, but the second amplifier was another story. Scott ended up lifting a couple foils in the process of changing out the SMD.

From his experience, he learned that it's best to clip the leads off the chip and then remove the leads. The glue holding the surface mount device can be a problem, too. Even though Scott would like to appeal for broadcast equipment to *not* be made with SMDs, the cost and space savings for manufacturers make this unlikely.

ELECTRONIC PARTS

MCM Electronics - www.mcmone.com

Ocean State Electronics - www.oselectronics.com

Parts Express - www.partsexpress.com

Fig. 1

Even when the mattress pad is turned off, RFI bursts are still generated if the power supply is plugged into an outlet. The home or apartment wiring serves as an antenna, making the problem worse. The interference sounds like a "tic-tic" and consists of brief wideband pulses with a one-second delay between the

RFI generating devices.

You can see a picture of the pad system as sold by a retailer at www.assistedlivingstore.com/lv_electric_blanket.asp.

The product is also sold by Kmart, so a wide distribution can be expected. Perfect Fit has indicated that they have pages of RFI complaints and are acting promptly



Fig. 2: 'Flocking' dampens the vibration of springs on this LPB mic arm.

★ ★ ★

Scott Todd of Minnesota AM stations KKMS and WWTC would like to see more written about servicing boards with surface mount devices, or SMDs. I imag-

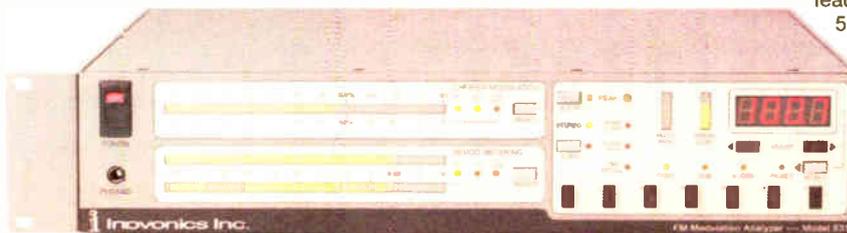
We'd appreciate hearing from readers who have tips on repairing boards using SMDs, especially if you've found a way using regular shop tools. Write to us at john.bisset@dielectric.spx.com. Scott

See WORKBENCH, page 10 ►

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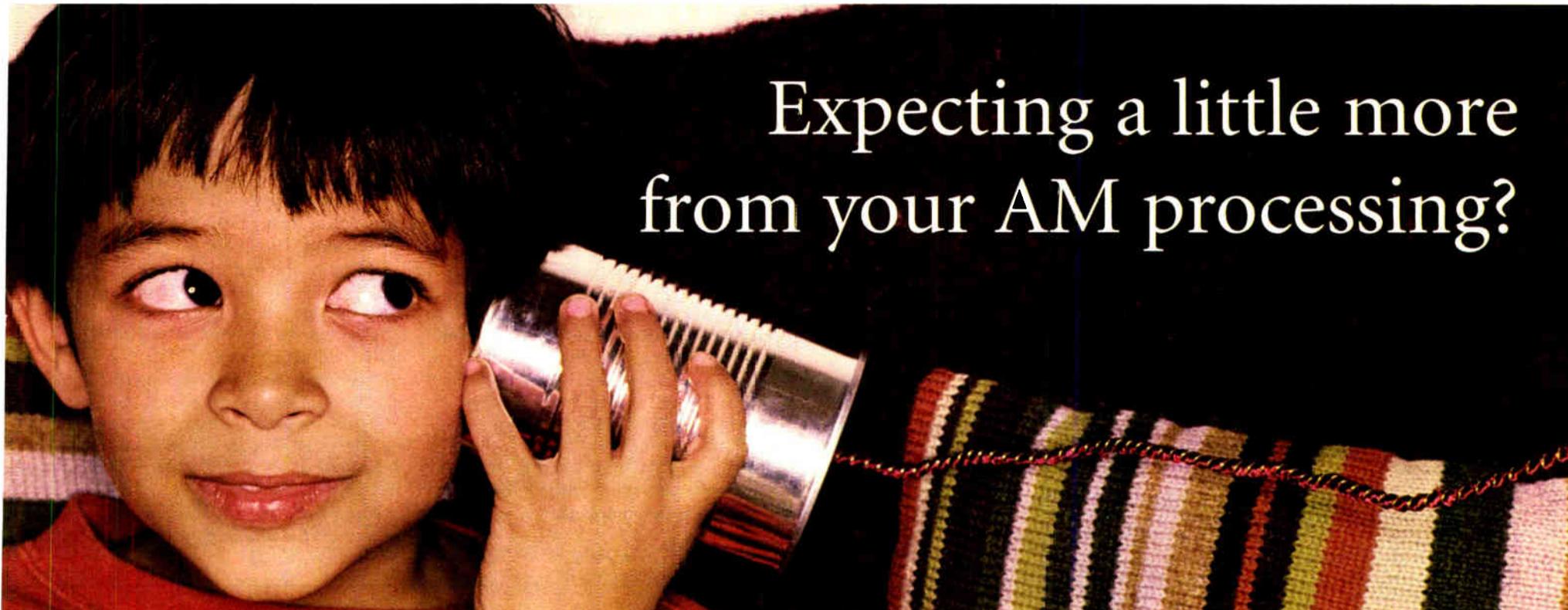


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Workbench

► Continued from page 8
Todd is at stodd@kkms.com.

★ ★ ★

Scott also wrote that he had a difficult time finding companies that stock SMD parts.

Sourcing small parts can be a problem, especially if you're not in a major city. George Pfisterer Jr. of Pfisterer Sound Engineering sent in names of more online sources for small electronic parts, in addition to the ones we've mentioned here in the past. Bookmark the ones shown in Fig. 1 on page 8.



Fig. 3: Some engineers answer to a higher authority.

George can be reached at pfistsnd@iopener.net.

★ ★ ★

While on the subject of parts, here's a great resource from the folks at Telos Systems. This tip comes from the company's weekly e-newsletter.

If you rebuild old gear, you've undoubtedly run up against obsolete transistors that need replacing. The University of Washington has compiled a fast, easy-to-use online cross-reference. You simply enter the ID of the old transistor, and the newest equivalent is supplied.

Bookmark www.ee.washington.edu/circuit_archive/parts/cross.html. Thanks to the folks at Telos/Omnia, always going the extra mile for the broadcast engineer.

★ ★ ★

Winston Hawkins' bad tube experience, described in the Jan. 2 *Workbench*, rang a bell for Rich Archut, chief at WKDN(FM) in Camden, N.J., who last year had a similar experience.

percent of the authorized power out. To really mess with Rich's mind, he installed two other newly rebuilt tubes he had on hand, only to have the same problem occur.

This is when you just *know* the problem isn't the tube, but somewhere in the transmitter. Like Winston, Rich's problems went away only after installing a new Eimac tube.

★ ★ ★

Have you tried the new LPB "flocked" springs to help deaden the twang on adjustable mike arms? A closeup is seen in Fig. 2. The woolen fibers dampen the springs, making mike arm adjustment much quieter.

Thanks to Chris Kelley, at Clear Channel's Salisbury, Md., cluster, for sharing this studio upgrade.

★ ★ ★

Cris Alexander, Radio World contributor and director of engineering for Crawford Broadcasting, sends the photo in Fig. 3. It was taken and forwarded to Cris by someone at an "unnamed" FM site in Alabama.

As you peruse the equipment rack, the object of interest is the statuette of the Blessed Virgin, situated in the most prominent location atop the rack. Looking at the rest of the equipment at the site, it's obvious the statuette is there for a reason.

Cris can be reached at crisa@crawfordbroadcasting.com.

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

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

Lighting Up the Dial

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— Ken R.



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Productivity's Pendulum: More Is Less

In Radio as in Other Businesses, Do Quality and Quantity Have a Zero-Sum Relationship?

Much has been made of the productivity increases in modern society, and clearly there is plenty of empirical data to support these claims. The pure output level of many of today's enterprises is enormous, and much of this is due to the multiplying effects of digital technology, in particular PC-based systems.

bined will?

Naturally, there is a middle ground that makes sense, but it seems today that corporate enterprise has not yet achieved a good understanding of such balance. Like many new movements, a pendulum effect applies, in which there is a headlong rush toward the new process, followed by a backlash

In some cases, technology simply has been used as a payroll compression algorithm.

These architectures allow individuals to manage by themselves many processes that formerly required a team of support staff. As a result, human resources have been reassigned and corporate assets often have been more efficiently or creatively applied. In other cases, however, such technology simply has been used as a payroll compression algorithm.

Increasingly today there seems to be a growing reassessment of this trend, and some are calling into question whether true progress has resulted. For example, many professional colleagues have lamented that the ability to manage more processes at once (including purely administrative ones) has now turned into a requirement to do so all the time. Our tools may have given us the ability to keep more balls in the air, but our attention is still applied proportionally to each. This results in individual projects receiving proportionally less attention, and can often mean that numerous efforts fall short of their optimal potential.

To put it in extremes, let's say that a given corporate employee spent last year working on one in-depth project, but spends this year working one hour apiece on 2,000 different projects. What are the chances that any one of those 2,000 projects will meet or exceed the value to the enterprise of last year's single project? What are the chances that all 2,000 of them com-

against it, finally resulting in a reasonable, centrist position that incorporates wisdom from the earlier period with enhancements of the current time.

It would seem we are still in the first stage of that process, having not yet hit the end of the pendulum's initial out-bound swing.

The multiplier effect on productivity has been given highest priority to date, at least in the U.S. digital economy. More is considered unilaterally better, but is it really? Yes, we are all doing more things, but how many of us feel we are giving any of them our best effort?

Doesn't it stand to reason that the more we do, the less attention we will pay to any one of our projects?

As applied to radio

This problem makes itself apparent in radio through the output of today's consolidated operations.

As more services are produced and broadcast from a single facility, the efficiency of broadcasters' production equipment, real estate and staff has never been higher. Yet how carefully are any of these services created? Music flows from hard drives in predetermined salvos, and DJs crank out announce breaks in voice-track factories. The result often has all the quality of a paint-by-number work, and compares poorly to the real-time, hand-crafted broadcasts of earlier times.

The Big Picture

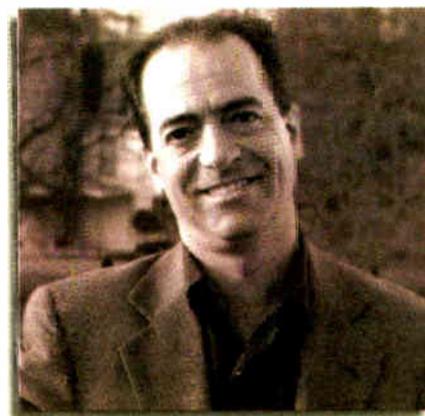


Photo: Gary Hayes, BBC

by Skip Pizzi

Sometimes more may not be better, it just may be more.

Of course, if more is all you care about, the current movement is a panacea. But for discerning listeners, it may be a plague. The real problem arises when such customers realize there are alternatives that can meet their needs and satisfy their taste thresholds, at least some of the time. And when they seek out and use these alternatives, they are not using the radio. It's a simple binary process in which radio increasingly may find itself in the losing position.

For example, there is now a class of "compilation" CDs in which previously published music from various artists is mixed into the form that might have been heard in a creative on-air DJ set, but is now generally relegated to the club DJ milieu. What was once common radio fare has become a premium experience.

And ironically, the PCs that are enabling this process at radio stations also are being used by younger audiences as creative tools to shape their own musical sets and remixes.

Don't blame the tools

It's easy to say this is all the fault of computers, but this would let the real culprit off the hook. Sure, computers can automate simple and labor-intensive processes, but they can't replace human creativity, style and attention to detail. Trying to make them do so is a

conscious business decision, and occasionally an inappropriate one, as some of us are beginning to learn.

The trading of quality for quantity is not an intrinsic artifact of computer-based systems. In fact, in some cases, digital systems can provide higher and more consistent quality of product in a cost-effective manner, as we all know. But where computers are applied simply for their multiplicative effect on a worker's output, quality of that output often will decline rather than improve. It is the trade-off of quality for quantity that is the inherent principle at work.

Like any tool, a computer-based process can be used or abused. For radio's sake, let's hope the pendulum finds its proper rhythm before it's too late.

Skip Pizzi is contributing editor of Radio World.

WE GIVE YOU WIRE

Name: Guy Wire

Occupation: Holding up radio towers, and reporting on the industry that uses and maintains them.

Certifications and Industry honors: Nothin' yet. I don't think they give honors to masked men.

Your mentor or hero: Paul McLane. And Randy Michaels, who started as an engineer and rose to rule a radio empire.

Favorite station growing up: KHJ, KYA, WLW, WLS, KOMA, WABC, WPGC, WIBG and sooooo many more!

Other: Keeping up with all the changes in radio leaves little time to use my hot soldering gun. But it's still fun to pull the trigger.



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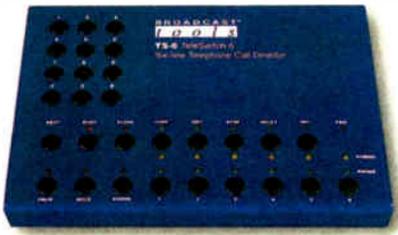
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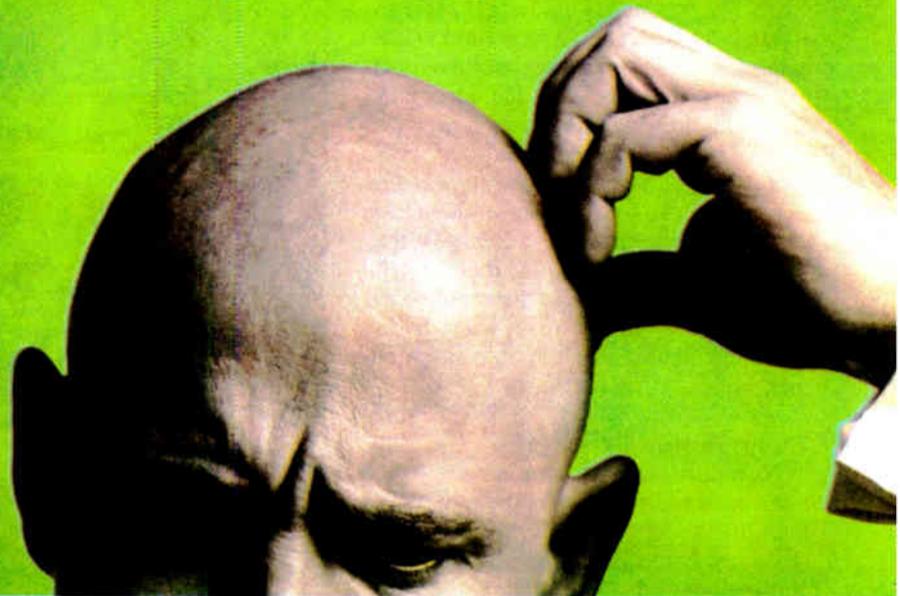
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FIRST PERSON

Taking Wireless to a New Level

by Tony Lopez

The engineering team in Pueblo, Colo., for Clear Channel stations KGHF(AM), KCSJ(AM), KJQY(FM) and KDZA(FM) is taking mobile remotes to the next level by using the latest wireless technology.

To date, the cluster is the only radio group of any owner in the western region using wireless for total multiple-station control from a remote location. We may be the only stations going this far with wireless radio remotes in the country.

The first major test was at the Colorado State Fair in Pueblo last summer.

Truly 'remote' control

Normally, remotes are accomplished by using a radio link from the remote van back to the station. Only audio can be remotely controlled. Usually, there is a console board operator at the station controlling the functions, such as breaks and line caller interaction, etc. The on-air talent at the remote has no control over the automated programming.

What the Pueblo engineering team has done is to give total control of the programming and console functions to the person doing the remote. The on-air talent can interact with his line audience and take total control of the station remote.

With the wireless mic and wireless laptop, they can take song requests and insert them immediately into the programming computer at the station. Live interviews and interaction with the remote audience are immediate. The audio portion of the remote is still done through the use of radio equipment at the remote van. Pueblo Engineering is working to eliminate this link.

The wireless link is achieved by first allowing engineering a connection to the Internet from our remote location. From



The KDZA Wireless Team, from left, is Nick Donovan, Dennis Mountford, Marty Muniz and Tony Lopez

there, we can Virtual Private Network to our main office and directly control our Prophet Systems Innovations automation system. Fortunately, our company already had an existing secure VPN infrastructure that we could utilize.

We are using existing technology to add another connection to this wireless ISP so that we make it a totally portable solution. A Linksys WRT54G wireless router is used to connect to the wireless broadband receiver to give us additional distance from where we actually have to set up the line-of-sight antenna.

Occasionally, we cannot get a LOS shot from inside a building, so it is necessary to move the antenna outside on a Will-Burt Hurry-Up mast. The wireless router then is connected; it will give us approximately 50 to 100 yards of mobili-

ty to use a laptop or pocket PC. No phone line is needed unless you need to have a backup control method. Unfortunately, a cell phone data connection is too slow to maintain effective control connectivity.

One of the main reasons many people are not going totally wireless is security issues with WiFi. We do not use the default setting in our wireless products. We also use MAC address filtering so that only the computers we authorize can get access to the system.

Even though the system is not bullet-proof, the advantages outweigh the disadvantages enough to test the waters of this incredible technology. The wireless system has allowed the Pueblo cluster to eliminate the need for part-time console operators. The exceptions are local high-school games and some live sports events

such as Colorado Rockies games where overtime cannot be predicted.

Just getting started

The current wireless infrastructure is being provided by AcuLink in Pueblo. Line-of-sight wireless equipment is being used. This situation has caused some problems with the existing Pueblo terrain. However, the technology and equipment is available to eliminate these problems and we are pursuing this equipment.

The wireless remotes have not been without failure at this point; but each remote has more than one backup piece of equipment in the event of a wireless failure. Our backup equipment in each case has allowed the on-air talent to complete the remote successfully.

Wireless remotes are still in their infancy. But the engineering team in Pueblo feels that we will be able to eliminate the old technology soon.

The author is chief engineer for Clear Channel Radio stations KCCY(FM), KDZA(FM), KCSJ(AM), KGHF(AM) and KJQY(FM) in Pueblo, Colo.

BUSINESS DIGEST

25-Seven to Launch Product at NAB

Several familiar names in the technology marketplace have formed a venture and plan to introduce their first product for radio stations and networks at the upcoming NAB convention.



Geoff Steadman

The company name is 25-Seven Systems Inc., based in Massachusetts. Its president is Geoff Steadman, known for his advocacy of the CartChunk audio file interchange standard and his work as product manager for the Orban Audicy and DSE 7000 workstations.

Among the principals are Derek Pilkington, former president of Studer Professional Audio AG and Orban and vice president of operations and engineering for AKG; Rick Sawyer, a technology project management consultant who has worked at Orban, IGM Communications, Radio Systems and Gentner Communications; and Neil Glassman of Cowan Communications, who has held management positions at Digigram, Telos Systems and Bradley Broadcast.

Also: Barry Demchak, a software developer, consultant and expert witness now with Torrey Pines Software; and Barry Blesser, developer of the first commercial digital reverb for EMT in 1976 and former chief technology officer for Studer and past president of the AES.

Titles for the principals had not been formalized. Steadman said other owners would not be publicly identified.

Most of the principals date their acquaintance to working at Orban in the period when that company was owned by Harman.

Steadman said the company expects to start by selling its product direct rather than through dealers.

"We're looking at creating products that fill voids as they exist now in radio technology. Those voids affect productivity, they affect efficiency, they affect profitability."

For information visit www.25-Seven.com.

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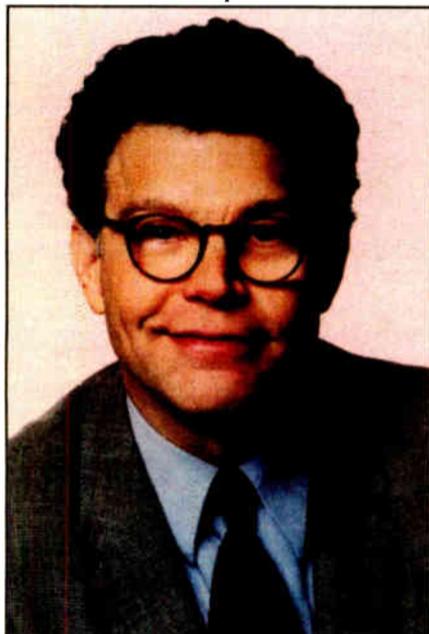
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Air America Sighted Off Left Wing

by Lyssa Graham

The impending debut of Progress Media's liberal talk network, Air America Radio, has created quite a buzz.

The network has signed comedian Al Franken, Robert Kennedy Jr. and Liz Winsted as hosts. Company President Jon Sinton said the network "will be available in the first quarter in top markets across the country, and our distribution channels will continue to expand in the coming



Al Franken headlines the nascent Air America network.

months." It had not debuted as of mid-February.

months." It had not debuted as of mid-February.

Syndicated talk show host Tom Leykis doesn't see much of a future for it. "These investors are going to lose every cent they've invested."

The veteran talker said the first qualification for a talker should be experience in radio. Citing hosts like Limbaugh, Stern and Dr. Laura, Leykis said successful hosts have a strong background in radio first.

"Anybody who's doing syndicated radio has had years of experience as a personality," he said, "Unless they put people like that on the air, it will fail."

And liberal talk, he said, is not a new idea.

"First of all, there's no such thing as a conservative talk network or a libertarian talk network," Leykis said. "This has been tried before. Mario Cuomo had a show, Jim Hightower had a show."

Leykis said he believes talk radio is for the professional.

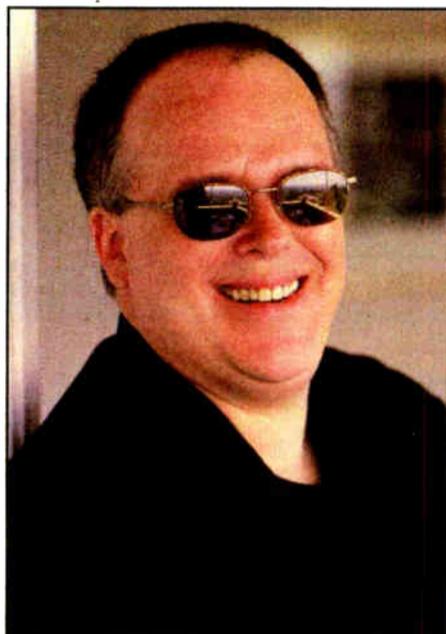
"Talk radio, number one, has to be entertaining. You don't create a talk radio show by who's liberal, you create by who's entertaining. Amateurs fail in talk.

"What we do is a craft and it deserves respect," Leykis said. "The fact is the audience can smell a rat, and if you put

No illusions

Franken said he is aware of the issues surrounding his relative inexperience. "I was very cognizant of that shortcoming, that hole in my experience," he said.

To combat that, Air America has signed radio personality Katherine Lanpher to co-host. Lanpher has experience in print at the St. Paul Pioneer Press



Tom Leykis has issued an on-air challenge to Franken.

in Minnesota, as well as commercial and public radio.

"My sidekick, as I'm calling her, has just ended a five-and-a-half-year stint at public radio, where she did middays," Franken said. "I've done a few different mediums, and I'm nervous enough about doing a new one to have someone cover my back."

Franken said he harbors no illusions about his coming step into a new medium.

"I'm saying, 'I know,' so I'm trying to cover my ass with Katherine," he said, laughing, "There's no reason to believe that I can do this."

But Franken will try. He readily admits to having an agenda.

"I'm not going to do it in the same way that they do it. I'm going to fight back with something they're not familiar with, called the truth."

Franken said liberals have been ceding radio to conservatives for "far too long. Listen to Rush Limbaugh for an hour and listen to NPR for an hour, see which journalism is more fair."

The former Saturday Night Live writer and performer said his show will feature comedy, guests and call-ins. "I'm going to try and honor the pioneers, my idols, Bob and Ray," Franken said.

Will it work? "What passes for liberal talk radio is boring," Tom Leykis said,

"and I consider myself a liberal, more of a libertarian but socially liberal.

"I happen to think that the problem is that liberals are too politically correct and are afraid of saying anything offensive; and by that very nature, they can't be entertaining. ... I wish there was such a person on the air; and at one time I was that person."

Although Leykis said he believes talk radio does lean toward conservatism, he doesn't see a conspiracy. He thinks it "is more a function of talk being on AM, where the audience is older and whiter."

Franken sees an audience waiting. "There's a tremendous hunger for this.

It would help if Rush were on trial when we launched," he said, laughing. Besides, he thinks, radio could be the perfect medium for him. "As I get older," he said, "I think radio is for me. I used to make it purely on my looks. 'Gal bait,' they used to call me."

Leykis will wait and see.

"If your show's not entertaining, it doesn't matter what your agenda is because nobody is listening."

The veteran talker has issued an on-air challenge, offering Franken \$50,000 if he can pull a 1 share at KBLA(AM) in Los Angeles, where Air America was rumored to be coming to air.

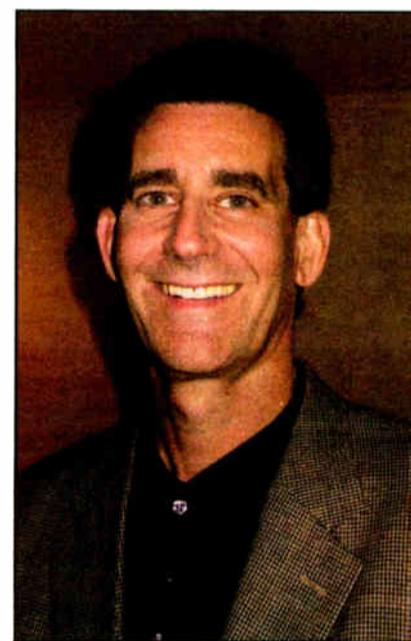
"I would love for somebody to do this right and make talk radio more interesting; but these are not the people to do it." 

NEWS MAKER

Sinton: The Time Is Now

Progress Media's Air America plans to provide 14 to 15 hours a day of progressive programming and to buy stations to broadcast it. Liberal wag Al Franken has been signed to go head-to-head with Rush Limbaugh. Chicago's WNTD(AM) has been secured in a LMA deal. Headquarters is to be in New York.

President Jon Sinton is a former air talent and radio executive, co-creator of "The Source" for NBC Radio and part of a small ownership group. He was executive producer of ABC Radio's "Hightower Radio." Radio World's Carl Lindemann spoke with him about the prospects for his venture.



Jon Sinton

RW: Radio talent has typically grown from the grassroots. Doesn't starting nationally go against the grain?

Sinton: Yes, the top-down approach is unusual. But we don't have the traditional luxury that a station has in starting a program that grows organically from the ground up. We're driven to this by the realities of the current media landscape. Consolidation is a fact of life. Also, we feel there is urgency to create a voice as broad-reaching as possible. The traditional growth of a network would take years and years.

RW: This model seems more like network TV: Toss dozens of shows out and see just a few stick. That's costly.

Sinton: You've got to figure in the opportunity cost, and not just capital costs. The opportunity is now. ... While it costs more in terms of capital, it would cost more in terms of opportunity to wait and try to do it on a slow scale. By virtue of the opportunity being there right now, you owe it to the project to launch it in a different way.

RW: Will Air America try to follow the conservative call-in format, albeit with a different slant?

Sinton: It's a different format than tra-

ditional talk radio. This will have a different "feel," something live, exciting. People seem to expect us to do something ponderous. They're expecting "Meet the Press." But what they're going to get is a lot closer to "Saturday Night Live."

RW: Aside from yourself and Dave Logan, it seems that many of the management and talent, like Shelly Lewis and Lizz Winstead, have TV credentials. Will they translate well to radio?

Sinton: Steve Sutton is a 30-year veteran of radio. He's a great coach and will help the non-radio folks get up to speed. Shelley Lewis is actually from radio, but she's produced high-profile TV for the last 20 years.

Their instincts are incredible ... Writing for the mind's eye and our intimate medium vs. the coolness of TV is thrilling for them.

RW: What is the opportunity for
See SINTON, page 18 ►

ROOTS OF RADIO

Another Take of 'Monitor'

Dennis Hart Updates His Book About 'Network Radio's Greatest Program'

by Peter King

Dennis Hart, a professor at California State University, Fresno, is keeper of the flame at Monitorbeacon.com, a tribute to the long-running NBC Radio Network show "Monitor." He's the author of the recently published "Monitor (Take 2)", an update of a book issued in 2002.

"Monitor" became a weekend radio listening habit for millions of Americans starting in 1955. It was like a long variety

show, with something for everyone. In the way "Seinfeld" was a show about nothing, "Monitor" was a show about everything.

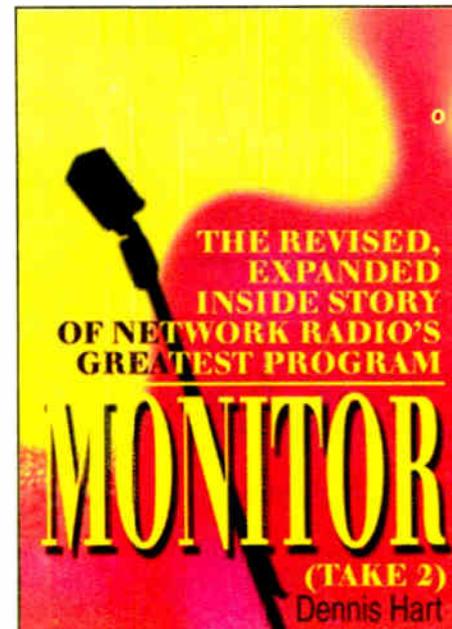
It was invented by legendary NBC President Sylvester "Pat" Weaver as a response to changing and dwindling radio audiences. It was based on the "Today" show concept of information and entertainment, but with greater mobility than television offered at the time.

The program stretched radio's technology, with live remotes from all over

the world. It broadcast live concerts, from big band to the Newport Jazz festival, and comedy from the likes of Mike Nichols and Elaine May, Bob and Ray, and Jonathan Winters. It took listeners, live, inside soaring jet planes, to undersea excursions, into the middle of dress rehearsals for plays and TV shows and inside a camel auction in Casablanca.

"Monitor" broadcast breaking news and sports; it brought listeners monologues from Jean Shepherd and comedy from an in-house stable of talent, commentary and interviews. You never knew what might be coming next.

That, says Hart, was the recipe for



compelling radio.

"Monitor" was a weekends-only program, hosted every Saturday and Sunday by NBC's premiere talent, called "communicators," a Weaver word. They included NBC television stars like Hugh Downs, Gene Rayburn, Bill Cullen, Ed McMahon, David Brinkley, Monty Hall, Frank McGee and Dave Garroway.

The show drew on NBC's stable of radio legends as well, including Ben Grauer, Don Russell and Frank Gallop in its early days, and during the 1960s and '70s people like Jim Lowe, Murray the K, Ted Brown, Don Imus and Wolfman Jack.

It premiered on June 12, 1955, with announcer Morgan Beatty introducing Pat Weaver. Two decades later, Big Wilson and John Bartholemew Tucker hosted the final "Monitor" weekend, in January of 1975.

The show debuted in 1955, with announcer Morgan Beatty introducing Pat Weaver. Two decades later, Big Wilson and John Bartholemew Tucker hosted the final show.

Perhaps its only negatives were its musical content — decidedly MOR — and great production expenses; it began as a 40-hour-per-weekend commitment.

Longtime "Monitor" fan Hart revised and expanded his book after hearing from former show staffers who had discovered the original book or his Web site. (The book includes a story by the author of this article.)

"Several told me it's as if I had been in the control room," he said. "Many came forward with new contacts, new stories and tapes, and those insiders were so good in their conversations ... it felt as if I had been there."

Hart's Web site was born in 2000, after an off-hand dinner-table remark in which he said he had so much "Monitor" material and only wished he knew how to put it online.

See MONITOR, page 17 ▶

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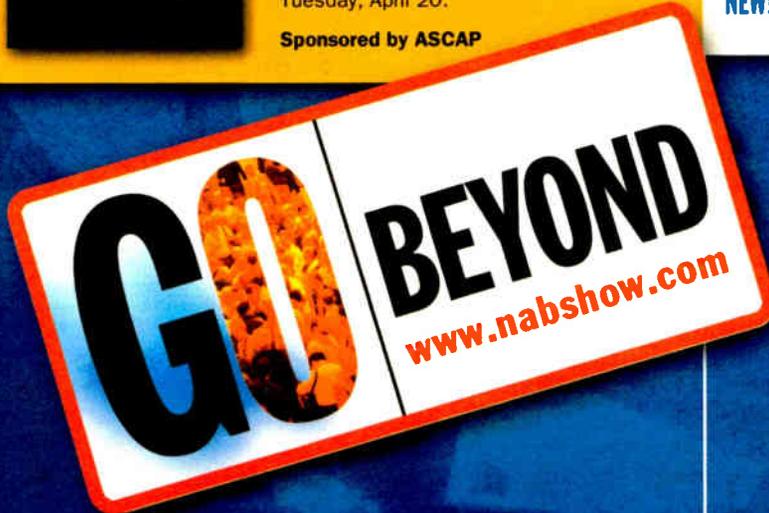
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Could 'Monitor' Work Today?

The demise of "Monitor" in the 1970s was fairly rapid. Station formats no longer allowed for the "something-for-everyone" approach, especially with the program's middle-of-the-road music mix, fine for most of the old-line MOR stations but not for contemporary music stations.

Could "Monitor" work now? Dennis Hart thinks it would get a huge listenership but probably cost too much.

"It took an immense amount of money to produce the show on a weekly basis," he said, "even in its latter years when it was only on for 16 hours a weekend instead of the original 40 hours."

At least one news-talk consultant believes a show like "Monitor" could be a winner in the 21st century. But Walter Sabo, CEO of Sabo Media, said the show would have to update some of its technique.

Music, he said, was not the only problem with "Monitor."

"The biggest one was that it was 100-percent scripted. And every week, that sounded less and less like the radio stations that aired it. Nothing else on the station was scripted. So the presentation sounded dated."

Great talent, Sabo said, should just be allowed to talk.

Sabo believes stations now might be hungry for "a super-charged, live, full-of-features weekend block ... especially since so many stations have locked the door on the weekend. Topical, current, live, fun, daring would work just fine, because now so much of what's on the weekend really isn't given much thought at all.

"Advertisers would love it, and so would listeners if it was flexible and fun."

Chris Berry, president and general manager of ABC O&O WMAL(AM) in Washington and the former vice president of radio for ABC News, doesn't think it could happen.

"The only way a program like 'Monitor' could clear would be to have a deep-pocketed sponsor, like when Alcoa sponsored 'See it Now' on CBS back in the 1950s. Unfortunately, that's not the business model for radio today.

"Advertisers want reach and frequency, and local stations won't give up their valuable commercial inventory for a program like this unless they receive compensation for their time," Berry said. "The cost would be prohibitive; and without comp, the clearance would be miniscule."

Dennis Hart said one fact is undisputed: After five years on the air, the show "put NBC Radio in the black. 'Monitor' had more commercials running in a single weekend than all the other networks had run during their entire weekday broadcasts."

He said NBC considered a "Monitor" revival in the 1980s, but parent corporation GE got out of the radio business before it could happen.

— Peter King

Monitor

► Continued from page 16

"My then-16-year-old son looked at me and said, 'I think I know how to do it.'" Hart handled the editorial content, his son handled the rest.

Hart thought he was probably the only one with a "Monitor" love affair, but he was wrong. He started hearing from other fans and former production staffers, who put him in touch with others, enabling him to steadily add material.

"Bud Drake was the first one. He was the longest-tenured producer, he was there for 19 years," said Hart. The contacts snowballed until Hart had interviewed dozens of former staff members.

Tedi Thurman was "Miss Monitor"

from 1955-60, delivering sultry-sounding weather forecasts and stretching listeners' imaginations with her intentionally sexy delivery. The former model discovered Hart's work by accident.

"My nephew was on his computer in Europe, and he just decided to put in 'Monitor' and there it was." Thurman's nephew wrote to Hart, who in turn contacted Thurman for the book.

She said Hart "has really done his homework; he has it so right, I can't believe he wasn't there with us. It's so completely right." Thurman said she's surprised anyone is interested in a show that hasn't been on the air in nearly 30 years.

Charles Garment, a "Monitor" writer for 19 years — he joined NBC during the show's second year and stayed until the See MONITOR, page 18 ►



Dave Garroway was the Sunday night host in 1955.

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Monitor

► Continued from page 17

end — shares Thurman's assessment. He said he was amazed to find Hart doing the project, not for money, but "just because he loved the show."

Garment and other writers had their work cut out for them.

"The show was heavily scripted," he recalled. "We did continuity; we wrote interviews; and we often *did* the interviews, which then were cut into the show" — with his questions edited out, and questions from the "communicators" edited in. Writers had to "try to make it as lively as possible, and serious when necessary." He said hosts had the room to ad lib, "as long as they didn't screw up the timing, which was crucial."

Garment worked with most of the show's hosts, including the late Gene Rayburn, who fronted the show longer than anyone, from 1964 to 1973. Rayburn was emcee of NBC(TV)'s popular "Match Game" show (1962-69),



'Monitor' celebrates its ninth birthday, 1964. Rear, from left: Executive Producer Bob Maurer; Saturday night host Gene Rayburn; contributing comedian Selma Diamond; Sunday night host Frank Blair; contributing comedian Al Kelly and Saturday afternoon host Barry Nelson. Front: Saturday morning host David Wayne; Sunday afternoon host James Daly; contributing commentator Arlene Francis and contributing commentator Al Capp.

"Monitor" from 1962-64 and again from 1969-73.

Lowe said he loved the "Monitor" job and gives credit to Garment and other writers. "It was so easy. It was not only scripted, but beautifully scripted." He loved doing interviews, a "Monitor" staple, as well as segments with the show's in-house comedians, Jonathan Winters and Al Kelly.

Lowe's most memorable interview? Possibly it is a classic with actor James Stewart, talking about actresses who were thought of as "the girl next door."

"I said, 'You never thought of Ava Gardner as the girl next door.' To which Stewart replied, 'Well, if that had been the case, everybody would have been next door!'"

Monitorbeacon.com and "Monitor (Take Two)" will be of interest to fans of the show and anyone who wants to learn about a piece of radio history. Much of the material on the site is duplicated in the book, but most of the book's stories are not on the Web.

The site's classic "Monitor" airchecks are a must-hear, especially some classic bloopers. The online guest book is signed by fans and industry people, including many NBC and "Monitor" veterans who share comments and stories. The site and the book are Valentines to an American

but he also was a radio veteran of legendary stations such as WNEW(AM) in New York; he knew how to use the medium.

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'M onitor' stretched radio's technology, with live remotes from all over the world.

"He was the ideal 'Monitor' host because he had a very engaging sound and he wasn't just a glib or flip kind of guy," said Garment. "He was well-read, he had a great sense of humor, but he had a serious side, too. He was a great all-around radio guy, and a personality that 'Monitor' really needed."

The host with the second-longest run was New York radio legend Jim Lowe, who worked at AM stations WCBS, WNEW and WNBC. He now hosts the syndicated standards show "Jim Lowe and Company." He was host of

radio original.

Dennis Hart is planning a reunion of "Monitor" alumni this summer in New York, not far from 30 Rockefeller Center, where it all began nearly a half-century ago.

"Monitor (Take 2): The Revised, Expanded Inside Story of Network Radio's Greatest Program," by Dennis Hart, is published by iUniverse, New York and Lincoln, Neb., 2003. Retail: \$21.95.

Peter King is an Orlando-based staff correspondent for CBS News Radio.

Sinton

► Continued from page 15
serving a liberal radio audience?

Sinton: There's an outcry for it. Look at the cume audience of morning and afternoon drive on NPR, something like 25 million people. This is a sure sign that someone's not being served. I think there's a lot of potential audience in music radio, too, and a tremendous disenfranchised audience as well.

RW: Plans for station acquisition?

Sinton: We plan to have both acquisitions and LMAs. Currently it looks like we'll roll out in about five of the top 10, but the nature of startups and acquisitions means the sands shift and things change, so I'll defer naming calls outside of Chicago.

We are also mounting an affiliation

drive. Maybe it's more accurate to say we're responding to an avalanche of affiliate inquiries. ...

Apparently there are a lot of operators who think our original programming is more likely to generate ratings and revenue than standards, second-tier talk, or, in the case of a couple of FMs, tired AC records.

RW: How do you respond to cynicism from conservatives to the idea of progressive talk?

Sinton: We're overwhelmed and gratified. I can't thank the conservative news outlets that have given us great visibility by slamming us — can't thank them enough.

After the initial write-ups in the New York Times, the coverage carried over internationally. We were deluged for the first month. ... Maintaining our visibility doesn't seem to be a problem because there's so much interest in having another voice out there.

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A Peek Into John Doe's Diary

Roller coasters. Haunted houses. Driving on the wrong side of the road.

These can be very scary. But nothing, my friend, is scarier than a visit to Arbitron.

I'll admit it. With the easy availability of Maximizer and the PD Advantage right on my desktop, I haven't made the trip to Arbitron in many years. I was lulled into this state of passive behavior because I could crunch nearly any number needed. There are so many ways to slice and dice the data that I gradually forgot the experience I used to get when I looked at a real diary.

It was a feeling, an emotion ... an experience.

Rude mechanicals

The last time I visited Arbitron, the men and women who collect the data had yet to scan the actual diaries into a viewable program, so one had to look at every "mechanical," or actual diary, to learn anything out of the ordinary. Yes, yes, I know that was long time ago.

I suspect that I am not the only radio guy who hasn't made the trek to Columbia, Md., in recent years. Many people don't visit Arbitron for another reason: expense. Travel has become

highly scrutinized by corporations. (Although it's hard to imagine anyone thinking of a trip to Columbia as boon-doggle, unless your idea of a hot time is hanging out in a hotel bar or visiting a shopping mall.)

What scared me on my recent visit to Arbitron? The diaries.

Looking at them reminded me of a few facts that had become buried somewhere in my subconscious. I was jolted to recall:

- The vast majority of people who make comments in diaries have simple opinions about radio. They'll note things like "too many commercials," "the morning DJ sucks," "I love/hate Rush Limbaugh" or "they never give the traffic information on roads I drive."

- Some stations get lucky with a few heavy diaries, where a participant draws a line from 6 a.m. to midnight almost every day of the week, thereby nearly creating a "hot Zip code" of its own (if sorting Zips by quarter hours).

- Not a lot of effort goes into filling out a diary. If we were grading diaries for decent handwriting and neatness, we'd be passing out a lot of failing grades. It's difficult not come away

with the feeling that as little effort as possible was used when completing many a survey.

- An awful lot of people write down call letters and frequencies incorrectly. Stations that have been in their respective formats the longest seem to have the least issue with that particular problem.

- The luck of what Zip code a diary falls into accounts for much of the end result, especially for stations that are signally challenged.

- A lot of diaries have the appearance of being filled out all at one time and not on daily basis. This could mean that a participant is either "remembering" an entire week, or making it up.

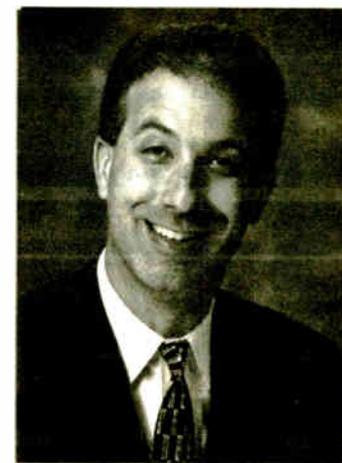
If you find any of those thoughts frightening — and obviously I believe you should — what can you do about it?

While I don't have space in one column for specific information, I will offer one big picture comment for your consideration: Paint your radio canvas with things that will "print" with your listeners.

Radio through print

Something *prints* with a listener when it hits an emotional chord. Certain songs print. Certain event promotions print. Certain copy in promotional announcements print. Certain stunts print. Certain personalities print. Certain feature programs print.

Promo Power



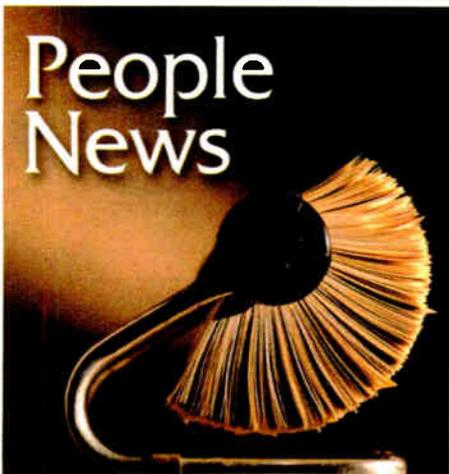
by Mark Lapidus

The more often your station broadcasts material that "prints," the more you'll win.

It's all about recall, at least until Arbitron's People Meters appear to rock our world. If we don't make our product highly memorable, we don't have nearly as good a chance at ratings as the next guy who's doing this better than we are.

It's easy to trash Arbitron. I'm tempted to do so at this very moment. But it won't do a damn bit of good. It's like ignoring reality. Much better, for the time being, to learn how to dance well and to do the dance so that every listener will remember it.

The author is president of Lapidus Media. Reach him at marklapidus@yahoo.com.



United Stations Radio Networks appointed David H. Lacey as chief engineer. Lacey remains in New York at USRN's Launch Radio Networks headquarters, but is responsible for studios in New York, Los Angeles and Nashville, as well as facilities growth.

Comrex Corp. named Chris Crump as director of sales and marketing. He had held the same position for Klotz Digital America.

Bruce Graham was hired as senior director of sales for ABC Radio Networks Detroit. He oversees the sales team that handles Michigan, Ohio, Indiana, Kentucky and Canada.

ABC Inc. attorney Jane B. Stewart was



Larry Baker

named VP of broadcasting legal and business affairs.

Westwood One named Shawn Pastor as senior VP of network affiliate sales.

Zeo Radio Networks appointed Rico Garcia director of affiliate relations. He had directed the sales efforts for the radio program, "On the House with the Carey Brothers."... Radio production executive Jonathyn Brown, formerly of Superadio

Networks, was appointed to Zeo's production team.

Audio-Technica promoted two in its sales department. Glenn Roop was appointed director of professional product sales; Kal Mullens was named director of strategic account sales.

NAB's VP of Human Resource Development Dwight Ellis retired and launched a media and workforce development consultancy.

Westwood One appointed Andrew Zaref, formerly a lead partner with KPMG LLP, to CFO. He replaces Jacques Tortoroli, who now serves as CFO of Infinity Broadcasting...

Crown International named Larry Baker as market director for portable PA, recording and broadcast products.

Veronique Rodman, a PR specialist and former television producer, was appointed by President Bush to the Broadcasting Board of Governors. She replaces Robert M. Ledbetter Jr. of Tupelo, Miss., whose term expired.



Andrew Zaref

The Radio and Television News Directors Foundation announced it would honor Sens. Charles Grassley, R-Iowa, and Patrick Leahy, D-Vt., NBC's Andrea Mitchell and Entravision's Walter Ulloa for their work on behalf of press freedom at its annual First Amendment Awards Dinner.

Jeff Federman was named VP and general manager of Infinity Broadcasting's KCBS(FM) in Los Angeles. He joins from Emmis Communications, where he served as VP and director of sales for KPWR(FM) and KZLA(FM). Federman replaced Trip Reeb, who continues to oversee KROQ(FM) in Los Angeles.

The Replicator

Long and short form program delay system

There are so many different programs available today for your stations' format to choose from. Do you ever wish that you could carry all of them, but just don't have the time or resources on hand to record more than one program at a time?

With the Replicator from RDS this is possible. It can record up to FOUR different streams of audio and can even playback one that it's recording simultaneously!!

Not only does it record the programs, it captures the relay closures from the source you are recording and reproduces them during playback, acting just like a satellite source. It can be programmed to record and playback at specific times or by relay closure.

The Replicator is the perfect companion to the RDS Phantom digital automation system or any other automation system.

ALSO
Be sure to see the article on the Phantom in this issue of *Radio World*

Call or email today for more information on the Replicator, the Phantom or our Traffic and Billing system.
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www.registerdata.com

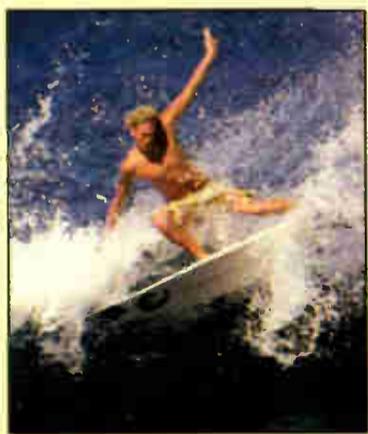
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You've probably seen BSW's huge new 2004 Broadcast Catalog. But if you want the very latest in new broadcast equipment, you don't have to wait for the next issue. Just visit our website, www.bswusa.com, for an incredibly vast resource of information.

There you'll discover expanded product descriptions, technical specifications, back-panel photos, accessories, special promotions and sales, links to manufacturer web pages, and much more. We constantly update the website and add new products, with many hitting the site before they land in the catalog. In addition, because www.bswusa.com is a full-featured e-commerce site, you can read about the products you need and then quickly and easily order them right online, with the same fast shipping and excellent service you've come to expect from your friends at BSW.



Secret Undocumented BSW Employee #7: Jeff "Riptide" Stokley works long hours surfing the web to make sure BSW is offering the best deals online. We let him work out of Hawaii because he insists "the surfing's way more radical" (they must have high-speed DSL lines everywhere or something...)



marantz Portable Solid-State Recorder

This latest-generation Solid-State recorder from Marantz is compatible with Compact Flash and Microdrive memory cards, records in multiple file formats/resolutions and now has a USB port, for the ultimate in flexible, portable digital recording!

Features: records in WAV, Broadcast Wave, MP2 or MP3 formats; selectable bitrate and sampling frequency allowing complete control over file sizes and audio quality; USB port for direct high speed file transfer into computers and for software updates; large LED screen; lockable covers for setting selectors and media slot; digital input and output, XLR microphone inputs, unbalanced line input and output on cinch/RCA; switchable phantom power (48V); automatic and manual recording level control; microphone filtering and limiter; "Mark Points" for recording and playback; EDL playback modes; built in condenser microphone and loudspeaker; bundled with 64 MB Flash card.

PMD670 List 899⁰⁰

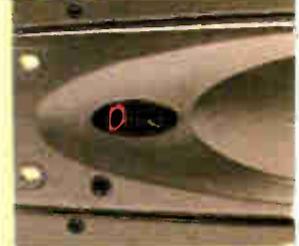
699⁰⁰
World Radio History



Powerful New Omnia Processor for Conventional and Digital FM

The new Omnia-5EX HDFM is an advanced FM processor with parallel processing optimized for both conventional and digital FM, delivering the clear, clean, loud, competitive sound you need to make your station rise above the competition.

Features: unique final limiter for DAB; integrated stereo generator with advanced peak control, pilot filter and dual composite MPX outputs for conventional FM; 24-bit/96 kHz processing; 5 band limiter; 2 AGC bands; wideband AGC; full color display; digital/analog I/O with dual AES/EBU outs; remote control via Ethernet, serial or modem connection;



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Limited Edition Koss PRO4AA Headphone Only \$49.95!

Incredible Offer! BSW purchased this special production run of the classic Koss PRO4AA headphone especially for our customers. This time-tested headphone is still the choice of broadcast professionals, due to its rugged construction, comfortable fit and wide frequency response.

Gel-filled ear cushions provide a complete seal, resulting in excellent isolation from ambient sound. Frequency response is 10 Hz-25 kHz; impedance is 250 ohms; cable is 10 ft. coiled, enters on the left side and is hard-wired with a 1/4" connector! Save \$30 over the standard model price and upgrade your classic PRO4AA headphone – order today! Limited availability. Bulk packaged without box or instruction manual. (Who needs those, anyway?)

PRO4AA-B List 99⁰⁰ **49⁹⁵**



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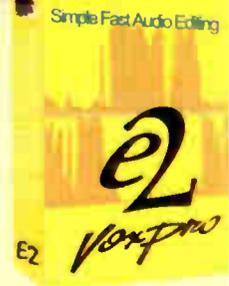


Fast 2-Track Editing Software Only \$149⁰⁰

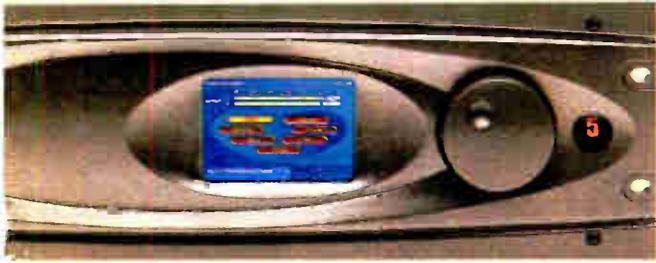
The makers of VoxPro PC now have a great introductory, two-track digital audio recording software package that can be used on any laptop or desktop PC using most sound cards, for fast, easy editing! VoxPro E2 lets you cut your audio and get it on the air right away, at a great low price. Get a Free trial download now at www.bswusa.com!

Features: records instantly in any mode; shows file most recently recorded in sound window ready to edit; imports and exports most popular file types including .wav and .mp3; records and plays back in stereo and mono; in two-track mode automatically separates host/caller talk-over with "Voiceslip"; much more.

VOXPROE2 List 179⁰⁰ **149⁰⁰**



er way, you'll get a great deal.



stereo EFX enhancement. Call today to add this powerful, le processor to your station's arsenal.

EXHDFM List 7,980⁰⁰ **Call**

digidesign



8-in/8-out FireWire Audio Interface

The Digidesign Digi 002 Rack is an 8-in/8-out, 2-space rackmount FireWire interface with MIDI connectivity and power of ProTools LE! The Digi 002 Rack brings flexible, rful ProTools LE recording and a professional FireWire-l interface within reach of small stations or studios but enough firepower and speed for any application.

Features: FireWire connectivity, 8 analog inputs, 8 analog outputs, 4 mic pres with individual gain and high-pass filter; phantom power enabled on channel pairs, 8 channels of T optical I/O or 2 channels of S/PDIF I/O, Outputs 1 & 2 monitored on 1/4" TRS monitor output (with dedicated volume control), and RCA-based -10 dBV fixed output; MIDI I/O: 1 IN 2 OUT ports (16 channels IN/32 channels OUT), 24-bit/96 A/D and D/A converters, Alternate Source Input for direct monitoring of -10 dBV audio equipment, (tape players, CD ers, etc.), Headphone output with dedicated volume control included, Footswitch for QuickPunch control, 2U rack-mountable chassis.

002RACK List 1,295⁰⁰ **1,199⁰⁰**

BROADCAST tools inc.



Simply and Transparently Prevents Dead Air, Generates Alarms & Switches to Back-Up

The Broadcast Tools Silence Monitor III improves on the original SSM. It's designed to monitor any stereo or two independent mono sources, generate alarms and transparently switch to back-up source equipment when silence is detected.

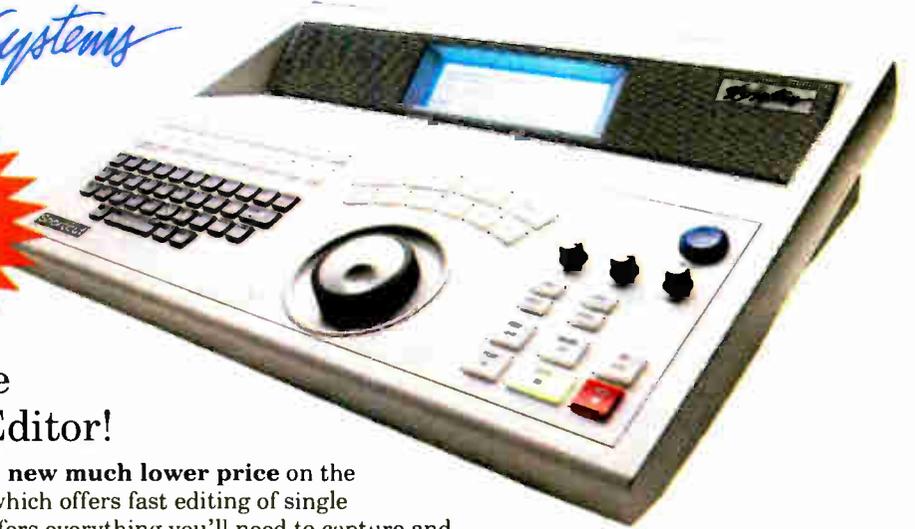
Features: front-panel, remote control and relay monitoring; selectable silence detection of -23, -25, -35 and -45 dB; precise time delay from 2 seconds to 85 minutes; precise restore timing delay from off to 42 minutes; active balanced inputs; defeatable alarm; relays for most remote functions. May be used on a desktop or rack-mounted with optional RA-1 rack shelf for mounting up to three units in 1U rack space.

SMIII List 259⁰⁰ **229⁰⁰**

RA-1 **49⁰⁰**

360 Systems

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List Price Cut by \$800⁰⁰



Incredible Price On Short/Cut Editor!

Take advantage of the new much lower price on the popular Short/Cut Editor, which offers fast editing of single or dual channel audio. It offers everything you'll need to capture and edit audio for talkshows, commercials, voice-overs and more. Call for our new sale price today!

Features: waveform display; real-time editing including cut, copy, insert, erase; insert record; crossfades; fade-in/fade-out; gain changes and ramping; one-touch instant record; title and cut select with built-in keyboard; assign cuts or edited clips to 10 Hot Keys per directory; 10 directories with password-protect; hard disk stores 12 hours of audio; reads and writes .WAV, .BWF and .AIFF files on Mac or PC disks; D-NET File Transfer Network capability lets you transfer finished audio; balanced XLR analog I/O (left channel input is switchable mic/line level); AES EBU digital I/O; IEC-958/II input; D-NET output.

SC182 Old List 3,495⁰⁰ New Lower List 2,695⁰⁰ **Call**



Single-Channel Frequency-Agile FM Relay/Translator Receiver

The Inovonics 630-00 is a single channel, frequency-agile receiver for FM-relay (translator) service and other broadcast applications which demand superior off-air reception and accurate carrier demodulation.

Features: composite (MPX) and stereo audio outputs; accurate front-panel metering displays MPX and audio levels, incoming RF level and multipath distortion; selectable IF bandwidth and advanced Walsh-function demodulator and a proportional stereo blend feature insure optimum reception under all signal conditions; remote control of the selectable operating parameters; auto-mute logic and a composite over-deviation limiter protect the re-broadcast signal; local and remote alarms for loss of carrier and loss of audio.

63000 List 1,250⁰⁰ **995⁰⁰** **Inovonics**



Affordable Rackmount Power Conditioners with Rack Lights

Both at under \$90.00, these Furman RackRider models feature eight switched AC outlets on the rear panel to power up and protect your equipment. Both are for use with 120 volt AC lines, and are rated at 15 amps (or a total load of 1800 watts, combining all outlets). The RR-15 and RR-15-PLUS feature two slide-out, swiveling light fixtures to provide discreet illumination of your equipment. The RR-15-PLUS (lower) adds an incoming AC line voltage display.

RR-15 List 92⁰⁰ **59⁰⁰** RR15PLUS List 114⁰⁰ **89⁰⁰** **FURMAN**

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Radio World

Digital Audio Production

March 10, 2004

USER REPORT

KVTY Installs 'Familiar' Lazer Blade

Scott Studios' Editing Software Reminiscent Of Long-Established Editing Formats

by Jeff Scott
Program Director
KVTY(FM)

LEWISTON, Idaho Idavend Broadcasting/KRPL Inc. in Lewiston and Moscow, Idaho, consists of five radio stations, all of which have (or will soon have) Scott Studios SS32 Lazer Blade editing software installed for phone editing needs.

KVTY(FM), one of our top 40 CHR stations, uses the Lazer Blade software, as well as our sister stations, KMOK(FM) and KRLC(AM). KZFN(FM) and KRPL(AM) are recent acquisitions, and will be upgrading to

this editing capability shortly.

Many of us still remember editing phoners on reel-to-reel, or have used one of the popular software packages or standalone audio editors. As far as those methods are concerned, I've found Lazer Blade to be easier; and if you've edited audio on any other software, you can jump right into using Lazer Blade.

You might compare it to using a Short/cut 360 that's incorporated into the touch screen. Lazer Blade comes with a media control station outfitted with an external jog/shuttle wheel, reminiscent of the 360, but I personally prefer to use the touch-screen set up. Everything is on my screen where I need it. No more looking at a sepa-

rate monitor for editing and playback.

One-touch recording eases the answering of calls. A call comes in, you press record and phone audio is saved in your specific file. Each jock is able to create their own folder into which they can record and save audio, making the archiving of audio a breeze. The only disappointment is that the phoner is saved with a date and time stamp instead of the jock being able to label it.

No fumbling

Once the audio is saved and you're ready to air it, select the cut you're looking for and the waveform will pop up on the screen. Lazer Blade also enables the user to insert phoners directly onto the main automation screen hot keys and play them there. This feature does let you label your audio cuts on the hot keys.

Editing the waveform is a snap. Just like other audio editing programs, set your "ins" and "outs" and decide where to cut and or paste. Of course, you have access to a scrub button to make those edits more precise, a scroll bar to make them fast and an unlimited undo button. Thank goodness for that. (Don't forget the "Beep" button for those potty-mouth callers.)

The Lazer Blade is a wonderful addition to our on-air studios. Training is a non-issue for our staff, and I haven't even looked at the manual yet.

It resembles separate editing equipment we're all familiar with, but puts the information right there on your air screen. Gone are the days of looking at



Lazer Blade comes with a media control station outfitted with an external jog/shuttle wheel.

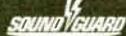
other monitors and fumbling with other pieces of equipment.

For more information, including pricing, contact Scott Studios in Dallas at (972) 620-2211 or visit www.scottstudios.com.



Every AudioScience soundcard is Built for Broadcast™ to expand your audio options and automation capabilities. Features like new **TSX™** time scaling algorithm* give you pitchless stretch and squeeze by up to 20%. With **MRX™** multi-rate mixing you can record, play and mix multiple audio streams to 1Hz precision. And advanced **SoundGuard** multilayer Transient Voltage Suppressors (TVS) dissipate power peaks of over 1000W. Our onboard DSPs let you record and play the latest compression formats including MPEG-1 Layer II and MP3, with multistream capability. Expand your sonic options. Call us at +1-302-324-5333 or go to www.audioscience.com.

*Contact your AudioScience dealer for this feature.



TECH UPDATE

Marantz Offers PMD Editing Software

Marantz Professional has debuted PMDEdit archival and editing software. It integrates with the Marantz Pro PMD670, PMD680 and PMD690 solid-state recorders, and CDR300 and CDR510 CD recorders.

Features include file management for applications that require audio archiving, and automatic splitting of files on import to your computer. EDL marker can be set during or after the recording that will create individual files out of long-term recordings.

Files can be labeled, rearranged or converted into smaller manageable files. PMDEdit exports to audio formats such as WAV, MP2, MP3, WMA or Real Audio for posting on the Web or intranet sites. Additionally, files can be archived to CD-ROM.

For more information, including pricing, contact Marantz in Illinois at (630) 741-0330 or visit www.d-mpro.com.





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USER REPORT

Stations Ease Production With Vault2

by Mark T. Simpson

Director of Engineering/MIS
KIIM(FM)/KHYT(FM)/KSZR(FM)
KTUC(AM)/KCUB(AM)

TUCSON, Ariz. I work for five Citadel Broadcasting stations. A while ago we decided to replace our digital audio system with a Broadcast Electronics Vault2/Express "hybrid," which gave us better audio redundancy and enables us to integrate production into our fast-paced air studios easily.

We had been running BE's AudioVault AV100 system for almost eight years. Besides better networking ability between air and production studios, the new Vault2/Express system gives us more control over how and when we can produce commercials, liners and voice tracks.

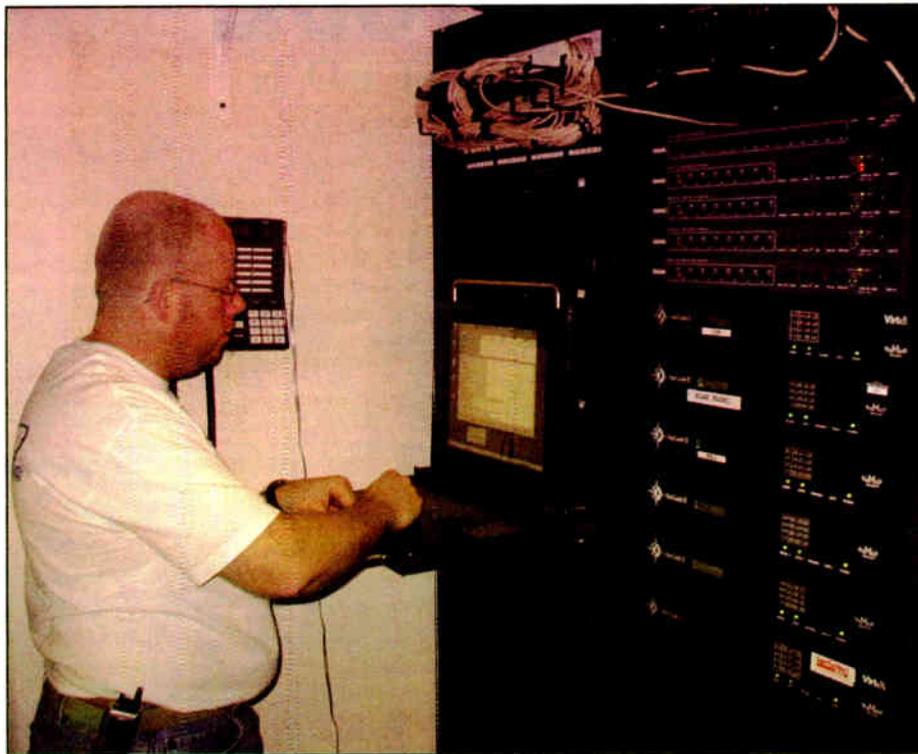
I set up the system so that each station has two computer chassis. One has local audio cards and runs AVAir along with NFS, and the other is a client that runs from two separate servers in the equipment room.

The local machine uses IDE RAID drives to hold a copy of the station's audio, as well as shared files such as commercials or PSAs. The two main servers utilize RAID 5-configured SCSI drives that have capacities equal to or greater than those of the five individual air computers, and hold a copy of the audio for every station.

The client workstations in each studio look at the volume on the two servers and play audio from their Digigram MixArt8 cards. Each station's backup air machine runs half of its decks from one server and half from the other. And there lies the redundancy and greater network accessibility between studios.

Card-carrying production

The production computers have their own Digigram VX222 cards, but record the data to the main servers. That way I don't need large hard-drive arrays in each studio, which can all



The author checks the status of Citadel Broadcasting's AudioVault servers and Net Record computers.

VoiceTrack now because of the VX222's multiple streams. No more wasting of three channels, as was the case with the AV100 system.

One added benefit of using the new Digigram cards is the audio sounds better than with the AV100 cards, which already sounded great. The program directors noticed the improvement before I could tell them about it.

Another aspect of the new Vault2 system that I like is the ability to save production files with the cart numbers and description, so when you are done, it's already in the system and ready to go. This is made possible because of the AVProd program, which is AudioVault's version of programs like CoolEdit (now known as

Adobe Audition).

I am now in the process of setting

up AVProd for each of my five stations to use as a phone editor with their backup AVAir computers. A great feature of the program is a function called Quick Record. You simply click the Quick Record button once and you're ready to go. When you need to record a phone call, just press the space bar on the keyboard. When finished, press the space bar again to stop. You can do that as many times as you want.

The WAV files will show up on the screen as separate files. Each portion of audio can be edited and saved as a separate file, making it easy to put phone calls on the air once they are saved. Just add the file to the day's log. This enables you to keep taking phone calls when you would normally have to stop what you are doing to play back the call. By using AVProd this way, it makes it easier to make promos for the next day. No more dragging a Short/cut to the production room to get sound bites.

After all, the most important thing is that the users are happy using this system. As long as they are happy, I am happy. That's one less call I have to deal with in the middle of the night.

For more information, including pricing, contact Broadcast Electronics at (217) 224-4700 or visit www.audio-vault.com.

TECH UPDATES

D.A.V.I.D. Updates DigaSystem Editor

D.A.V.I.D. Systems updated its Multitrack Editor audio production tool for the DigaSystem radio operating system.

Multitrack Editor 4 offers virtual track management and object-oriented production with tracks and clips. The user can record on one track and playback on different ones simultaneously. Its integrated audio conversion engine recognizes commonly used audio formats and converts them to the selected format.

Grouped into four working areas — Multitrack Page, Edit Station, Recorder Page and Reporter Box — each page handles specific tasks and displays only those functions essential to the current production stage to preserve the uncluttered interface. Version 4 has a redesigned GUI and the same layout and operation for all screens. The company says it works with all audio formats, allows multi-format editing and is equipped with an internal 32-bit float audio engine.

The effects, such as easy equalizer, parametric equalizer, compressor and subsonic, can be automated and are applicable to tracks and objects. MM drivers are supported, as are Digigram NP drivers.

Features include ActiveX plug-ins; audio track mixer with low-latency volume and panning changes; overview track screen window; and sample-accurate cuts with MP2/MP3. Editing options include automated cross-fade, phase analysis and phase display, soft scrolling for smooth waveform movement and vertical waveform zoom.

For more information, including pricing, contact D.A.V.I.D. in Virginia at (703) 396-4900 or visit www.digasystem.com.



Lynx Ships AES16-SRC PCI Card

Lynx Studio Technology recently began shipping the AES16-SRC, a PCI card that has eight channels of mastering-quality AES/EBU I/O sample rate conversion to accommodate facilities running multiple sample rates or signals not locked to "house sync." With conversion ratios of up to 8:1, its sample rate converters have a dynamic range of 142 dB.

Its zero-latency 32-channel/32-bit digital mixer with 16 sub outputs offers patch-bay style routing. Also featured is the capability to maintain phase between multiple rated-converted inputs using matched phase control.

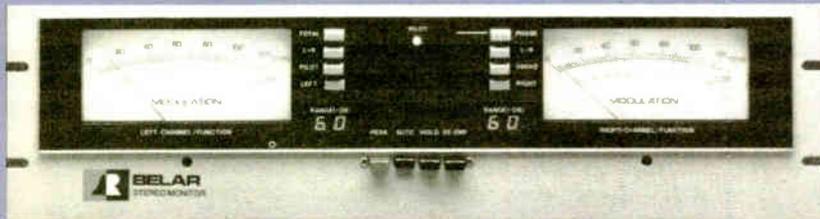
The AES16-SRC is a model of the AES16, which uses technology that limits conversion artifacts to low levels, resulting in distortion-free recordings. Its features also are included with the AES16-SRC, including SynchroLock, for the extraction of a clean clock from AES signals affected by long cable lengths and other noise sources, and software control and compatibility with Windows and Mac.

Two model CBL-AES1604 cables enable the interface, using XLR connectors for audio and BNC for word clock I/O.

For more information, including pricing, contact Lynx in California at (949) 515-8265 or visit www.lynxstudio.com.

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with the best monitor and the most accurate test set.



The FMM-2/FMS-2 series monitors provide an even greater degree of measurement than ever before... **You can measure S/N below 90 dB, You can measure crosstalk below 85 dB, You can measure separations of better than 70 dB, You can measure frequency response to better than 0.25 dB, You can measure distortions to lower than 0.01%, and much more...** Our uncluttered panels and autoranging voltmeters make these measurements a dream.



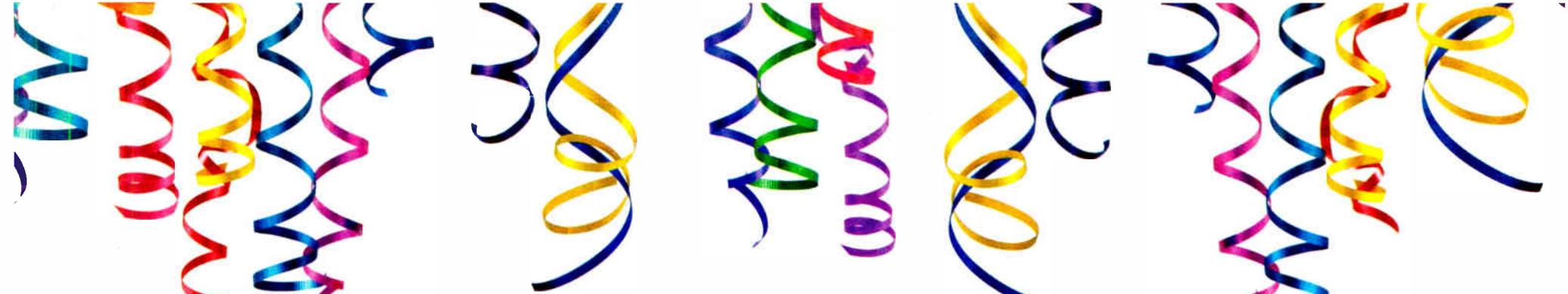
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USER REPORT

Audion Labs Debuts Compact VoxPro

by Tom McGinley
DOE/MIS
Infinity Broadcasting

SEATTLE Audion Labs has introduced a compact version of the VoxPro audio editor called e².

First introduced in 1993 on the Mac platform by long-time Seattle radio personality Charlie Brown, the two-track editor served radio station jocks through its quick editing of recorded phone calls. In 2001, it evolved into a PC version with added features. VoxPro is touted by the company as the de facto industry standard for phone call editing.

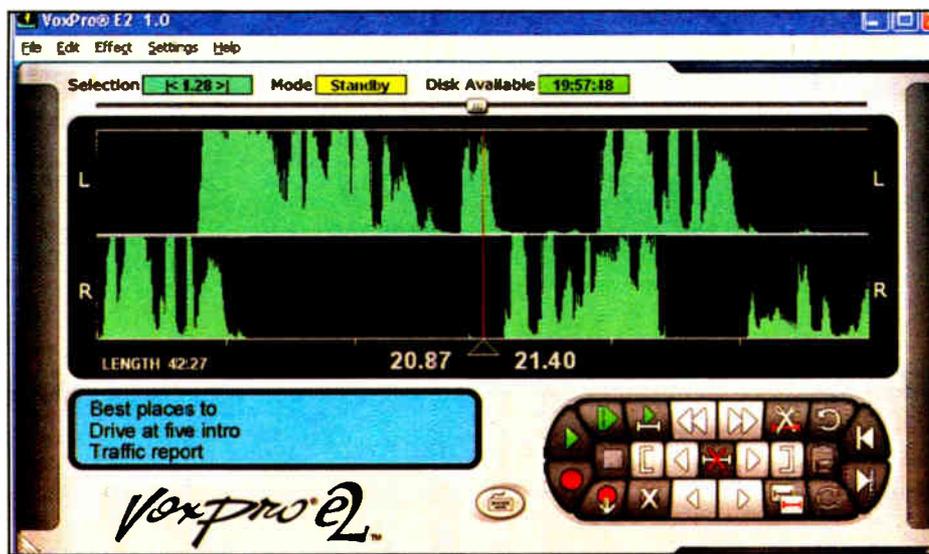
VoxPro's little brother, e² is intended for production studios, newsrooms and environments where simple stereo or mono audio editing capabilities are needed. Any modern Windows PC with a mouse, keyboard, sound card and speakers can run e². VoxPro editing features, such as VoiceSlip, Bleep, Undo, Redo, Slow/Fast Shuttle and user-adjustable audio scrub are included. However, e² does not include the use of an external hardware controller, a remote control interface or the ability to network multiple machines together.

Sibling rivalry

The e² features the capability to handle WAV, WMA, AIF and MP3 audio files. A mouse-controlled on-screen "tape transport" is offered for executing commands, rather than the familiar hardware controller or mapped keys on the PC keyboard.

The coolest feature of the e² is that keys and associated functions are marked clearly with "bubble" labels. Most operators quickly get the feel of point-and-click with the mouse or alternate numpad editing method, and find it's as precise as the external hardware controller.

Like the VoxPro platform, e² edits audio as a Windows Wave file and han-



e² edits audio as a Windows Wave file and handles audio files on an LAN.

e² is intended for environments where simple stereo- or mono-audio editing capabilities are needed.

dles audio files on an LAN using the import/export feature to convert, edit and return the file to the desired format and location. For converting MP3 files, e² uses LAME, an open-standard, no-license program known for its quality and lack of audible artifacts.

e² does not need Direct-X audio capable sound cards. Virtually any Windows compatible card will work, but to ensure broadcast quality performance, higher-end cards with low distortion and noise

floor specs are recommended. e² can run on Win98, Win2k and Xp OS platforms. Minimum specs recommend a Pentium 3-class machine with 128 mB of RAM, but we've used it successfully on older Pentium 2 and AMD K6-2 machines with a decent video card.

The software is optimized for Win2k and Xp, so Win98 machines may be a little more challenged, especially with the streaming waveform display. It might behave a little jerky but the audio is not affected, except on machines with slower CPUs or less RAM.

e² is available for downloading and a 30-day free demo test-drive from the company's Web site. One licensed copy of e² covers one machine, but can be loaded and reloaded four times per license to accommodate changes and upgrades to the PC's hardware.

The e² should find quick acceptance for editing tasks where Cool Edit Pro, Adobe Audition and other multi-track production editors are overused and present a steep learning curve for the untrained or occasional user. e² also is cheaper. In addition to editing phone calls, studio interviews and news stories, we are using e² to edit air-checks for clients, best-of shows and audio affidavits.

As far as recommended features are concerned, we'd like to see an audio fade-in and fade-out capability for creating smooth transitions. But for the price, the e² is a winner — hands down.

For more information, including pricing, contact Audion Labs in Washington at (206) 842-5202 or visit www.audionlabs.com.

TECH UPDATE

NetStation Eases Access to Audio Sources

Kersonic KS-1 Listening NetStation is a network audio workstation that enables the ability to listen to live and stored audio content over IP networks. NetStation plays linear and MPEG audio files and streams; it can access intranet and connect to automation software, browse audio libraries and monitor what is playing at a local or remote location.

The workstation controls broadcast equipment without going through complex menus or loading multiple applications. Kersonic, which has offices in France and the United States, features a testimonial on its Web site from the deputy general manager of Radio-France, who notes the KS-1 terminal's PCMCIA slots enable reporters to read and transfer content from solid-state digital audio recorder Flash cards.

The Web-based graphical interface can be customized for specific tasks or user groups, and a touch-screen and jog-dial enable intuitive navigation. NetStation has a compact footprint and is fanless for quiet operation.

The system uses the Linux operating system and supports IP multicast technology, which allows simultaneous listeners to monitor an audio program over one stream, thus conserving network bandwidth. Automatic software updates via network eases maintenance.

For more information, including pricing, contact Kersonic USA at (702) 543-6906 or visit www.kersonic.com.



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USER REPORT

KUHF Manages Audio With SADiE

by Brad Sayles
Senior Recording Engineer
KUHF(FM)

HOUSTON KUHF(FM) 88.7 is an NPR affiliated station that offers news and classical music, as well as locally produced features to the Houston community. Along with network productions, we provide the community with three weekly arts and music shows and a weekly feature broadcast of the Houston Symphony.

When we moved into our new facilities in the fall of 2000, we began to overhaul and replace our equipment to convert from an analog to a digital facility. We made the decision to upgrade our audio workstations to the SADiE PCM4 & PCM8 Windows-based systems. The bulk of our programming is classical music, so we wanted a system that would combine superior sound quality with the flexibility to customize and upgrade.

Through my past experiences with the SADiE systems, I was assured they would provide us with the system and support we needed.

Symphonic editing

The PCM4 and PCM8 accept analog and AES digital signals and support sample rates of up to 192k, with real-time DSP playback of up to 32 channels of audio per card. PCM4 has four I/O, while PCM8 has eight I/O and the ability to run multiple cards in a system for up to 32 I/O configurations.

Our SADiE PCM8 is the heart of our production facilities, with the physical system rack-mounted in a separate machine room to reduce noise. We use the system for multitracking studio sessions, importing stereo and multitrack WAV files from the field and assembling radio shows for local and NPR/PRI broadcast.

The PCM4 is used for quick promo editing, smaller editing projects and as a backup for the PCM8. Both systems are connected to an audio server via standard Windows networking, so we can pull up projects in either room and continue to work on them as needed.

I think SADiE's most attractive feature is its editing model and user interface. Within its Edit Decision List, we can record, edit and master the audio. Using the integrated PQ Editor, we can burn directly to CD without having to create an image file. We control every aspect of the waveform without having to jump between separate windows. Everything from simple cut and splice, volume, fade and crossfades are handled within the EDL.

We can integrate the use of SADiE proprietary and DirectX plug-ins in real time through their customizable software mixer. This new feature has been a big timesaver because we can process shows and burn to CD faster than in real time. However, we do have some external gear we prefer over the plug-ins. With SADiE so easy to route, we create aux sends on the virtual mixer that are sent through a physical digital output, processed by the gear and brought back into SADiE as a separate channel. Now we can EQ or automate that processed signal as needed.

The desktop layout is user-friendly, allowing us to select the options we need without being overwhelmed with features that aren't required for a given task. SADiE allows these customized features to be saved in separate user profiles. We have three edi-

tors at our station, each with their own idea of how the SADiE should be set up. The user profiles option makes this possible.

We have collaborated with orchestras and composers to record and produce several CDs — all of which have been recorded, edited or mastered on the SADiE. We plan to expand to SACD and DVD-A and employ SADiE's surround-sound capabilities. With SADiE's support and research, I am confident that this will be a long-lived partnership. It's an easy system that will make your projects sound the way they deserve to sound.

For more information, including pricing, contact SADiE in Nashville at (615) 327-1140 or visit www.sadie.com.



Brad Sayles is senior recording engineer for KUHF(FM), which uses SADiE PCM4 and PCM8 audio workstations.

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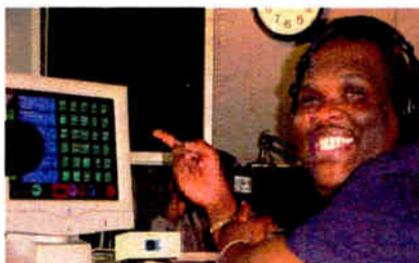
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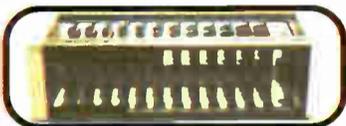


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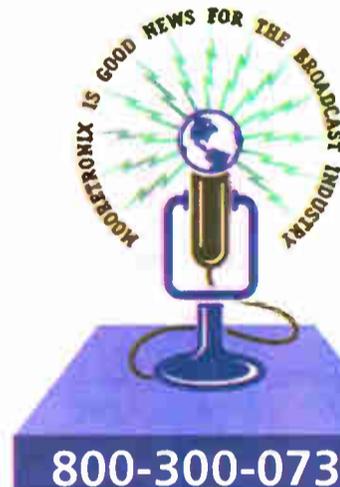
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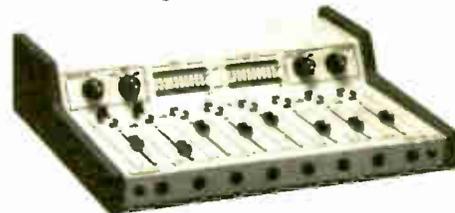
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TECH UPDATE

Cool Edit Pro Is Now Adobe Audition

In May 2003, Adobe Systems acquired Syntrillium Software and its assets.

Adobe Audition software is a renamed, updated release of Syntrillium's Cool Edit Pro, bringing Adobe into the professional audio niche with an editing and mixing environment for studios, broadcast facilities and post-production.

The company says Clear Channel and the BBC used Cool Edit Pro, and now use Audition, as their standard audio editing systems in the studio and field. It had audio mastering and uses digital signal processing effects to mix 128 tracks, edit individual files and create loops. Effects such as reverb, delay and dynamics processing are included.

Audition records, edits and mixes high-resolution 32-bit files using sample rates up to 10 MHz. It features transparent sample-rate conversion in case the user must change the sample rate of audio. Processing is at 32-bit resolution, and third-party DirectX plug-ins are supported. High-bit-rate material is converted to lower-resolution formats without



introducing audible artifacts, the company says. The audio retains its definition through user-definable dither depth and Noise Shaping curves.

Other highlights include a toolkit for digital audio that consists of an integrated multitrack mixing view, a mono and stereo waveform editing view, effects support and looping capabilities; royalty-free performance-based music loops that can be used to create individualized music beds; and broad file-format support, enabling the user to work with files that arrive from different sources and deliver files in the necessary audio format. Audition supports Windows PCM (wav), AIFF, MP3, mp3PRO and WMA 9.

For more information, including pricing, contact Adobe at (800) 833-6687 or visit www.adobe.com/audition.

Digigram Updates Card Line

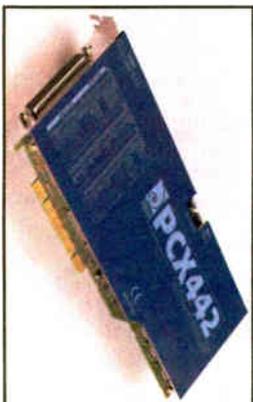
In 2003, Digigram released four sound cards to replace existing cards PCX822np, PCX440np, LCM440 and VX820, which had been discontinued.

Its new cards — PCX822v2, PCX442, LCM440v2 and VX822 — operate at the 3.3 volts standard, and are the result of efforts to make its sound cards compliant with the next generation of PCI bus.

"All Digigram multi-channel sound cards have been updated with a Universal PCI interface, making them compatible with 3.3V, 5V and mixed 3.3/5V environments," said the company's managing director.

PC codec mp3, an optional MP3 codec for the PCX and LCM sound cards, improves playback as many MP3 files can be decoded simultaneously, making the recording of MP3 possible. Encoding and decoding is performed on the host CPU, while mixing is performed on the sound card. One codec manages multiple sound cards installed in the same PC. While it works with the discontinued sound card models as well, it will not work with the company's VX line of cards.

For more information, including pricing, contact Digigram in Virginia at (703) 875-9100 or visit www.digigram.com.



Digigram's PCX442 sound card has been updated with a universal PCI interface.

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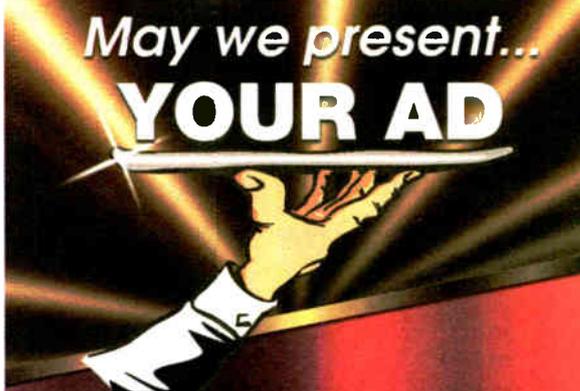
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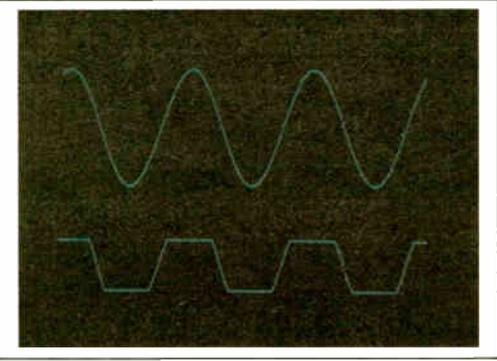
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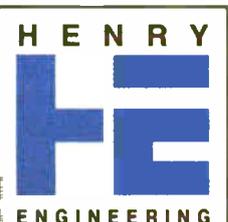
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TECH UPDATES

NewsEdit XP Adds Post-Production Content

Mediatron says its NewsEdit XP multitrack editing software meets a broadcaster's audio editing needs with integrated content management.

The software adds further editing capabilities to the traditional process of creating a sound file with editing software, working on several tracks, adding different recordings, cutting, fading and exporting into different formats.

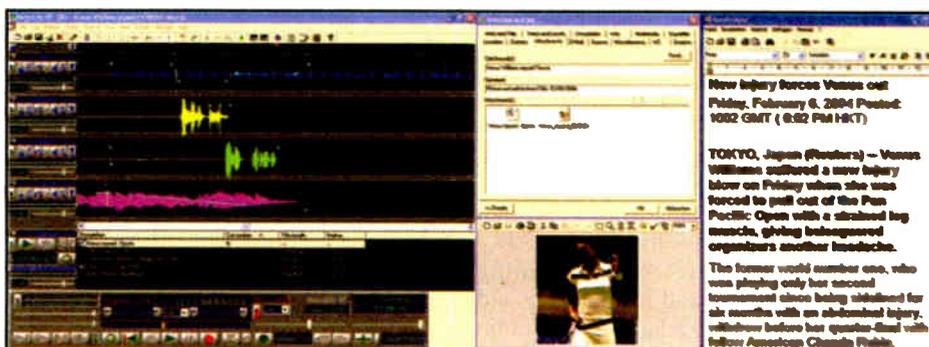
Broadcasters add elements such as content, text and pictures or videos to audible sound. To organize this information, NewsEdit XP uses a centralized database that enables the likes of Access over mySQL, SQL and Oracle to be installed.

Contents and attachments are stored; once the content is added to the database entry, the file can be deleted to safe storage.

Content can be added while producing a new element with the NewsEdit XP, or while using the DatabaseManager. Files in the database can be enriched with text or other files. This is handy for adding content to be displayed on a Web site or DAB radio

abroad.

Text that has been added during production using RTF file format can consist of information for the talent to announce the upcoming element.



Using the AirControl NT radio automation and live assist system, with the NewsPrompter Plug-In, the text can

be displayed on the talent's screen with automatic scrolling of the text.

File types for future use can be attached to the production. While exporting the audio file, the user can

correspondent traveling around the world. Once the production is ready for broadcast, the correspondent can add text, pictures or small video clips and e-mail it to the studio.

Files can be found with content and attachment catchwords using the QuickSearch database browsing tool.

Working with a SQL database enables storage of content data for access and archiving so it is available when needed. The ability to store numerous database entries allows the system to build a content and information database, which can become a primary information source within the organization or network.

For more information, including pricing, contact RAM Systems and Communications at (847) 487-7575 or visit www.ramsyscom.com.

360 Short/cut Readies Access to Clips

360 Systems' Short/cut 2000 recorder/editor uses hard-disk technology to replace earlier analog and digital tape machines.

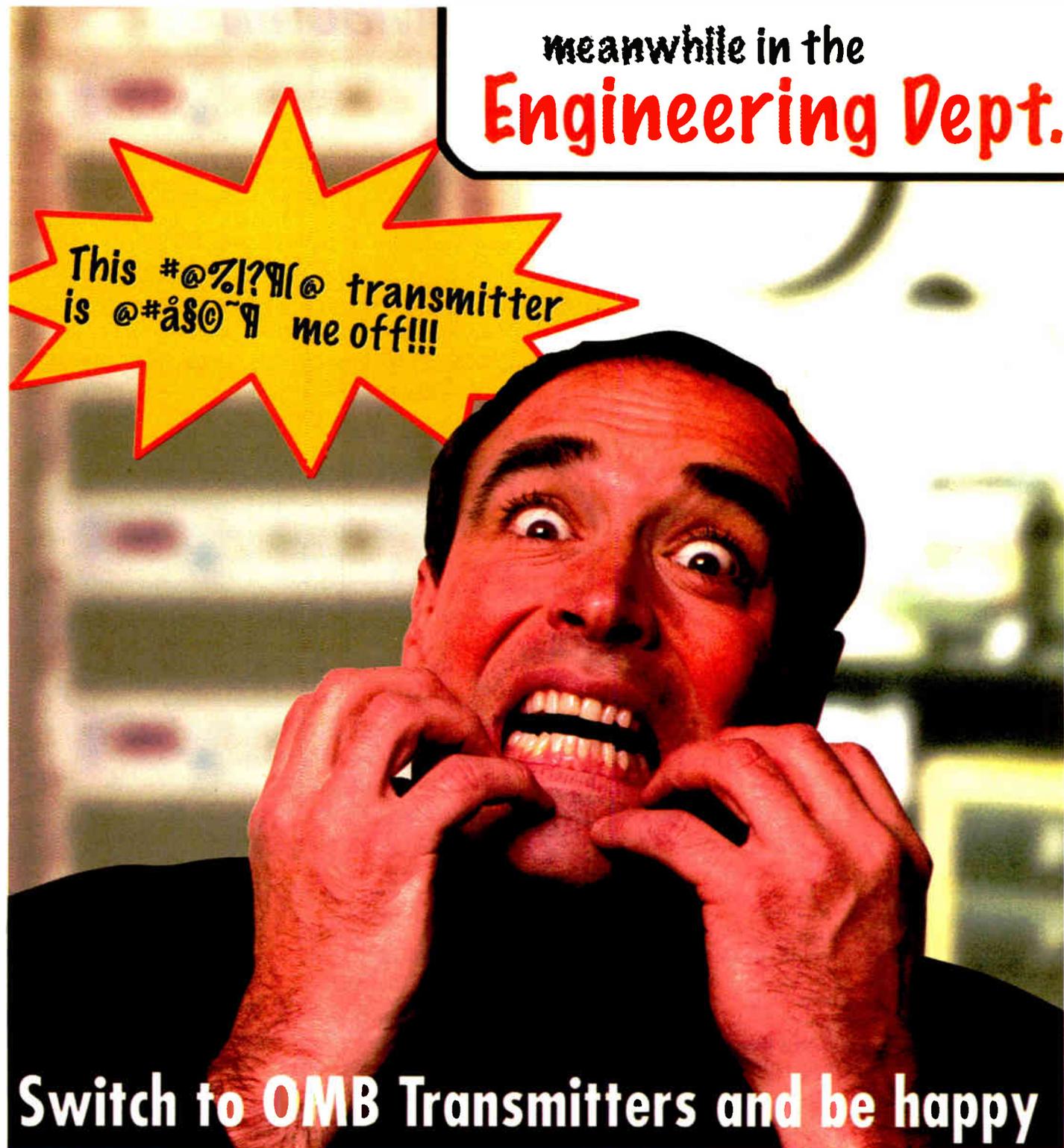
Its operation controls combine features of tape machines and word processors. The weighted jog reel offers a simulation of tape reel "scrub" editing while a waveform display assists with editing decisions. Editing options include cut, copy, insert, erase and fade-in and fade-out.

Short/cut's file conversion utilities enable it to interface with most DAWs, and it reads and writes WAV, BWF, SD-2 and AIFF file formats on PC and Mac. An external Zip drive can be connected at the rear panel to archive finished work. Twelve hours of audio can be stored, with important clips kept online and ready to play. To locate a cut, the user scrolls through directories with the wheel or types a name on the keyboard.

A notable feature for radio and broadcasting is the ability to access edited clips quickly. For on-air playback of news and phone calls, the "hot keys" play up to 10 stored audio segments.

The panel buttons are silent-action and illuminated, and the display is bit-mapped backlit blue LCD. The display scale is zoom-selectable for up to 20 seconds. Included are two 4-inch (100mm) speech range monitor speakers with level control. A padded gig bag and SCSI port for external drives are available as accessories.

For more information, including pricing, contact 360 Systems in California at (818) 991-0360 or visit www.360systems.com.



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USER REPORT

Telecom Prof Leaves Digital Legacy

PCC's Communications Curriculum Now Includes NexGen Audio Workstations

by **Jeff Rudisill**
Professor, Performing and Communications Arts Division
Pasadena City College

PASADENA, Calif. Most students who skim the catalog of available broadcast classes at Pasadena City College in

California are likely to assume that a career in radio is rather easy to obtain upon graduation. It's true. A word of advice for those students: Hurry and sign up for those classes, for they fill quickly.

We are at the forefront of training future broadcasters, and have a long and impressive history in education for radio

and TV careers to show for it. Many well-known people in the industry are PCC alumni, and the signals being emitted about its broadcasting program are loud and clear. We have on campus one of the nation's leading public radio stations, NPR affiliate KPCC(FM), serving all of Southern California. Through the strength of our curriculum, we have established the premier institution for training students in digital audio production and broadcast operations.

"The history of Pasadena City College's audio controls on-air academic program began in 1957 with the creation and licensing of KPCS(FM), now KPCC," said recently retired Professor Stanley Coutant of the school's telecommunication department.

"Almost a half-century later, the new millennium seemed an appropriate time to add advanced technology and program automation to the mix," he said.

Technology first

With a clear goal, Coutant investigated audio editing systems and production equipment from several leading companies.

"My strategy was to buy a system that would best prepare and train students for employment in radio broadcasting careers," he said. "It had to serve both as a classroom teaching tool and as an on-air professional caliber broadcasting system."

USER REPORT

KEDU's Ghost in the Machine

Community Radio Station Automates New Studio With RDS Phantom MPIII System

by **Harvey Twite**
General Manager/
Program Director
KEDU-LP(FM)
Fort Stanton Inc.

RUIDOSO, N.M. At KEDU-LPFM 102.3 Community Radio, we have a strong commitment to provide quality community programming. We were the first LPFM on the air in New Mexico, and the first in the state to simulcast programming on the Internet. After 30 years in commercial radio, we undertook an aggressive community project to provide the best local programming possible. Simply put, we want to be the best.

For the most part, our listeners range in age from 5 to 85. Our program format spans news/talk, classical, jazz, classic country, big band, Native American, sports, Spanish and classic old-time radio. With a programming lineup as diverse as ours, we require flexible audio broadcasting equipment. We decided to build a series of studios that would include analog and digital capabilities.

Starting from scratch

Only four walls, a closet and bathroom existed prior to this community project. The studio, lighting and sign construction were donated by area contractors and engineers. However, one thing was clear from the start. The heart of our operation was to be The Phantom MPIII automation system from **Register Data Systems**.

My past RDS experience, coupled with that of our engineer, Ken Bass of SW Technologies, left no doubt it would be the perfect fit for this project, as it has everything we need in a live-assist/automation system — stand-alone capability, live-assist production features, production/programming transfer, network timer/recorder features, import of MP3/WAV files and 24-hour "live" support. Additionally, it allows the user to customize each personality's show.

"Busy-screen" confusion is eliminated by separating information about activities, such as input changes, voice/personality changes and clock changes, into individual schedules rather than scheduling them in the log

between your breaks. The Phantom keeps the log clean and uncluttered.

Custom liners, bumpers and other voice/music drops can stay out of the log, as Phantom airs them on demand at the touch of a hotkey. The user controls the rotation frequency, as well as the mute options. This feature enables that smooth "live" feel that is lost with many

as recording. It's not my favorite feature, but RDS gives you the option. The user also is alerted to an upcoming satellite timer schedule while using the system for production, allowing for exit of the system before the timer begins its operation.

For stations that use one or more satellite feeds, Phantom can retime spots to fit them cleanly into a satellite break window without running late or rejoining the network too soon. It can keep programming tight by filling incomplete



The Phantom MPIII serves KEDU's Studio B; Harvey Twite is GM and PD.

other systems.

Another nice quality is the "Quick Break" and post-log editing features. "Quick Break" allows for quick "cart" insertion for on the air playback in seconds, whether it is used for a quick news update or inserting a long-running program. The user also can go into the log and edit, or edit a programming clock from the log entry position, saving critical programming time and permitting time for last-minute changes without importing a new log.

Multitasking

The Phantom enables the recording of audio into the system, while remaining on the air, switching input sources and airing scheduled breaks and on-demand voice drops.

In live operation, its split-screen function makes it possible to view the on-air log during other activities such

satellite breaks with spots from a specified list, so that we never rejoin the network in the middle of its closed circuit feed or optional timed song.

While we allow some breaks to go unfilled so that PSAs and alerts can be inserted in the unfilled break, Phantom does this without violating product separation. In live day-parts, it overlaps spots to maintain that live feel.

Service after the sale has kept us coming back to RDS for programming hardware to RDS Traffic software. KEDU is outfitted with two MPIII Phantoms, as well as an RDS Production system. Plans are on the table for Studio C. Another edition of Phantom will take its place in our new state-of-the-art studios at Community Radio.

For more information, including pricing, contact Register Data Systems in Georgia at (800) 521-5222 or visit www.registerdata.com

The Wizard Editor allows PCC instructors to key in on audio editing capabilities in the classroom.

Coutant and staff decided on NexGen Digital Broadcasting, a programming control center that schedules, stores and processes all audio data. PCC's new system, from **Prophet Systems Innovation**, includes 10 workstations and a file server. With the assistance of the college's electronics staff, installation was completed in time to celebrate Coutant's retirement party in June of 2003.

NexGen Digital's Wizard Editor allows PCC instructors to key in on audio editing capabilities in the classroom, as it is capable of mixing four stereo tracks in real time down to one "mixed" stereo track. I can then copy the mixed track, or up to one of the working tracks for re-mixing. The Editor supports marking a section; cutting; deleting or copying that section; inserting silence; premixing of tracks; and recording to the end of the track.

Additionally, the Editor is Windows-compatible and uses many of the same keystrokes that a Windows-based word processor uses, making it an easy transition for the students.

As Coutant's successor, I was pleased to see the college's dedication to teaching relevant technology and skills. I can't think of a more appropriate direction to lead radio broadcast students than on the path of automation and digital audio.

This system adds considerable strength to PCC's technological growth and training objectives. Combined with a new emphasis

See PROPHET, page 33 ►

Prophet

► Continued from page 32
on training students to acquire their Radio Operator's Certification from the Society of Broadcast Engineers, our students will be well prepared to meet the employment challenges of the next decade.

Prophet has since integrated all software packages into the NexGen 2 Studio Suite. Features include VoiceTrac, for recording liners, breaks and intros for an entire shift; PhoneTrac, a module that enables the access of NexGen Digital Broadcasting via telephone to record and playback audio for phoning in traffic bulletins, weather reports and news and sports; and a WANcasting module for sending copies of system data and audio between linked sites via frame relay networks of any speed.



Dr. Jerry McGill, center, looks on as 'The Mic' is passed from retiring Professor Coutant, right, to incoming Professor Rudisill.

NexGen can interface with most traffic scheduling systems for loading traffic logs into the NexGen Digital logs. Additionally, it will play back the current system time and temperature based on a command in the clocks and logs, or as a substitute for a satellite liner call.

In addition to offering Associate Degrees in Arts and Associate Degrees in Science, Pasadena City College offers certificates of completion in Broadcast Journalism, Radio Broadcast Technology, Radio Production, Television Operations and Television Productions.

Professor Coutant, whose career spanned 37 years at Pasadena City College, is justly proud of his decision to acquire NexGen's technology to teach students and advance their broadcasting careers.

For more information, including pricing, contact Prophet Systems in Nebraska at (308) 284-3007 or visit www.prophet-sys.com.

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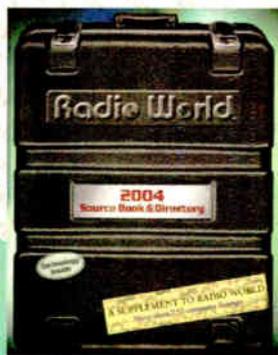
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JBL/Urei 5330 6 channel mixer with limiter, two outputs, \$30. Peter Russell, Bowdoin College, Sills Hall, Brunswick ME 04011. 207-725-3066.

AUTOMATION EQUIPMENT

Want to Sell

Conex CG-25, 25 Hz tone generators (3) & Conex 25/35 Hz dual tone decoder (1). No manuals, all four units working when removed from service, \$250/BO. Jeff Raynor, WXYM, Saltville VA. 276-685-6032 or 276-646-2550 until 8pm ET or email: JeffreyLRaynor@aol.com.

ITC WP rack mount. Ken Kuenzie, KRMS, 5715 W Hwy 54, Osage Beach MO 65065. 573-348-2772.

Two B.E. Record Playback cart machines Two Stereo units "as is" for \$65.00 each and two mono units "as is" for \$50.00 each. Call Michael Raley @ (704) 523-5555 or e-mail Mraley@rb.org for pictures.

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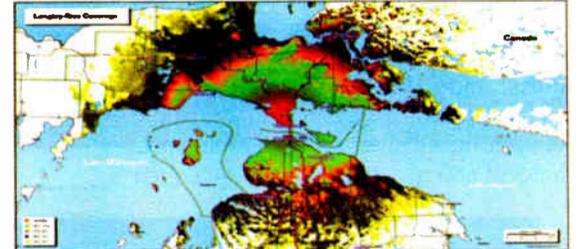
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Trak Systems 8390 time code generator & Systron Donner time code reader. Both work fine. Generator has red LED display & front panel "set" switches. Has IRIG outputs and 1, 10, 100 and 1K PPS output. Reader has 0.5" nine digit display. Not sure if it can be linked to master clock or not, but it's a nice addition to your studio, \$125/both. Jeff Raynor, WXYM, Saltville VA. 276-685-6032 or 276-646-2550 until 8pm ET or email: JeffreyLRaynor@aol.com.

Gorman-Redlich EBS Encoder-Decoder Model CEB, BO. Maynard Meyer, KLOP, 623 W 3rd St, POB 70, Madison MN 56256. 320-598-7301.

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RECORDERS (WTS) Cont.

ITC-SP playback decks (3). All stereo & were removed from service. Heads in good shape. Manual included, \$150/all +shpg. Jeff Raynor, WXYM, Saltville VA. 276-685-6032 or 276-646-2550 until 8pm ET or email: JeffreyLRaynor@aol.com.

Magnecorder 24714 PTGA drive, R/PB, drive with electroics, 1/2 track & full track, BO +S&H. W.H. Brown, WWAC, 645 Anderson ct, Satellite Beach FL 32932. 321-777-0265.

Two Denon DNM 1050R Professional Mini-disc Rec/PB Deck. Both units manufactured in 2001 and were used on our test bench in our downlink room. Has low impedance and headphone jack. We are asking \$570.00 for each unit plus shipping and handling. I can e-mail two pictures and the "Main Features" portion of the manual. Please contact Mike Raley or Ron Muffley at (704) 523-5555 for more information or e-mail Mraley@rb.org for pictures.

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Marti RPT-40 xmtr 161.73; Marti RPT-15 xmtr 170.15; Marti R30/150 receiver 170.15. Ken Kuenzie, KRMS, 5715 W Hwy 54, Osage Beach MO 65065. 573-348-2772.

Telex FMR-50 wireless mic receiver, rack mount on 171.905 mHz, works well, \$30. Peter Russell, Bowdoin College, Sils Hall, Brunswick ME 04011. 207-725-3066.

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Audio Arts 8400 Distribution Amplifier. We have about 15 of these as a result of studio renovation. They cost over \$1,100.00 new but will sell "as is" for \$200.00 each plus S&H. Contact Michael Raley at (704) 523-5555 or e-mail Mraley@rb.org for a picture.

Enberg BA - 6 Annunciator. Three of them in great condition with no more than eight years of use in them. Original cost was \$359.00 each but we will sell them for \$200.00 each "as is" plus s/h. Call Mike R at (704) 523-5555 or e-mail Mraley@rb.org for more information.

Technics SL-D2 record player can let go "as is" for \$125.00 plus s/h. E-mail Mraley@rb.org for a picture or call Mike at (704) 523-5555 for more information.

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TFT 713 AM Frequency and Modulation Monitor. Cost \$3,400.00 new but will sell for \$1500.00 plus S&H. Needs recalibration. Call Michael Raley at (704) 523-5555 or e-mail Mraley@rb.org for a picture.

Two RTS 416 Distribution Amplifiers. Has slight problem pushing +4. Cost \$1,173.00 new but will take \$325.00 for each unit plus S&H. Call Michael Raley at (704) 523-5555 or e-mail Mraley@rb.org for a picture.

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RDS

► Continued from page 38

I suspect, because of European RDS-intensive practices. And because the rest of the world seems adamantly against distracting drivers, these radios do not support Radio Text let alone PS Scrolling, which has been deemed a public safety hazard.

What we really need to do, instead of overusing the PS display space, is re-establish rapport between the radio industry and receiver manufacturers. With so many radio groups giving the thumbs up to RDS, we may be able to resurrect their interest in adding RadioText to new radio models.

In a way it is the broadcasters' "turn" to show their renewed willingness to invest in RDS, to prove they are reversing the lack of interest shown during the last decade. Their investment in RDS technology will be an indication that the radio industry is ready to support the huge investment receiver manufacturers make to bring new products to market.

As a product developer, we have creat-

ed Parallel Dynamic Text, featuring the capability to maintain two separate text messages for each on-air event — shorter messages specifically formatted for PS Scrolling that minimize the use of the display space, and longer form messages that are sent to the more appropriate RadioText group. We will continue to work toward our goal of transitioning away from PS Scrolling entirely.

Turn it on, tune it in and listen. Our recent RDS technical developments may bring you "modest" information about what you're listening to. Let's accomplish this by taking the high road and considering public safety while trying to expand our technological reach. Together, we will have improved upon the radio experience for the listener and perhaps contributed responsibly to our industry.

Mission accomplished.

Allen Hartle is president of Bellevue, Wash.-based *The Radio Experience*, which provides products and services for RDS, HD Radio and Internet data-casting applications. This article appeared on the company's Web site www.theradioexperience.com.

◆ READER'S FORUM ◆

Radio World, March 10, 2004

Slingin' Hash

Philip Galasso's letter regarding the malarkey that is pushing IBOC (*Reader's Forum*, Dec. 17) prompted this response.

There is a Clint Eastwood movie that serves as a great parallel to the IBOC stampede. In the film, a drug company presses the FDA for approval of a drug that internal tests show is defective and lethal.

All the appropriate "leaders" are lining up to back something so flawed. I've heard about the "hash" from IBOC on WSAI(AM) 1530, and yes you can really hear it in South Carolina. Does anyone believe that if all the stations are generating such hash that the AM dial won't be packed with noise?

There are the other concerns like: 1) making all radios in the United States obsolete; 2) the cost to small-town radio; 3) the listeners, particularly in poorer areas, won't be buying the new radios for years; 4) no one in the "trades" has addressed the adjacent-channel, sideband, frequency response curve and modulation limitations questions.

Who is behind this mindless push to a flawed technology? Is digital really better, or just different? Independent record companies that tell me that making "records" on old-fashioned equipment gives a warmer feel without the "metallic" edge. Lest we forget the stories about how several generations of a digital MP3 is like making a tape of a tape of a tape.

We, the independent radio and engineering people, are going to have to work to stop this. You can bet your sweet bippy that the industry giants are going to continue this "Invasion of the Body Snatchers" until we all become one of "them." The pods are planted and we dare not go to sleep.

Jim Jenkins
Owner/GM

WAGS(AM)/WJDJ(AM) Radio
Bishopville, S.C.

The following letter is in response to an item in *RW Online Newsbytes*, "Oregon Station Adds AM Stereo."

Why so surprised?

"A station in Portland, Ore., has just gone ... AM stereo?"

It certainly will sound better than what the so-called "HD" hash factories put out. Way to go, Portland.

Scott Todd
Cambridge, Minn.

Let Me Play With Your Poodle

So, Michael Powell wants to increase on air obscenity fines *ten-fold*.

The upside to these language restrictions? They'll encourage artistic creativity in describing "sensitive" things, and make the "standards" fun to read into.

Consider the early 1950s in America, with Joe McCarthy and a tensely uptight nation. In this climate, R&B artists had to

know their way around suggestive notions. Consider songs like "Sixty Minute Man" by Billy Ward and the Dominoes; "Keep On Churnin' 'Til The Butter Comes" by Wynonie Harris; "My Ding-a-ling" by Dave Bartholomew; and "Work With Me Annie" by Hank Ballard and the Midnighters. While these and other songs may have been banned from the airwaves in many places, they were huge jukebox hits and top sellers.

Today, Marcia Ball's "Let Me Play With Your Poodle" proves that some of us still love a more creative and funny way to dance around "the rules," regardless of the obscene language we hear today. The scary part comes when Michael Powell wants to stifle double entendre.

Pete Simon
Arvada, Colo.

Local Service

An article in the Jan. 14 issue ("Could Low-Power Morph to AM?") stated, "The FCC requires LPFM broadcasters to produce at least eight hours per day of local programming."

While that may have been the original intent of the service when it was being formulated, the rules do not require local origination.

Instead, LPFM applicants can choose whether or not they will "pledge to originate locally at least eight hours of programming per day" (see 47CFR 73.872(b)(3)) for awarding points, as part of the process for weeding out some of the mutually exclusive applications.

I cannot find any rule that requires applicants not claiming those points in their LPFM application to originate any local programming of any kind at any time. Personally, I don't agree with that rule. A major purpose for creating LPFM was to provide more localism. Nevertheless, this is how the FCC stated the issue in their rules.

Alan Kilgore, CSRE
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GUEST COMMENTARY

RDS Display Is No Place for Ads

by Allen Hartle

With the sudden surge in RDS installations and the sudden appearance of PS Scrolling, new issues are at hand that I believe threaten the future of RDS in the United States. As if it hasn't been a rough enough ride already.

PS (Program Service) data usually consists of a station's call letters or other eight-character description that never changes. PS Scrolling is the act of updating the PS data dynamically, to hijack previously static information in an effort to compensate for the lack of a true RadioText display capability. The problem is that most RDS radios can display the PS data, and the opportunity to have a dynamic window to the listener is proving too tempting to resist.

I admit I am in favor of utilizing this capacity to pass forward limited information related to the music on the air, for artist and (possibly) song title information has always been the principal benefit of RDS to listeners. Yes, I said *possibly* song titles.

If PS Scrolling is misused by manipulating PS data for generic advertising messages, our RDS efforts may be in vain. These threats to RDS have been building as recent business interests have arrived on the RDS bandwagon. Recently I received a phone call tipping me off that an RDS advertising proponent was preparing to start giving away "advertising time" to be displayed on RDS radios as an introduction to this new advertising medium.

Advertising medium? A slow, eight-character display is an exciting new advertising channel?

Moving violations

Let's be clear. There are companies that want to collect advertising money by displaying messages to people in driving their cars. As you contemplate driver safety and driver distraction, the idea of broadcasting advertisements to drivers will start to sound like one of the worst ideas in the history of radio.

Now for some driver safety math: Imagine someone on the freeway driving 60 mph determined to read a 64-character message via the eight-character PS display. Using typical scrolling rates, this car will have traveled two-thirds of a mile during the time it took to read the message. So, who was driving the car?

I have posted an Excel spreadsheet on

theradioexperience.com for calculating this driver safety formula. Go ahead and adjust the numbers. I believe you will come to the same conclusion. The only reasonable amount of time spent looking at the RDS display is "a glance." If you are trying to piece together an advertiser message by reading an eight-character PS display showing fragments of the message at a time, you are probably a threat to public safety.

Type "Driver Distraction" into the Google search engine and you will encounter a universe of activities regarding this issue. Our government, private industries and other social organizations are thoroughly engaged in public debates and legislation considerations surrounding regulatory activities and technical R&D. Not to mention the pleas to these organizations from a human perspective, most notably the organizations created as a result of some tragic accident due to driver distractions.

People have died as a result of fiddling with the radio — and now we want them to read sentences provided by advertisers.

Another problem is that by manipulating the PS, radio stations are in direct defiance of the European and U.S. RBDS standards regarding PS usage. These standards cite concerns for "distraction." Making matters worse is the fact that PS Scrolling is circumventing the automaker's agenda for controlling driver distraction. One of the worst cases I have seen was a fairly new Audi with a secondary RDS PS display embedded in the instrumentation, next to the speedometer in the center of the driver's view.

What if it is remotely possible that PS Scrolling may result in potentially hindering the future of RDS? My greatest concern is that forces in Detroit and Japan may take back their control of the car environment by not enabling RDS radios in future U.S. automobiles.

As I write, the industry is expecting to receive critical feedback soon regarding this practice from the U.S. Department of Transportation National Highway Traffic Safety Administration and (we hope) from the automobile industry. I also want to note the irony in the recent public comments of radio group executives, discussing deteriorating listener shares due to "the abundance of clutter and the over-commercialization of radio."

So, here we are in the early stages of a potential second chance for RDS. And immediately we have companies ready to

Clear Channel Tries for Local Voice

There has been much grumbling by radio insiders and listeners alike about the consolidated power of such media Goliaths as Clear Channel.

The commission is showing concern as well, and it formed the FCC Localism Task Force to look into the matter.

Task force representatives are going to various markets to get public reaction on how well broadcast outlets are serving their communities. Last October it headed to Charlotte, N.C. In January it was in San Antonio, home of Clear Channel.

If we judge by its actions of recent months, that big broadcaster seems to understand, at last, that it has allowed itself to be cast in the role of villain to the detriment of itself and our industry.

Among the steps it has taken is the creation of local-market advisory boards.

According to Clear Channel, the boards are designed to expand the company's existing local market research. They will provide forums through which local leaders, the music community and area listeners can better interact with the local management of Clear Channel stations.

How effective this will be, and how sincere Clear Channel is, remain to be seen. We're glad the company is taking this step, although it can't be just for the sake of appearances. The timing of the announcement, just prior to the FCC Task Force arriving in its hometown, was suspicious.

Separately, several weeks before the local advisory board announcement, a local newspaper reported that Clear Channel Radio Wheeling, owner of seven stations in West Virginia, had made deep cuts in its local news programming and personnel. In total, the cuts eliminated seven and a half hours of local programming and left the public without a forum in which to discuss local city issues on the air. That kind of development is troubling and, unfortunately, not unique.

Did it take the FCC looking into the matter to send localism to the forefront of Clear Channel's radar? Had localism been overlooked in the company's quest to streamline operations and maximize profitability, as many critics assume?

Or perhaps the company truly is starting to hear its customers and realize that it needs to change public perception if it is going to maintain its business (which, we argue, is about more than just selling ads).

Optimistically, we feel the local advisory boards are a good idea and long overdue, whatever the motivation; other "Big Radio" companies would do well to follow. While Clear Channel certainly may be looking for positive PR, if localism regains its voice, this could bring good results.

— RW

press the envelope regarding driver distraction, and overwhelm the eight-character PS display as a new advertising channel? Are you looking forward to seeing a Viagra advertisement over RDS?

RDS does not stand for R-a-D-i-o S-pam.

Text potential

Perhaps I am trying to point out the different agendas between products and services that enhance our core radio technology as opposed to exploiting it for profit with little regard for public safety. For the second opportune time in a decade, I am investing my time and financial resources assisting fellow engineers with the installation of hundreds of RDS systems. Just as it was in the mid-1990s, there is an element of pride as we attempt to "evolve" FM broadcasting just a bit.

At the same time broadcast engineers are trying to improve upon the base technology, a small carnival of new companies arrive, often operated by non-radio

people, ready to exploit RDS in a new "revenue generation opportunity."

Usually the wilder ideas, such as paper coupons coming out of your RDS radio, are perhaps entertaining as they pass by. But this time an RDS revenue generating scheme has the potential to cause harm to innocent people and the very future of RDS, in large part because of a situation the radio industry is responsible for.

Let's face it — radio stations chose to not install RBDS encoders over the last decade despite the fact that we had receiver manufacturers, such as Denon, Pioneer, Onkyo and Delphi, building radios with RadioText capabilities. This lack of action in the 1990s cost us those manufacturers willing to produce RDS radios with RadioText displays.

Now, by the grace of radio manufacturing economies of scale, the automobile manufacturers seem to build universal radios for the entire world — RDS radios,

See RDS, page 37 ▶

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