News in Review
Broadcasters hope to kill LPFM before it creates chaos on the airwaves. TV duopolies get thumbs up.
Page 6

Tech Talk
Going shopping for a new mic? Do you know what features you should be looking for?
Page 20

Programming & Positioning
He used to be Speaker of the House. Now his voice is coming out of the speakers of your radio.
Page 24

Welcome to Orlando! Check out the hot sessions and hot new products at this year's NAB Radio Show. Then, go outside and enjoy some more heat.

NAB Preview
Page 14

REMOTE JACKPOT
with a COMREX HOTLINE

- Uses one plain old telephone line – no antennas to set up and no digital lines to install.
- Save on staff – even a weekend board-op can use a Hotline. It’s that easy!
- Sounds amazing, like it was produced in the studio – but don’t believe us, try it for yourself! Call for a free demo loaner.

COMREX Corporation, 65 Nonset Path, Acton, MA 01720 USA Toll-free 800-237-1776 in North America email: info@comrex.com Fax-on-Demand: 978-264-9973
Your Wide Area Networkability Is Limitless

The demands of today's fast paced broadcast marketplace require maximum utilization of resources to achieve cost effective performance. Thanks to the latest advances in digital technologies, multiple broadcast facilities can now seamlessly share audio inventories, news, scheduling and billing data, and often consolidate other redundant functions.

All of this is possible by combining the advantages of non-proprietary products such as the ENCO DADpRo32 Digital Audio Delivery System with Wide Area Network (WAN) architecture. Audio production may now occur from virtually anywhere within a group, information flow is automatically managed between multiple remote locations, and transfer schedules are configured to take advantage of varying tariffs for maximum efficiency and cost control.

The ENCO DADpRo32 Digital Audio Delivery System provides a powerful professional audio management tool for both live assist and automated on-air operations, production, and inventory control. Support of Wide Area Networking is inherent with DADpRo32, providing capabilities to take full advantage of distributed data and group interconnectivity.

next level solutions

WIRELESS
BROADCAST
GOVERNMENT
NETWORK SUPPORT

1-800-622-0022 • www.harris.com
June revenues join double-digit parade, pacing strong

Radio revenues for the month of June improved 11% over the same month in 1998, with a 12% gain in local business and a 10% gain in national business. June was the 28th consecutive month of gains, and it kept total YTD revenues at 12%. There is an excellent chance that radio's revenue gain will still be in double digits at the end of the year. Forward spot pacing, which indicates the percentage of pre-sold spot inventory, remains exceptionally strong, performing well ahead of last year's record pace.

Things were quiet elsewhere, in places like Wall Street, where stock prices pretty much stayed put. Total radio station ownership consolidation was flat as well. Although there was one major deal, Entercom's purchase of most of Sinclair's radio properties, it constituted a territorial expansion for Entercom, with overlapping stations in only one market (Kansas City, and spin-offs will be required).

The second page of Stats features a look at how the automotive industry uses the media. -DS

---

Radio Revenue Index

June keeps latest double-digit mini-streak alive

A 12% gain in local business, combined with a 10% uptick on the national side combined for an overall gain of 11% for the month of June over the same period last year. Locally, all regions picked up 13%-14% more business with the exception of the Midwest, which gained as well, but only 6%. National results were uneven, ranging from 2%-14% with a little of everything in between. YTD, radio is up 12%.

Local & Nat'l revenue Jan-June 1999

All markets 12%
East 14%
Southeast 14%
Midwest 6%
Southwest 13%
West 13%

Jan-June 1999

All markets 13%
East 13%
Southeast 15%
Midwest 9%
Southwest 12%
West 14%

Local & Nat'l revenue Jan-June 1999

All markets 12%

Forward Pacing Report

Halloween will be a treat

1999's spot inventory, as it has all year, is outpacing 1998's record-setting rate. This despite the fact that, at least among the three execs featured in this month's GM Talkback (pg. 8), millennium-related schedules are not really kicking in yet. It seemingly can only get better.

Superduopoly Dimensions

Industry Consolidation (as of August 9, 1999)

Superduopoly: 51.6%

<table>
<thead>
<tr>
<th>Market</th>
<th># of stns</th>
<th>percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 50</td>
<td>848</td>
<td>54.7</td>
</tr>
<tr>
<td>51 to 100</td>
<td>627</td>
<td>55.6</td>
</tr>
<tr>
<td>101 to 150</td>
<td>395</td>
<td>47.6</td>
</tr>
<tr>
<td>151 to 200</td>
<td>382</td>
<td>45.7</td>
</tr>
<tr>
<td>201 to 261</td>
<td>435</td>
<td>50.6</td>
</tr>
<tr>
<td>Total</td>
<td>2,687</td>
<td>51.6</td>
</tr>
</tbody>
</table>

Total Industry: 74.0%

<table>
<thead>
<tr>
<th>Market</th>
<th># of stns</th>
<th>percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 50</td>
<td>1,205</td>
<td>77.8</td>
</tr>
<tr>
<td>51 to 100</td>
<td>845</td>
<td>74.9</td>
</tr>
<tr>
<td>101 to 150</td>
<td>583</td>
<td>70.3</td>
</tr>
<tr>
<td>151 to 200</td>
<td>590</td>
<td>70.7</td>
</tr>
<tr>
<td>201 to 261</td>
<td>628</td>
<td>72.9</td>
</tr>
<tr>
<td>Total</td>
<td>3,851</td>
<td>74.0</td>
</tr>
</tbody>
</table>

Note: The "# of stns" shows the total count for stations in either a superduop or, in the case of total industry consolidation, in an LMA, duop or superduo. The "percent" column shows the extent of consolidation for each market segment.

Tender loving car: Going after auto ads

If there is an upside for radio in the battle for automotive ad dollars, it is that there is a lot of money out there to target which isn't currently finding its way into radio industry bank accounts. Charts below show how the auto ad pie was sliced in 1987 and 1997 (pretty much the same both times), and below that is a chart showing ad spending for Q1 1999.—DS

### 1987 Auto Advertising Expenditures by Medium

<table>
<thead>
<tr>
<th>Medium</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Television</td>
<td>15.7%</td>
</tr>
<tr>
<td>Radio</td>
<td>17.8%</td>
</tr>
<tr>
<td>Newspaper</td>
<td>52%</td>
</tr>
<tr>
<td>Others</td>
<td>14.5%</td>
</tr>
</tbody>
</table>

Source: NADA Industry Analysis Division

### Q1 Ad Spending by Auto Companies by Media ($000)

<table>
<thead>
<tr>
<th>Auto Company</th>
<th>Total</th>
<th>Newspaper</th>
<th>TV</th>
<th>Cable TV</th>
<th>Network Radio</th>
<th>Natl. Spot Radio</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Motors Corp.</td>
<td>556739</td>
<td>96427.5</td>
<td>320691.2</td>
<td>46587</td>
<td>236.9</td>
<td>2442.9</td>
</tr>
<tr>
<td>DaimlerChrysler AG</td>
<td>332309.1</td>
<td>18167.4</td>
<td>224853.9</td>
<td>17377.2</td>
<td>324.3</td>
<td>2998.3</td>
</tr>
<tr>
<td>Ford Motor Co.</td>
<td>276550.7</td>
<td>17950</td>
<td>142791.2</td>
<td>19852.7</td>
<td>0</td>
<td>3270.9</td>
</tr>
<tr>
<td>Toyota Motor Corp.</td>
<td>160378.4</td>
<td>6965.5</td>
<td>99749.1</td>
<td>8875.9</td>
<td>0</td>
<td>565.9</td>
</tr>
<tr>
<td>Honda Motor Corp.</td>
<td>140079.4</td>
<td>5056</td>
<td>108981.8</td>
<td>6351</td>
<td>0</td>
<td>147.5</td>
</tr>
<tr>
<td>Volkswagen AG</td>
<td>93382.4</td>
<td>11839.8</td>
<td>63758.4</td>
<td>7674.9</td>
<td>0</td>
<td>130.6</td>
</tr>
<tr>
<td>Nissan Motor Co. Ltd.</td>
<td>81866.2</td>
<td>28175.3</td>
<td>34017.1</td>
<td>2852.3</td>
<td>0</td>
<td>430.3</td>
</tr>
<tr>
<td>BMW AG</td>
<td>36279.7</td>
<td>4953</td>
<td>14859.5</td>
<td>4519.9</td>
<td>0</td>
<td>353.6</td>
</tr>
<tr>
<td>Mazda Motor Corp.</td>
<td>34253.6</td>
<td>4857.3</td>
<td>25942.5</td>
<td>1220.1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mitsubishi Motors Corp.</td>
<td>32083.5</td>
<td>0</td>
<td>27949.7</td>
<td>2358.1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Non-Traditional Revenue Track

Summer is picnic time!

Food/Grocery was a hot category for NTR at radio stations in June as processed food companies fought for space in consumers' coolers as people headed to the beach. Automotive dropped off, but just wait until the new models debut this Fall.—JM

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive</td>
<td>15.63</td>
<td>10.36</td>
<td>17.84</td>
<td>12.16</td>
<td>9.42</td>
<td>16.01</td>
<td>4.29</td>
<td>9.96</td>
<td>1.30</td>
</tr>
<tr>
<td>Food/Grocery</td>
<td>33.80</td>
<td>22.48</td>
<td>42.19</td>
<td>21.06</td>
<td>18.83</td>
<td>23.20</td>
<td>49.33</td>
<td>31.30</td>
<td>1.17</td>
</tr>
<tr>
<td>Leisure/Electronic</td>
<td>22.35</td>
<td>33.56</td>
<td>35.61</td>
<td>34.46</td>
<td>40.67</td>
<td>30.43</td>
<td>25.73</td>
<td>31.17</td>
<td>5.83</td>
</tr>
<tr>
<td>H&amp;B C</td>
<td>9.00</td>
<td>7.62</td>
<td>4.24</td>
<td>9.37</td>
<td>6.94</td>
<td>9.26</td>
<td>2.67</td>
<td>5.83</td>
<td>2.22</td>
</tr>
<tr>
<td>Home Improvement</td>
<td>8.07</td>
<td>7.26</td>
<td>5.39</td>
<td>8.02</td>
<td>9.08</td>
<td>3.57</td>
<td>5.60</td>
<td>6.14</td>
<td>6.68</td>
</tr>
<tr>
<td>Office</td>
<td>6.83</td>
<td>2.42</td>
<td>2.22</td>
<td>4.49</td>
<td>0.07</td>
<td>2.02</td>
<td>2.75</td>
<td>2.22</td>
<td>6.38</td>
</tr>
<tr>
<td>Clothing</td>
<td>2.51</td>
<td>3.28</td>
<td>0.15</td>
<td>1.41</td>
<td>12.35</td>
<td>2.75</td>
<td>6.38</td>
<td>4.88</td>
<td>8.50</td>
</tr>
</tbody>
</table>

Source: Revenue Development Systems; based on revenues from 76 stations in 32 markets.
FOR IMMEDIATE RELEASE

MANAGER'S BUSINESS REPORT APPLIES FOR BPA INTERNATIONAL BUSINESS PUBLICATION MEMBERSHIP


BPA International will track circulation for MBR based on business, industry and geographic coverage. The magazine will have 18 months to complete its initial circulation audit.

"MBR has experienced rapid growth since its inception and first issue almost three years ago," said Jim Carnegie, Publisher. "In order for us to better serve our advertisers, as well as make a commitment to maintain the quality of the publication's circulation, MBR is pleased to apply for membership to BPA International. Finally, there will be a radio manager's publication committed to independent verification of its target audience."

Michael Marchesano, BPA International President and Chief Executive Officer, said, "We are pleased to have MBR apply for membership in BPA International. I'm confident that our audit of circulation will help the publication in its efforts to attract advertising to effectively serve its market."

Now in its sixty-eighth year, BPA International is the leading world auditor of business publications, and a global provider of audited data to the marketing, media and information industries. In addition to serving 1,815 business publications in 20 countries, BPA verifies data for 445 consumer magazines, 71 daily and community newspapers, 72 interactive firms encompassing 195 Web sites and 4 direct-marketing databases. The organization also counts as members 2,600 advertisers and advertising agencies in the United States, Canada, Europe and Asia.

###

NR799830
**NAB blasts LPFM, tells FCC it “will create chaos”**

Spectrum integrity will be displaced and the transition to IBOC digital radio may be hindered. That’s what the NAB says the industry has to look forward to if the FCC goes ahead with its ill-researched low-power FM proposal.

“Low-power radio would result in a significant increase in interference for a large number of radio listeners,” announced NAB CEO/Pres. Eddie Fritts during a news conference at NAB headquarters.

“We’re concerned that the FCC is putting the cart before the horse.”

The NAB filed its comments in response to the FCC’s proposal to relax 2nd and 3rd adjacent channels in order to carve out spots for thousands of 100- and 1,000-watt stations. The FCC has made clear over the past few months that it supports LPFM as a way to enhance diverse ownership and programming.

While NAB officials do admit that the Commission’s goals are “laudable”, the agency should not “sacrifice technical engineering to promote social engineering,” wrote the NAB in its LPFM comments. Reply comments were due 9/1.

The study

The FCC last reported to MBR that it was testing boomboxes, car radios and home stereo systems. The NAB has taken that study one step farther by testing 28 radios that also include clock radios and personal radios which the Commission did not cover. And the results are not promising. In the 60 markets where the FCC has proposed allocations for LPFM, the NAB reports that if both 2nd and 3rd adjacency protections are eliminated, 6.1M people across the US would sustain interference from 100-watt LPFM stations and 5.8M people from 1,000-watt stations.

In its comments, the NAB discredits the FCC’s assumption that new receivers are better than old ones at handling relaxed protections. “(FCC) relied on unsubstantiated claims by low-power FM proponents that (these protections) are no longer necessary because of alleged ‘vast improvements in receiver technology’... these ‘vast improvements’ are a myth... there is no evidence to support this claim.” The NAB receiver study reports that LPFM service areas would actually have to be smaller than the Commission has proposed and would in fact be vulnerable to interference from full-power stations.

The study also points out that the conversion to digital radio could be harmed if the Commission proceeds with LPFM. The NAB says the Commission does not know how a digital signal would be affected by an LPFM station because a digital standard has yet been adopted. If the FCC pushes forward with LPFM, writes the NAB, “the Commission is abrogating its principal role as spectrum manager.”

The NAB’s comments also note that each FCC Commissioner has said that LPFM service should not be established if it would create interference to existing broadcasters. Now all the NAB can do is hope they stay true to their words.—TS

**Entercom wins Sinclair sweepstakes**

Opportunities to buy three and a half dozen radio stations all at once don’t come along often anymore, so Joe and David Field didn’t let this one pass. The company’s previous biggest deal was the $1.4OM buy of five Boston-Worcester stations which included a sell-back of two Tampa stations to Infinity (N:INF) for $75M. After its successful IPO though, Entercom was primed for an even bigger acquisition and outbid the field to take Sinclair’s 43 stations in nine markets for $821.5M, which Sinclair said was 20 times projected 1999 EBITDA. Not included are the markets for $821.5M, which Sinclair said was 20 times projected 1999 EBITDA. Not included are the

**RIP UPI**

United Press International (UPI) confirmed 8/6 that it has sold its broadcast client list to Associated Press (AP) and is exiting the wire service and radio network businesses. All of UPI’s remaining 400 or so broadcast clients are being switched over to AP service and the transition should be completed by sometime next month.

As the latest president charged with rebuilding UPI, Arnaud de Borghgrave has targeted the Internet and electronic newsletters as the way to give the long-struggling company a future.—JM
FCC OKs TV duopoly, sets radio/TV limits

Saying that the broadcast industry needs to move away from a waiver-based environment into a rule-based one, the FCC voted to eliminate its ban on radio-television crossownership. Before the (8/5) ruling, radio/TV combos were only available through waivers granted by the Commission.

Under the new rules, a party may own eight broadcast outlets in a particular market. Permissible combos would include seven radio stations with one TV station or six radio stations and two TV stations.

But the rules are not without conditions. There have to be at least 20 other independent voices in the same post-merger market for the radio/TV combo to be approved. An "independent voice" would include all fully-operational commercial or noncommercial radio or television stations, any daily newspaper printed in English at least four days a week, and wired cable services.

The new rules also allow a party to own a TV station and up to four radio stations in any market as long as there are still 10 independent voices remaining.

The Commission also amended its ownership attribution rules by adopting a new "equity/debt plus" plan. Under this rule, a party is now considered to have an attributable interest if it holds more than 33% of a station's equity or debt or if that party supplies more than 15% of a station's weekly programming.—TS

McCain, Burns to bring back tax certificates

It doesn't happen often, but for once Sen. Commerce Committee Chairman John McCain (R-AZ) and FCC Chairman Bill Kennard (D) are seeing eye to eye. Kennard and fellow Commissioner Michael Powell (R) have made pleas to Congress in recent months for a revival in tax incentives. Though it's not an official introduction, Sens. McCain and Conrad Burns (R-MT) say they have prepared a bill that would help to put ownership in the hands of minorities and women via tax certificates.

Officials at the FCC have made it known that they openly support a bill that would allow companies to defer capital gains taxes on sales to minorities or women. And it's just what McCain's bill proposes to do. Most importantly, to address criticisms of the old program, the new bill would also limit gross revenues or total assets and would restrict selling the business. Under the old tax program (killed by Congress in 1995), there was no set dollar amount for the purchase, as well as no time restriction for a resale or a cap on the number of times such a group might use the program.

"All Americans have a stake in advanced telecommunications technology, and all Americans should have a chance to enjoy its benefits, not only as users, but also as owners," McCain said in a written statement. Added Burns, "I am a big supporter of using the power of the free market, rather than the heavy hand of government, to help open doors of business ownership to every American."

An introductory bill of the bill is expected in September.—TS

Next IPO: Radio Unica!

Joaquin Blaya is taking the tried and true route to Wall Street: 1) Start with a business plan and a strong management team; 2) Find a well-funded venture capital firm to fund your early growth—in this case, Warburg, Pincus Ventures LP; 3) Build a successful track record; 4) Sell bonds to introduce your company to the financial community; 5) Take your company public with an IPO. Blaya's Radio Unica is now at step five and is seeking to sell $97.75M in stock to the public. Once the IPO closes, the shares will trade on Nasdaq as UNCA.

Billing itself as the "only national Spanish-language radio network in the United States," Miami-based Radio Unica launched its Spanish Talk format in January 1998 with three LMA'd stations and 30 affiliates. It now has 13 O&O or LMA'd stations and 36 affiliates. Radio Unica says it covers 80% of the US Hispanic population. Its ad sales are handled by 15 network sales people in 10 offices nationwide and 60 local sales people at its O&O/LMA stations.

For its first year of operation (1998), Radio Unica had negative broadcast cash flow of $1.55M on net revenues of $8.2M. For Q1 1999, net revenues increased to $1.8M from $562K a year earlier. Broadcast cash flow was -$5.2M, compared to -$3.25M a year earlier.

The company posted net losses of $20M for 1998 and $6.9M for Q1 '99. According to its SEC filing, "We believe that losses will continue while we pursue our strategy of acquiring radio stations and developing our network."

The managing underwriters for Radio Unica's IPO are Salomon Smith Barney, Bear, Stearns & Co., Citicorp World Markets and Donaldson, Lufkin & Jenrette.—J.M

Cigar ads should be a thing of the past

That's according to a FTC report, asking Congress to enact legislation to ban cigar ads on radio and television. The report also called for health warnings on cigar labeling.

"We now know that there has been a dramatic increase in cigar use and in the extent of advertising for cigars in the last few years," said FTC Chairman Robert Pitofsky. "Yet cigars are not 'truthful advertisements for lawful casino gambling,' whether the broadcasters are located in a state that permits casino gambling or a state that does not."

Eddie Fritts, NAB CEO/Pres., called the announcement "a major First Amendment victory for the broadcast industry (and) completes our nearly 10-year battle against these advertising restrictions."—TS

NAB wants FCC receiver studies

Once again, the NAB wants to see the FCC's receiver studies—the most up-to-date version, that is. Again, the FCC didn't disclose the details so the NAB's SVP/General Counsel Jack Goodman filed the formal request under the Freedom of Information Act.

"We had filed the same request earlier in the process [March] and had gotten what the FCC had at the time. The effort here simply was to update—if they've done any more work for the purpose of making these decisions, we'd like to get a copy of it," said Bruce Reese, Bonneville CEO and Chairman, NAB's Radio Spectrum Integrity Task Force. Documents requested include: 1) the number of radios expected to be tested by the Commission; 2) the type and model of radios expected to be tested; 3) the test methodology used by the Commission and any modifications to those tests; 4) the reasons for choosing the test methodology; and 5) any conclusions resulting from those tests made by the FCC staff.

The letter, addressed to the Commission's Managing Director Andrew Fishel, asks for all information surrounding the documents, if the documents are not disclosed, "to enable us to consider whether to seek judicial remedy under the Act."—CM

MBR observation: Five of the top cigar companies reported spending only $325K on radio and TV spots in 1997. We divided that dollar amount by the number of commercial radio stations in the US (approx. 11,000) and commercial TV stations (approx. 2,000) and found that ad spending per station equaled only $25. With these minuscule ad budgets, we find it quite bizarre that anyone would blame radio and TV for encouraging this cultural habit.—TS

FCC, DOJ give the thumbs up for casino ads everywhere

This past June the US Supreme Court handed down a decision to legalize casino advertisements on radio and television stations in Louisiana (RBR 6/21, p. 2), but the ruling left many scratching their heads and wondering if that decision would apply to all states. Now the industry finally has some clarity in that gray area: the DOJ and the FCC announced last week that they would abandon casino advertising restrictions in all 50 states.

Earlier this spring the High Court heard oral arguments from the Greater New Orleans Broadcasters Assn., challenging federal regulations that barred radio stations from airing commercials which specifically mention games of chance (such as slot machines), but allowed ads that promoted hotel rates, meals specials or entertainment. According to last week's announcement, radio commercials may now mention gambling as long as they are "truthful advertisements for lawful casino gambling," whether the broadcasters are located in a state that permits casino gambling or a state that does not.
Each month we ask a few general managers from around the country to share with us, and you, their views of the industry. This month we quizzed: Marlin Broadcasting's Boyd Arnold of WCCC-AM-FM Hartford, CT; Clear Channel's Judy Lakin of KHFI-FM, KPEZ-FM, KEYI-FM, KFON-AM Austin, TX and L & P Broadcasting's Bob Spencer of WSTG-FM, WAEC-AM Bluefield, WV.

Here are this month's GM Talkback questions and the GMs' responses.

Do you have many advertisers booking millennium-related commercials on your stations? If so, how has this affected your station revenue?

Boyd Arnold:
At this point, we do not have many advertisers that are actually booking millennium-related schedules or commercials. Our sales team, however, is actively presenting ideas for millennium campaigns. We anticipate some 15 to 20% additional revenue based on the campaigns that we are currently presenting.

Judy Lakin:
We have not seen a strong demand in millennium-related commercials on our radio stations.

Bob Spencer:
We use every situation or event as an advantage to sell commercials. Many clients are mentioning millennium-related issues already as a way to educate listeners, such as banks, propane heating plants, etc. Also, we create "demos" with the millennium where appropriate. This has already helped revenue. We will see a large increase during the 4th quarter.

What was your most interesting new account this year?

Boyd Arnold:
Perhaps the most interesting client from the standpoint of "radio getting results", would be the correctional officers/state prison employees union. The American Federation of State, County and Municipal Employees Union is a 5,600 member union with three chapters. They needed to dispel the public's negative perceptions of prison guards. They were convinced to use radio to reach the general public as well as their members. The objective was to remind the public that A) prison guards are upstanding community-minded citizens and that there will be contract negotiations in the year 2001, B) Connecticut State prison employees protect us from drug pushers, child molesters and thieves day in and day out and C) AFSCME members donate much of their time to a variety of local community organizations. The campaign has increased public awareness and set the stage for the negotiations to work in the union's favor. The client has seen the results and has committed to a 12-month schedule.

Judy Lakin:
The most fascinating new revenue stream is the Internet dot-com businesses. We have seen a tremendous growth in this category.

Bob Spencer:
We had tried to get an area hospital to advertise on WSTG (Star 95). Since we flipped from Country to Top 40, the hospital wanted to wait until we were "proven." The hospital is very active in the community and we wanted very much to align ourselves with them. The station's mascot is a bear—the Star 95 Care Bear. We proposed that the hospital be the exclusive sponsor of our Care Bear. Our mascot delivered the proposal, some flowers and a stuffed bear to their marketing director. The situation attracted a crowd, and they took the rather large advertising proposal.

How did you get into radio and why did you stay?

Boyd Arnold:
I had an interest in radio as early as high school. After being in direct sales for six years, I made the decision to move into radio sales. That was 31 years ago. It has proved to be one of the best decisions of my life. I have enjoyed all aspects of the business, including ownership, and it is hard to imagine doing anything else.

Judy Lakin:
I was working as a sales assistant in Dallas, TX for the Selcom Radio Rep Firm. The GM from a station we represented in Austin recruited me to work for him in local sales. Why radio? I'm very passionate about radio as an entertainment medium and its ability to move products and services for our clients.

Bob Spencer:
I was born with an immediate interest in radio. I was fortunate to experience legendary stations like WLS, WOWO, WCLF, WABC, etc. I built a radio station in my bedroom. Later, I got my foot in the door at a local station by bringing the announcers pizzas and hamburgers. They would let me play jingles into songs. I eventually became program director and operations manager of that same station.
Station Owners... Want To Broaden Your CAST?

Where The World Tunes In

Station Owners... BroadcastMusic.com is your Free Internet broadcasting solution. Consider what you get: No monthly fees; no software or hardware investments; no licensing fee (BMI, ASCAP, SESAC); Free advertising banners; no limit to the number of simultaneous listeners; G2 Surestream technology platform from RealNetworks; Free listener email accounts with voice mail through your custom audio player!

To find out more visit us @ NAB Booth #1160 and #1256.
Or contact Michael McPherson VP Sales/Marketing
(207)773-9447 email: broadcast@broadcastmusic.com
Zenith Media's Matt Feinberg on the magic of radio; will consolidation make it less magical?

Yet another impassioned radio lover is featured in this issue's Agency Perspective. VP/Manager, Radio National Broadcast for Zenith Media Services Matt Feinberg chanced into radio during his internship after college and was hooked ever since. It was at All American Television that Matt produced his first syndicated radio show ("SST College Radio America"), targeted to the college market.

After a short stint with College Media Journal, Feinberg moved to American Home Products (AHP) where he stayed for 11 years. As buyer and planner of national and local radio, Feinberg also produced in-house infomercials. Highlights of his tenure there include devising a 52-week radio-only plan for Riopan Antacid. His plan was credited for Riopan's 11.5% increase in profits that year.

Feinberg left his position as Director, Special Projects at AHP and joined Zenith a year and a half ago. He purchases national radio for companies such as Delta Airlines, Procter & Gamble, E-loan.com, Lexus and Red Lobster Restaurants.

How has national radio changed over the last few years?
National radio, like most other media at this point, has essentially become a commodities business. I see the people involved being less the broadcaster, and more the broker.

What do you think has brought about this change?
In a word: consolidation. The FCC deregulation act of 1996 has, in my opinion, done a real disservice to the American people. Allowing companies the multiple ownership of media outlets to the extent it does, serves not the taxpayer, but the shareholder. It has led to less creative programming, less public interest programming. It has compromised once stellar news departments and made the possibility of small privately-owned radio stations virtually impossible. From a purely business perspective however, some of the new opportunities that have come about are the ability to negotiate multi-media deals. It has also allowed the networks to overcome one of their biggest traditional weaknesses—namely more O&O network radio groups.

Can you expound upon that last point?
Multi-media campaigns are going to become standard operating procedures in the not too distant future. The national broadcast group at Zenith has been involved with several very large ones and the last two buys I did for one of our clients involved extensive cross media. This really makes an agency tap into its resources because the buyers become more like media and marketing analysts than straight media buyers. As far as the O&O status, one of national radio's biggest drawbacks has been its ability to control placement of inventory of their affiliates. With networks becoming part of larger broadcast entities, specifically AMFM, they are able to guarantee placement on stronger affiliates. This really makes network radio far more attractive to advertisers than ever before.

What do you enjoy most about buying national radio?
What is really satisfying is being able to impact the client's profitability directly. I feel that my time at American Home Products was invaluable in that it gave me a solid understanding of traditional marketing. I am able to use that experience and apply it to radio strategies and help the client meet the goals. I also
Who are we as Americans?
Where are we going as a country?
What should we as citizens care about?

Hosted by former Speaker of the House Newt Gingrich, *The Age of Possibilities* is a daily 90-second commentary about the people who make America succeed and how they, as citizens, are changing the world around them.

From his travels across the country, Newt believes technology and education are transforming society. And the knowledge, ideas, solutions and opportunities are empowering individuals to continue to make this country great.

Draw listeners and sponsors to an exciting daily feature that will introduce them to the people that make America strong.

*Consider the possibilities.*
do you find networks in general are easy to work with?
That's a tough one. During negotiations, things can get pretty rough and tumble but it really depends on the individual sales person, their management and the company's philosophy. Over the past five years, Westwood One has become increasingly difficult to work with. I believe they had many control, or lack thereof, issues that caused the organization to all but implode. However, in the last six months they have brought in two very talented executives to help right the situation—Joel Hollander, CEO and Peggy Belden, EVP Sales. They are headed in the right direction, though they have a long way to go and a lot more cultural obstacles to overcome but I believe they will do it.

AMFM is an interesting animal. They have developed a business model that so far is working for them in spades, but from what I have begun to experience is not fluid enough to deal with the idiosyncrasies of each advertising agency's needs. In a strong marketplace, they can afford to treat the agency like a number in a deli waiting line. But when the marketplace turns around, I wonder if this archetype will serve them as well. They have some of the best sales talent around and a great product but they seemed to be tied down by an overly rigid system.

Also, many of the small niche networks have good product but a sales force that knows little or nothing about media, or their product for that matter. They are relying on a bull market, name recognition and perceived value to get them through. It gets aggravating to deal with them on detail and finding out how research is actually done within their organization.

What do you like about radio in general?
Radio is my life! I actually love radio. No BS. I listen all the time to many different stations. Mostly because I like radio personally; I've gotten the same way with the Internet. I have always been a light TV viewer and have found something magical about radio ever since I was a kid listening to WFIL-AM (Philadelphia) with Mark Goodman (of MTV fame). I remember sitting in the room and taping from a transistor radio a concert special called "Fantasy Island" (which looking back, I assume it was an early syndicated program, probably by Westwood One) where they aired what appeared to be a live concert of the Woodstock magnitude with groups like Cream and The Beatles reuniting. This was around 1974. I was totally sucked in. Mesmerized. I went and told the guys I was hanging out with at the time about The Beatles getting back together again! The magic of radio worked on me and it still does. I wouldn't be surprised if that tape is somewhere at my parents' house as I have forbidden them to throw away any records or tapes that I have left down there.

What stations do you listen to?
Everything, seriously. I change dial positions every few weeks to different stations just to see what's going on. The one station that gets the majority of my time is WBGO-FM in Newark. It's the best jazz station in the country and an NPR affiliate. I also try and tune in to WNEW-FM (NYC) every Sunday from 8PM-1AM for Vin Scelsa's "Idiot's Delight," without a doubt the best radio show on the air. Music programming in New York is pretty lame for the most part so I can't stay with one station too long. Lately I've been checking out Jammin' 105, which is great stuff, but they have a ridiculously short play list. Also "Opie and Anthony" on WNEW FM drive team. They have basically taken the Howard Stern model and given it their own spin. It's not for everybody but I fit the demo like a hand in glove.

What do you dislike about radio?
I love the business, but knowing the business and being privy to some of the questionable practices has dulled much of the shine for me. Twice I have been offered jobs in the record business but I declined, realizing music is much too special to me to treat it as a commodity. The same has become true with radio. The problem is money spoils everything.

Do you see satellite radio and Internet radio as long term players in the radio advertising landscape?
Absolutely. They will not necessarily replace broadcast radio as we know it, but become a part of the landscape and a viable advertising medium.

What makes you good at your job?
Who said I was good? No actually. I believe I am good at what I do because of my love of the medium and because of my wide variety of related experiences. I have as much, or more, local radio buying and requisite promotional experience. I have planned radio, produced it, syndicated it and have even been on-the-air. While there are other great buyers out there, I don't know that anyone has as broad-based a background. All respect to my colleagues, to whom I would defer to in a minute on their buying prowess. Also, my time spent at American Home Products was invaluable working under Katie Coke in the radio department (Katie is somewhat of a legend in the radio advertising community). After Katie's retirement, I reported straight to the president of the in-house agency who pushed me to become a familiar face with the brand groups and planning personnel.

Basically, I've been fortunate enough to work with extremely bright people. From my first job at All-American TV (assistant to co-founder George Back) to my current position here at Zenith (reporting to Peggy Green, EVP/National Broadcast), and I include some great sales people who have helped along the way also. My father also instilled in me a lot of common sense.

How do your clients benefit from national radio advertising?
Low CPMs, increasingly better clearances, stronger affiliations, greater accountability, more cross media opportunities. Our clients, and here's the plug, also get the benefit of Zenith's vast resources—both people and information.

What would you like to see happen with the national radio department at Zenith?
It depends on if I have had a good day or had day. Really, I would like to work toward a fully integrated radio group—local, national, planning and even production. The last I looked, Zenith is already one of the top network radio spenders nationally and I would first and foremost like to keep growing that.
WITHOUT EXCEPTION, A RADIO STATION'S CENTRAL NERVOUS SYSTEM LIES IN ITS AUDIO ROUTER. THIS UNHERALDED MAINSTAY KEEPS OPERATIONS FLOWING SMOOTHLY, DAY IN DAY OUT. AND TO THEIR CREDIT, GREAT ROUTERS REMAIN THANKFULLY FAITHFUL IN THIS MISSION CRITICAL ROLE.

SAS RECOGNIZES THE IMPORTANCE OF RELIABLE ROUTING SYSTEMS. PERHAPS BETTER THAN ANY OTHER MANUFACTURER. WE DESIGN AND BUILD ROCK SOLID, YET HIGHLY FLEXIBLE DIGITAL AND ANALOG SYSTEMS. AND IN THE LAST 12 YEARS, WE HAVE BROUGHT OVER 100 HIGH-PERFORMANCE AUDIO PRODUCTS TO LIFE—EXPRESSLY FOR RADIO STATION OPERATIONS, BIG AND SMALL ALIKE.

LIKE THE NEW CENTURY, THE NEXT GENERATION ROUTING SYSTEMS ARE ALMOST HERE. PATCH INTO OUR EXCITEMENT THIS NAB AND CHECK OUT OUR NEW 32KD SYSTEM, AN ADVANCED-THINKING PLATFORM FOR NETWORKING AND ROUTING. WE'LL SHOW YOU WHAT WE MEAN BY INVENTIVE, DEPENDABLE SOLUTIONS TO TAKE YOUR RADIO STATION INTO THE 21ST CENTURY AND BEYOND.

NAB RADIO '99, Booth #1425
Serious business, hot parties highlight NAB Radio Show

Leave your tuxedo at home! This year’s Marconi Awards Dinner and Show is “business casual.” For most of us that means a sport coat and tie, but we doubt that anyone is going to be enforcing a dress code very strictly. Hosts Bob Kevoian and Tom Griswold of AMFM Radio Networks’ “The Bob & Tom Show” are more likely to show up in T-shirts and baseball caps.

Entertainment for this year’s gala, Thursday evening (9/2), is Lyle Lovett and his Large Band. Hey, come to think of it, we saw Lyle perform a few years back at the White House and although he was wearing a jacket, we’re pretty sure there was no tie around his neck. So, our advice is to adhere to the Randy Michaels code of fashion etiquette—wear whatever the heck you feel like!

Speaking of Randy, he’ll be making a return appearance to the Group Executive Super Session, which is always the biggest crowd draw of each NAB Radio Show. Of course, this time he’ll be representing a different company, Clear Channel Communications, where he now oversees one of the industry’s three $1B+ billing radio groups. Also on the panel from the $1B+ trio is Ken O’Keefe, COO, AMFM Radio.

Rounding out the Thursday afternoon panel are Dick Ferguson from Cox Radio, Entercom’s David Field and Ed Christian from Saga Communications. (Might we suggest that NAB include someone with less than $50M in annual billings next year, just to add a little bit of a different perspective?)

Meet the Commissioners

Taking time out from her campaign to become Governor of New Mexico, which apparently began the day she was named to the FCC, Commissioner Gloria Tristani is making her first visit to an NAB Radio Show. Broadcasters shouldn’t expect to make much headway in altering her views, but it will at least be nice to be able to give her a little reminder that broadcasters are people, not evil, faceless corporations, as she seems to believe.

Joining Tristani at the head table for Friday’s CEA Financial Breakfast will be her political opposite on the FCC, Commissioner Harold Furchtgott-Roth. The NAB won’t even need Jerry Springer to make this a verbal death match that should be long remembered!

Tame by comparison, but at least there’ll be bagels and doughnuts, will be Thursday’s Chairman’s Breakfast, featuring FCC Chairman Bill Kennard. Fresh from pushing through a compromise on the long-delayed review of TV ownership rules (see pg. 6), Kennard is likely to get a much warmer welcome from broadcasters than in his previous appearances.

Something for everyone

At first we thought Blood, Sweat and Tears referred to a session on how to be a superduopoly GM, but it turns out that the actual band, which was enormously popular in our misspent youth, is playing at the party following Tuesday’s opening reception on the exhibit hall floor. The hall will also be open Wednesday 9-5 and Thursday 9-3.

This year’s conference sessions, with parallel tracks for management, programming, sales/marketing, engineering and small market, wrap up on Friday morning, so there’ll still be plenty of time to take in Disney World, Epcot, Universal Studios or a round of golf.

SEE AND HEAR THE LATEST ON IBOC

DAB Update panel: “How Close is the Future of Radio?”

Don’t miss the latest IBOC developments and field testing details, as provided by a panel of representatives including Keith Larson, FCC Assistant Chief, Engineering, Mass Media Bureau; Digital Radio Express’ VP Engineering Derek Kumar and Board Member Dwight Taylor; Lucent Digital Radio VP Business Development Nick Karter and USADR VP Engineering Glynn Walden. "How Close is the Future of Radio," part of the Digital Facilities Workshop, will be held Wed., Sept. 1 3:45-5PM in Room 311-E/F.

USADR shows off IBOC system; Continental, Energy Onix on board

USA Digital Radio will be showing live demos of its hybrid FM IBOC system at the booth. A press conference will be held at 3:30 on the 31st by CEO Bob Struble who will voice several announcements of marketing and technology alliances (six total) as well as happenings at the show. Press briefing room, Room 206-C. Two of the announcements: As previously reported (RBR 4/19, p.6, 5/10, p. 3, 5/17, p.7), transmitter manufacturers Energy Onix and Continental Electronics have joined Nautel, QEI and Broadcast Electronics as alliance members.

Struble will be joined by Director of DAB Development Rick Martinson, VP Engineering Glynn Walden, VP Operations and Business Development Jeff Jury and Director of Marketing and PR Dave Salemi.

Booth #729

Lucent demos IBOC system, PAC

Lucent Digital Radio will demonstrate an end-to-end prototype of its FM IBOC Digital Audio Broadcasting (DAB) system, leveraging equipment from recent technology alliances made with equipment manufacturers. Lucent will also be demonstrating its Perceptual Audio Coder (PAC) with Cutting Edge/Telos and detailing the results of recent field tests with WBJB-FM (RBR 7/19, p.8).

Booth #751
NEW PRODUCTS

New connectors featured from Neutrik

Neutrik USA will display its fourth generation of bantam plugs (NP3TT-P), designed to be fully compatible with all industry-standard TT audio patch cables. The NP3TT-P is manufactured in two pieces, rather than the usual three, and now needs only a standard crimp tool.

Neutrik's new 2-pole "Speakon® NL2FC and NL2MP connectors build upon the 4-pole industry standard. Less parts allow a competitive price with standard 1/4" phone connectors.

Booth #223

OnRadio hosts presentation & party, co-hosts "The IP Connection"

On Tuesday, August 31st, Radio Web site content provider OnRadio will host a presentation at its Booth, #1023, which will include few special guests "sure to attract attention." Wednesday evening, Sept. 1, OnRadio will host a party NAB attendees at Universal Studios Escape Citiwalk and Islands of Adventure theme park. The party will be closed to the general public a few hours to accommodate.

Also on Wednesday at 2:15pm, OnRadio COO Steve Carley will speak on a panel called "The IP Connection." Steve will be joined by Tom Hopfensperger, Director of New Media for KGO AM San Francisco, an OnRadio affiliate. Bill Pearson, CEO, Motorola's RadioWave.com will also host a presentation in this opportunity to learn how the Internet is impacting radio broadcasting and how to use it to your advantage. Also part of the Digital Facilities Workshop, "The IP Connection" will be held from 2:30-3:30 in Room 311 E/E.

Comrex offering Envoy, Euro Nexus ISDN Codecs

New to the Comrex codec lineup, The "Envoy" provides everything needed to send audio program over ISDN. This small unit delivers 7.5 kHz/15 kHz mono audio for full duplex ISDN broadcasting. Seamless two-way communication is achieved with only a six millisecond delay. Mixing capabilities include three mic level inputs with the third switchable to line level, plus a fourth input for the main program or cueing. Envoy has three headphone outputs and a fourth for PA feeds or recorders.

Geared for interactive remotes, talk shows and live concerts, the Nexus ISDN codec now has a European counterpart with the same features. 15kHz audio is offered at 128 kbps for full fidelity or 7.5 kHz audio at 64 kbps for voice applications and full compatibility with other codecs. It has a S/T European interface instead of the U interface for North America.

Booth 919

Logitek shows improved Numix Console

Logitek will show its updated Numix modular broadcast console control surface. The Numix has been redesigned for greater space efficiency and expanded functionality for use with hard disk audio storage systems. LCD displays on each fader allows output of information from digital storage systems. Its modular design is modified for greater flexibility and space efficiency—the individual modules are wedge-shaped so the console swings around the user for more of an ergonomic design.

The functions of the meter wedge have been moved to the selector wedge, the fader wedge has been updated to include six faders instead of four, allowing larger fader counts without increasing space. Motorized faders are an option which allows software to physically change mix levels.

Are YOU Tuned in
To YOUR Audience?

Affordable Research & Surveys
Customized for Your Station.

Ad Sales • News • Programming • Promotion

"The Questions you should be asking...the Answers you need to know"

Visit us at RTNDA Booth 285

Call 1-800-RVS-6335
E-mail: info@audres.com Web: www.audres.com

Manager's Business Report • September 1999
The Numix console can be configured with six to 42 faders. The entire core of the system is digital—all analog inputs are digitized, all automatic conversions, all automatic rate adaptions on digital sources. Also for greater integration with hard disk audio storage systems, the alphanumeric display on the fader wedge has been changed to a 200 x 640 LCD panel.

Booth # 352

**Klotz to show Vadis digital audio platform, Spherion console**

Klotz Digital Audio will be showing off its unique Vadis 3d digital audio platform which allows multiple control rooms to share sources, DSP functions (EQ, voice processing, mix-minus) and logic control. Plugged into the Vadis 3d frame, multiple locations are able to share sources, area-wide logic control, signal routing, splitting and more. This is all possible through the fiber optic technology system “DIAN,” which eliminates most of the plant wiring. In addition to audio mixing surface manufacturers, Klotz is looking to systems integrators and multimedia controller manufacturers as potential Vadis platform partners.

A mid-priced digital console for multiple control room applications and independent stations looking to go digital, Klotz’s Spherion is built upon the router technology of Vadis 3d. Spherion is available in two sizes: 12-fader/min. 24 input and 20-fader/min. 40 input sources. DSP production features include EQ, limiters, compressors and gates. “Source to Fader” formats can be saved with routing assignments and be recalled, and any source connected to the console can appear on any fader.

Standard features also include programmable button banks, intercom talkback, mechanical/ballistic VU meters, gold contact connectors and stereo program and audition outputs in digital and analog.

**Booth #313**

**Prophet introduces NexGen Digital Broadcasting**

Taking the success of its AudioWizard on-air system to a higher level, Prophet Systems will feature “NexGen Digital Broadcasting,” which encompasses new programming in a more powerful language, Windows API, for Windows 98, 2000 and NT. NexGen provides more user choices, higher speed and up to 128 audio servers from one system with multiple file server redundancy. Real-time voice tracking is now possible across a network of stations, along with customized reporting and instant, seamless mode and shift changes. “The first key with NexGen is scalability—it can go from one workstation up to several hundred on one system. The second is fault tolerance and third was flexibility—what we’ve built is the ability to adapt and modify the system to meet customers’ particular needs,” said Lynn Moore, PSI Director, Product Development.

**Booth # 947**

**Netia shows “The Snippet”**

A new editing system from Netia, “The Snippet” was developed to save time in the production room. Users can run several sound files on the same track, and insert them in any location. Each file takes on a different color for easier ID. The Snippet also offers a new key, “cut non-selected,” to keep only what has been selected.

**Booth # 532**

**Dataworld shows NAB maps, new internet service**

Signal coverage mapping company Dataworld will be showing off its study for the NAB LPFM comment filing, which includes interference studies on differing receivers for 60 markets, using the FCC’s LP100 and LP1000 allotments.

Dataworld will be demonstrating its new “DataXpert®” service, providing Internet access to clients for ownership information, contour population data, map display, engineering data and more. Station data is retrieved by entering call letters. Dataworld will also show its “Dataflex” Program via the Internet, encompassing the “Within” and “Sitecheck” programs.

**Booth #1001**

RCS offers XML data formats

RCS has announced an open architecture initiative for some aspects of digital on-air and scheduling systems, using the XML data format (used extensively with Web site development), and Microsoft’s COM standard. New versions of RCS Selector®, Linker and Master Control NT may soon be more compatible with software from BE, CBSI, Computer Concepts, Dalet, Datacount, Enco, Marketron, Media Touch, Power Gold, Prophet, Register Data and Scott Studios.

“What we’re trying to spec out is how to pass events—a song, a commercial spot, a schedule—back and forth. We’ve talked to about 16 vendors and we have been developing an XML interface between our own products. Some people have talked about openness and what they’ve wanted to do was just write things to each other’s databases. That’s alright, but if you have 10 people who are writing to your database, you then become a captive to each of those vendors—you cannot move and improve or add things without getting consent,” said RCS President Andrew Economos. “What we’re proposing is by setting up a standard, when you come here and ask for a song, this is what you’re going to get. If all you want is the intro, beats per minute and title and artist, then here’s how you ask for it.”

RCS is currently working with Enco and Marketron to prove out the XML standard interface. RCS will also hold a press conference discussing XML and other new product announcements September 1, 10AM Room 206-C.

**Booth # 1146**
**THE EXLINE COMPANY**

MEDIA BROKERS CONSULTANTS

Visit us at NAB Radio Show

PEABODY HOTEL

ANDY McCLURE    DEAN LeGRAS

4340 Redwood Highway • Suite F-230 • San Rafael, CA 94903
Telephone • 415-479-3484 Fax • 415-479-1574

---

**dataworld**

- Market Analysis
- Custom Mapping
- Ethnic/Demographic Data
- Sales Marketing Packages
- Pinpoint Target Audience

www.dataworld.com
800-368-5754

---

**CartWorks**

Digital Audio Systems

- Live Assist
- Satellite Automation
- Music-on-Hard-Drive

Easy Operation Reliable Affordable

1-800-795-7234 www.cartworks.com

---

**EXCEPTIONAL GSM OPPORTUNITY**

Do you value a Radio Company that rewards your leadership? Cox, one of today's premier Radio Companies, offers on-air product that gets results for advertisers as well as appreciation for delivering bottom line. If you make a difference, and your team looks to you as a leader, you could have a future as GSM of Cox's FM-Rock Combo in Tulsa: Star 103/Rock 102, two highly-rated, well-positioned FM-rockers. If you want to work for a solid company with a future, you owe it to yourself to investigate this opportunity.

FAX a resume ASAP.

Tom Holiday, Station Mgr/DOS Cox Radio, Inc. - Tulsa
7136 South Yale, Tulsa, OK 74136 FAX 918-493-5390 EOE M/F

---

**Standard Jumbo**

**When Reliability Matters Most...**

**OWL ENGINEERING, INC**

- FCC Applications & Field Engineering
- Frequency Searches & Coordination
- AM-FM-CATV-ITFS-LPTV
- EMC Test Lab-FCC & European (IEC)

800-797-1338

8899 Hastings St NE, Minneapolis, MN 55449
info@owleng.com (612) 785-4115 fax:(612) 785-4631

---

**Your Professional ad could be here**

---

**Professional Cards**

Mullaney Engineering, Inc.
Consulting Telecommunications Engineers
9049 Shady Grove Court
Gaithersburg, MD 20877
phone/301-921-0115 fax/301-590-9757
Member AFCCE
muller@iad.com

---

Boyd Broadcast Technical Services
James Boyd / Erik Kuhlmann
21818 SW Columbia Circle
Tualatin, Oregon 97062
email: bbt@teleport.com
(503) 692-6074

AM/FM/NRSC Measurements...RF Measurements...FM/AM Field work...Due Diligence...Mock FCC Inspections...Got a tough problem, we'll help you solve it!

---

**COMMUNICATIONS TECHNOLOGIES, INC.**

Broadcast Engineering Consultants
Clarence M. Beverage
Laura M. Mizrahi
P.O Box 1130, Marlton, NJ 08053
(856) 985-0077 • fax: (856) 985-8124

---

In October we will bring you comprehensive NAB Radio Show Conference

In November "Return to the Net" Radio Internet Services
In this issue of MBR's Tech Talk, we provide an update and overview of mics for radio stations through some of the biggest names and distributors in the biz. The following stepped up to the mic to contribute to this educational buying tool:

- Jay Ubben, Director of Marketing, Broadcast Supply Warehouse
- Greg Beebe, Assistant Product Manager, Sennheiser
- Karl Winkler, Brand Manager, Neumann USA
- Charlie Winkler, Product Manager, Electro-Voice
- Ric Goldstein, Sales Representative, Bradley Broadcast
- Mark Bertrand, Sales and Marketing Manager, DPA
- Microphones/TGI North America
- Sandy Schroeder, Director, Presentation/Install Market, Shure

**What are the most important considerations in choosing a mic?**

**Ubben**: Really knowing your application and the type of sound you want to arrive at. Go for the type of sound, then durability and quality.

**Beebe**: Its application!

**K. Winkler**: 1. Sound. The character of the mic's response should suit the situation and the talent. 2. Long-term value. Will the mic hold up over the years, with daily use? 3. Cost. The best mic for the available budget should be carefully chosen. Remember, you can never "fix" something downstream that wasn't right from the beginning. And even in an audio chain, the mic is the beginning.

**C. Winkler**: Decide if the mic is to be used for live sound or broadcast. The two applications are very different.

**Goldstein**: What are you trying to accomplish (live sound, voice-overs, on-air announcing etc), budget considerations, personal preferences and in many cases, durability.

**Bertrand**: DPA microphones are a premium brand, in our minds, clarity is the most important issue. The microphone must be as clear as the camera lens on a camera, crystal clear in order to paint the most accurate and vivid translation of the vocal talent to the audience.

**Schroeder**: Usually budget and application needs are the most important considerations. For radio announcing or voice-over applications, choosing the right product could come first, and budget considerations secondary.

A good polar pattern is also important for the rejection of unwanted sound from the sides and rear of the mic. If the mic is to be used close to a computer monitor, care must be taken to make sure that the mic doesn't pick up audible interference effects from the monitor.

**What should a Talk station look for vs. a music-based station in a mic?**

**Ubben**: Talk stations with lots of different guests will want to make sure that they get a mic with a forgiving polar pattern, one that picks up consistently at any position and distance from the mic. Mics that have less proximity effect (that big bassy sound when you get right next to the mic) are best for guests. Music stations need to go for the sound they are looking for, and purchase mics to get the most consistent results with their particular staff. This is more of a subjective decision and is based on the type of sound you are after.

**Beebe**: Natural reproduction of the spoken word with minimal, if any, coloration.

**K. Winkler**: Since talk stations rely only on voice talent to keep listeners, more resources in terms of money are allocated. In music stations, less emphasis is on the voice talent, so the budget may not allow for a "top of the line" mic. Really, the talent should choose a mic to suit his or her voice, regardless of whether the station is talk or music. When the announcer talks, the transmission should carry all the clarity, nuance and character of the voice. This holds true even between classical, jazz, oldies or pop music stations—you should have maximum intelligibility for the person speaking.

**C. Winkler**: The RE20 is often preferred for straight Talk stations, and the RE27N/D is often selected because it offers a more tailored response. I refer to the RE20 as (AM) and the RE27 as (FM).

**Goldstein**: Talk stations will generally look for a more natural sounding mic rather than a mic with a big bottom end which DJs will probably prefer to make them sound sexier.

**Bertrand**: In keeping with clarity first, superior vocal intelligibility will grab the attention of the audience immediately. DPA microphones have very low distortion, combined with excellent intelligibility, the long term effect is very low listener fatigue. For the talk radio station this is critical as the longer people listen, the greater the ratings.

**Schroeder**: Dynamic (moving coil) mics seem to be the most popular for AM radio talk shows and radio DJs. There are several popular mics in this category; the most successful of which are the Shure SM7A, the Electro-Voice RE20, and the Sennheiser 421. These products (with the right pop protection—free from explosive breath sounds (B's, P's, and T's) at close range can be used at points of blank range, a technique preferred by many users.

For music stations, or more significantly FM vs. AM stations, announce/talk mics trend more toward condenser mics, which can sound more "hi-fi" without the talker being right "on" the mic. If a condenser is used, it could be anything from a flat-response "probe"-type (Shure SM81) to a side-address studio vocal mic (Shure KSM32, AKG 414). Condenser mics do require phantom power (a powering requirement for electret and condenser mics, usually with batteries) to operate, which is not available on all consoles. Condensers are also more pop sensitive and must be used with adequate windscreen protection or with the user at a small distance from the mic.

**How has mic technology progressed over the years?**

**Ubben**: Not very much. Most of the changes to mics have been in the area of better electronics for condensers, and new tweak manufacturing techniques.
Lindy Williams  
V.P. Engineering  
Lotus Communications  
Los Angeles, California  
“We’ve replaced some ‘very expensive’ condenser microphones with the RE27N/D ...now the GM wants the guest mic replaced, as well as the production studio and the newsroom microphones. You’re blowing my engineering budget!”

Steve Lariviere  
Chief Engineer  
WSNE  
East Providence, Rhode Island  
“We replaced six expensive German condenser microphones in favor of the RE27N/D. What a great sound!”

Mary Collins  
Chief Engineer  
KFI-KOST-KACE  
Los Angeles, California  
“The RE27N/D has the fullness of a ribbon with the punch of a shotgun condenser microphone. The pattern is very good, giving good backside rejection of noise. Congratulations on building such a fine microphone.”

RE27N/D  
Studio Dynamic Microphone  
The new broadcast standard.

Electro-Voice  
Electro-Voice, Inc.  
600 Cecil Street - Buchanan, MI 49107  
616/695-6831 - 800/234-6831  
616/695-1304 Fax

See your local EV dealer, for a test drive.
Tech Talk™

Beebe: Quieter mics with flatter frequency responses that are not priced out of the market.

K. Winkler: Since the 1930s, mic technology has been mostly refined. Originally, condenser mics were made with PVC diaphragms, had tube amplifier circuits, and transformer output circuits. In the 1950s, PVC was replaced with polyester, which is much more stable. In the 1960s, tubes gave way to transistors. In the 1970s, polyester was introduced. In the 1980s, tube amplifier circuits, and transformer output circuits. In the 1990s, tubes gave way to transistors. In the 2000s, polyester was introduced.

The basic designs from decades ago are still being used today.

C. Winkler: Condenser technology has improved through the years and the use of Neodymium has given dynamic mics more output which helps with signal to noise.

Goldstein: There have been a few major breakthroughs in mic technology over the years. Some of these are quieter circuitry for digital recording, neodymium elements for lighter weight and higher output, advances in miniaturization and of course, wireless. In spite of all the advances, many engineers still prize their old vintage models and many new models are retrofitting and trying to emulate the sound of 40 year old models. Go figure.

Bertrand: DPAs (formerly Bruel & Kjaer) miniature microphones have reestablished the benchmark at a lower price point by providing an excellent, full bandwidth, low self noise solution.

Schroeder: Mic technology has become greatly refined over the years, although the main operating principles (dynamic and condenser designs) have been around since the 1930s. Reductions in price for equivalent-performing products, particularly condensers, have been dramatic over the past decade. Condenser vocal mic performance that cost $1500-2000 ten years ago is now available for under $500, largely driven by the explosion in the home recording studio market. As a result, many radio and production users have benefitted greatly.

Does your company lay claim to any unique features or technologies?

Beebe: The MD421 II has a built in five position bass roll off, and optional customized shock mount.

K. Winkler: In our 70 year history, Neumann introduced quite a few “firsts”: the first commercially available condenser mic, the first multi-pattern mic (U 47), the first phantom powered mic (KM 84), the first transformerless mic (TLM 170), the first transformerless tube mic (M 149 Tube), and the first mic with a self-noise figure below 10 dB-A (TLM 103). Today, our two tube models, the M 149 Tube and the M 147 Tube are the only tube mics with a transformerless output. This allows for an extremely detailed, noiseless output signal with a high output level.

C. Winkler: We invented Variable D which is one of the main features of the RE20, RE27N/D and RE16 which reduces proximity effect when working close, a must for broadcasters. Also, we were the first company to use neodymium in the magnetic system of dynamic microphones.

Bertrand: The most unique feature would have to be longevity. These microphones are manufactured to remain in spec for 15 years and 15 years. In fact we have tested microphones that have been 14 years in the field and are still performing to the original manufactured specifications.

Schroeder: In addition to its respected sound quality, unique features of the SM7A include built-in frequency-response shaping switches, excellent shock and multi-stage pop protection, swivelling yoke mount, and immunity from CRT (monitor) interference.

Briefly name some of the studio/production mics you offer

Ubben: We offer just about any mic you would want from studio mic, to handhelds, wireless systems and a huge variety of special application mics.

Beebe: Sennheiser's MD421-II is a staple to the radio industry. Now with its customized shock mount, it becomes an even greater asset to the station.

K. Winkler: From the top of our line: the award-winning M 149 Tube is a multi-pattern large-diaphragm tube condenser mic with 9 polar patterns and a 7-position high-pass filter. Our mainstay mic, and the most popular mic in our line (it was introduced more than 30 years ago), is the U 87 Ai. It offers three polar patterns, a 10 dB pad switch and a high-pass filter. Many VO artists love the TLM 170 R, which offers 5 polar patterns, a pad switch and a high pass filter. With its slightly smaller capsule, the TLM 170 R is suitable where the most neutral sound is desired, or if the talent wishes to tame excessive sibilance [overvocalizing ch, s, s, sh, zh] in their voice. Similar in sound, and using the same capsule, is the TLM 193, which is a single (cardioid) pattern version of the TLM 170 R. Our most popular mic ever is the TLM 103, introduced last fall. It has a sound very similar to the U 87 Ai, but by reducing features (it only has a cardioid polar pattern and no pad or rolloff), it is extremely cost-effective.

The latest model offered is the M 147 Tube mic, which is a cardioid-only model for the budget-minded studio or station where a tube mic is desired. The M 147 Tube has a taste of the “vintage” sound but is thoroughly modern in design and specifications. By keeping it simple, it is very affordable.

C. Winkler: RE20, RE27N/D, RE50, RE50B N/D, 635A, 635N/D.

Goldstein: Here is a smattering of my own picks for recent “VERY COOL” awards: Audio-Technica 4060 Tube—a beautiful looking and sounding top of the line large diaphragm mic package.; Neumann TLM193 & TLM103—allowing mere financial mortals to possess the Holy Grail of mics at a more down to earth price.; Shure SM7a, a popular and thoroughly professional “on air” mic/shockmount/windsheer package. Very high “bang-for-the-buck” factor.; Electro-Voice ENG618, ingenious collapsible integrated shotgun/boom-pole microphone w. built-in shockmount and headphone ampl.; Electro-Voice RE20, not new but still our best selling on-air studio voice mic.; AKG C4000B, new large diaphragm condenser with a rich low end and a smooth price. Good on-air choice for something different.

Bertrand: We offer a great many microphones suitable for this type of application but the two that come to the top of the list are the DPA 4035 headset microphone that can be placed conveniently on the headphones. This results in talent that sounds great and are able to work comfortably for long periods of time. The DPA4006 is also a great workhorse for every application.

Schroeder: Shure's main products for radio/production announce applications include the SM7A dynamic, SM81 and KSM32 condenser designs. For someone on an extremely tight budget, a Shure SM57 dynamic with its accessory A2WS Locking Windsheer and A55M shock mount offers surprisingly good results.
Newt’s Age of Possibilities

by Carl Marcucci

The Gentleman from Georgia is back. With an emphasis on the positive, Former Speaker of the House Newt Gingrich is hitting the airwaves to deliver a daily message for America. Since resigning a speakership often credited with the first GOP congressional majority in 40 years, he’s been busy—especially when it comes to breakthroughs in health and technology. Debuted 8/9, 90-second “The Age of Possibilities” is just that, informing listeners of the critical issues—past and present—that can and are determining our future.

Politician, teacher, consultant, fellow and student, author (Contract with America, To Renew America) and now radio commentator, Newt gives MBR a glimpse of his new show and some unabashed insights on America.

What purpose does your daily commentary on Premiere Radio Networks hope to serve?

I want to communicate ideas, stories about how America can be a better place, about things that are succeeding, about new ideas, new breakthroughs and about people who are personal heroes. People who have done something positive to make this a better country. I think we have too much negativity and this is a great country with a lot of interesting, very good things happening from Silicon Valley right to your neighborhood.

So this is a positive commentary.

What else have you been doing since resigning the Speakership?

I have a firm called Gingrich Group, which has a consulting relationship with Price, Waterhouse, Coopers, and works on ideas. Again, particularly strategic planning on health and health care.

I refuse to do any lobbying of any kind. I don’t think that is appropriate for the Speaker of the House. I do try to help people think through public policy issues and how to solve problems of the country. I spend an awful amount of my time trying to be a student, visiting laboratories, going and listening to people and just trying to learn.
TURN YOUR ON-AIR AUDIENCES INTO ON-LINE PROFITS

WITH InXsys No COST, No RISK WEBSITE TRAFFIC & REVENUE SOLUTIONS

InXsys multimedia on-line classifieds, auctions, personals & shopping will drive new & repeat traffic to your website 24/7, producing substantial new non-traditional revenue from both audiences & advertisers. Be a major portal in your market and cash in on the Internet, with InXsys no-cost content.

Visit www.buysellbid.com or call 800-320-7870

VISIT US AT THE NAB RADIO SHOW BOOTH 1037

www.buysellbid.com

www.datechannel.com

www.ecommamerica.com
What will be the show’s top issues?

First, I’d start with health—health and health care. I want to do an awful lot on health. What are we learning, where are the breakthroughs? What are the new cures? What is it you should be doing for your own health? Second is going to be the Internet and the whole explosion of communications opportunities—new web sites, new breakthroughs and new technologies. Third, I want to talk about the opportunities and challenges as Americans live longer, including “Social Security Plus,” an idea that the younger generation deserves a chance to have the kind of social security system that will give them a safe and sound retirement, while also protecting their parents and grandparents. That is a theme that I will come back to a lot.

Finally, I want to talk about the national defense and the genuine threats there are to the US—I’m serving on the National Strategic Study Group. I think that the dangers, for example, from biological and chemical warfare, the dangers from terrorists and the fact that we have no missile defense, so the Chinese, the Iranians, the North Koreans, or the Russians, could pose a direct threat here at home in the US. I think it is very important in a calm, straightforward factual way to point out the truth about American vulnerability, and that will be a component of the show on a regular basis.

What are your favorite Talk personalities or TV commentators?

I would say Sean Hannity, Rush Limbaugh and Tony Snow would certainly be on my short list of people that I really find intelligent and thoughtful. Brit Hume, frankly I think does a good job for Fox News Channel. Those are the kinds of guys that I would look at when I want to know or get a better sense of what’s going on and how people think about it.

I should mention that the other guy I listen too many, many years is Neil Boortz down on WSB-AM Atlanta. He’s a fabulous guy, a great talk show host.

What about future political aspirations?

I think my job is to be a visionary, a teacher and a strategic planner. That’s the role I want to carve out for the next years. That’s how we did the contract with America. I decided to go back to developing new ideas and new solutions. I think that is the contribution that I could make. If we get a Republican president, which I certainly thought it was necessary to abolish slavery. They couldn’t find a way to do it in their political context. I think that they would say they were astonished at how big the country has become. They are impressed by what science has created, although many of them were scientists. Jefferson, Washington and Franklin, for example, all were into scientific research in different ways.

I think that if they were to lecture us, they would tell us two things more than anything else. First, you cannot retain a Republic without some basic culture of integrity and patriotism and responsibility. Second, I think that they would say that it is wonderful that we now lead the world, but we must be very careful not to let the world drown us and/or power corrupt us. They would say that Republican virtues were real and the collapse of Republic virtues ultimately killed the Roman Republic. And they would warn us that the greatness that 200 years has brought is very transitory unless we follow the basic rules of history and sort of humble ourselves to the obligation to preserve freedom, rather than to simply to pursue our own selfishness.

As a former history professor, what would you think the founders would say about America in 1999? What mistakes would they think that they made?

I don’t think that they would think they made any mistakes. I think that they would say that of the things they couldn’t get done, they would say they were glad we abolished slavery. I think that almost all of them
by Dave Seyler

Denver omelet? AMFM scrambles Mile High staff: With the metamorphosis of Classical KVOD-FM into Jammin' Oldies KDJJ-FM, longtime KVOD GM Pam Kenney has exited. Market manager Bob Visotcky will hold the GM reins for KDJJ, KALC-FM and KXPK-FM. Dave Burke adds VP/GM duty for KVOD-AM, along with KXKL-FM and KIMN-FM. Several GSMs were named: Dan Wiley for KXKL/KVOD, Amy Gresheimer for KXPK, Gerry Jones for KALC and Joby Koren for KIMN. Promoting the entire group will be Dennis Douglass as business development manager for Chancellor Marketing Group.

Grand Kenyon? Clear Channel obviously thinks so, as it names engineering veteran Al Kenyon VP, technology for the entire group. He came over from Jacor and will continue to work directly with Randy Michaels.

Louisville Bill of flair? We'll see if Bill Gentry has a flair for station management in the superduopoly era as he takes over Clear Channel's eight station cluster with the title of VP/market manager. He comes over from the former Jacor cluster which Clear Channel bought and spun-off when the two companies merged.

VOO-do: Journal's Tulsa duopoly has upped news director Brian Gann to director of news operations for its one-AM, two-FM duopoly and PD at KVOO-AM.

Infinity Promotions Group had created the position of Managing Director, New York for Jay Key. He will be responsible for marketing the combined audience of Infinity's New York radio stations, as well as promotional events and website opportunities.

Parsley, sage, Rosemary sells time: Jefferson Pilot's WLYF/WMXJ Miami FM duopoly will have a new national sales manager. Rosemary Zimmerman exits CBS Radio Reps to take the position.

The Butler did it: That would be Allyson Butler, who took to position of director of marketing for Jammin' Oldies WJMO-FM/Washington (the old WGAY-FM).

Susquehanna restructures
Susquehanna Radio has given several of its top executives new responsibilities: Long-time Dallas manager Dan Halyburton is now Sr. VP/General Manager for Group Operations, giving him responsibility for "group operating resources" in programming, research and interactive marketing for all eight markets.

KRBE-FM Houston GM Nancy Vaeth-Dubroff is now Sr. VP/Regional Manager for Houston and Dallas.

Exec. VP Larry Grogan is heading development of a new company-wide sales training programming and will relinquish station management oversight except in the San Francisco market.

Sr. VP/Regional Manager Mark Renier has added Cincinnati and Indianapolis to his portfolio of Atlanta and Anniston, AL.

Zellers to run sellers: Chancellor Marketing Group has named food marketing veteran Betty Jane Zellers to the position of business development manager. She will be working out of the Philadelphia office.

Columbia, SC Country stalwart WCOS-FM has a new PD. Lance Tidwell took over the programming chair 8/23, exiting KTOM-FM Monterey, CA.

Rochester remains in San Diego? That's right folks—Kris Rochester and her partner, Tony Randall, have signed on for three more years as the morning team at KSON-FM along the Southern California shore.
### September

- **Sept. 8-10** Women in Cable and Telecommunications Executive Development Seminar. Hilton Hotel, Loveland, Colo. Contact: Pamela Williams (312) 634-2330
- **Sept. 9-12** Michigan Association of Broadcasters annual conference. The Grand Hotel, Mackinac Island, Mich. (517) 484-7444
- **Sept. 10-12** Women in Radio and Television 48th Annual Convention, Washington, DC (703) 506-3290
- **Sept. 15-17** National Association of Black Owned Broadcasters (NABOB) will hold their 23rd Annual Fall Broadcast Management Conference - Washington D.C. 202-463-8970
- **Sept. 16** Southern California Broadcasters Association - RADIOFEST '99, Burbank, CA (323) 938-3100
- **Sept. 16-18** Tennessee Association of Broadcasters 52nd Annual Convention. Holiday Inn Choo-Choo, Chattanooga, Tenn. Contact: Jill Green (615) 399-3791
- **Sept. 24** Alaska Broadcasters Convention, Fairbanks, AK (907) 258-2424
- **Sept. 24-27** Audio Engineering Society Convention 107th Annual Convention. Jacob Javits Convention Center, New York. Contact: Howard Sherman (212) 777-4711

### October

- **Oct. 3-5** National Religious Broadcasters Western Regional Convention. Antlers Adam's Mark Hotel, Colorado Springs, Colo. Contact: Gary Curtis (818) 779-8400
- **Oct. 5-7** NAB Education Foundation Journalism Seminar, Atlanta (202) 775-3527
- **Oct. 12-13** Ohio Broadcasters Convention, Columbus, OH (614) 228-4052
- **Oct. 14-16** National Religious Broadcasters Midwestern Regional Conference. Lied Conference Center, Nebraska City, Neb. Contact: Martin Jones (402) 464-6440
- **Oct. 14-15** New Hampshire Broadcasters Convention, Bedford, NH (603) 472-9800
- **Oct. 18** Broadcasters Foundation Fall Classic Golf Tournament. Manhannan Woods Golf Club, West Nyack, NY Contact: Gordon Hastings (203) 862-8577
- **Oct. 19-21** Society of Broadcast Engineers National Meeting, Madison, WI (317) 253-1640
- **Oct. 21** Bayliss Foundation Media Roast - (Eddie Fritts) New York, NY 831-624-1536
- **Oct. 21** Connecticut Broadcasters Convention, Farmington, DE 860-633-5031

*Proceeds benefit the Bayliss Foundation Radio Scholarship Fund.*
At Prophet, we don’t believe that a pager in someone’s back pocket is your idea of support—it certainly isn’t ours! So we expanded to 24x7, a 24-hour manned customer support center. What does 24x7 mean for you? It means a live voice—first time, every time—when you need us most. It shows you our commitment to quality in the service and products we offer. Twenty-four seven, just one more way that Prophet is dedicated to continually improving everything we do.

24-hour MANNED tech support. It’s what sets Prophet Systems apart.

Our users speak—

-----Original Message-----
From: Stuart Engelke engineering@nycradio.com
To: WIZARD-L@LISTSERV.BOISESTATE.EDU
WIZARD-L@LISTSERV.BOISESTATE.EDU
Date: Friday, April 30, 1999
Subject: Re: I need 5 reasons I should buy Prophet

Tech support, I talk to real people.
Tech support, I get answers and solutions.
Tech Support, I get upgrades the same day if that's what it takes.
Tech Support, I get what I ask for added into the software when the request is reasonable.
It's a great capable product.

That help?
Stuart Engelke
Chief Engineer
WMCA/WWDJ Radio

-----Original Message-----
From: Peter Fiveland comments@nycradio.com
To: WIZARD-L@LISTSERV.BOISESTATE.EDU
WIZARD-L@LISTSERV.BOISESTATE.EDU
Date: Friday, April 30, 1999
Subject: I need 5 reasons I should buy Prophet

Just as the three things to look for in real estate are location, location, and location, the top five reasons to get a Prophet System's unit are:
#1: Prophet Systems' tech. support
#2: Prophet Systems' tech. support
#3: Prophet Systems' tech. support
#4: Prophet Systems' tech. support
#5: Prophet Systems' tech. support

Peter Fiveland
Operations Manager
WMCA/WWDJ Radio

Do you have a question or a comment? Subscribe to the Wizard ListServ. Simply send an email to ListServ@ListServ.idbsu.edu. The body of the email need only contain the following command: Subscribe Wizard-L
Seen what's new @ WebRadio.com?

WEB RADIO.COM

Unlimited Bandwidth • Unlimited Streams
reach more listeners. increase market share. generate revenue.

www.WebRadio.com

contact: Affiliate Relations • 888.643.6783, ext. 302 • sales@webradio.com