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Rupert Murdoch: Digital's Reluctant Bridegroom



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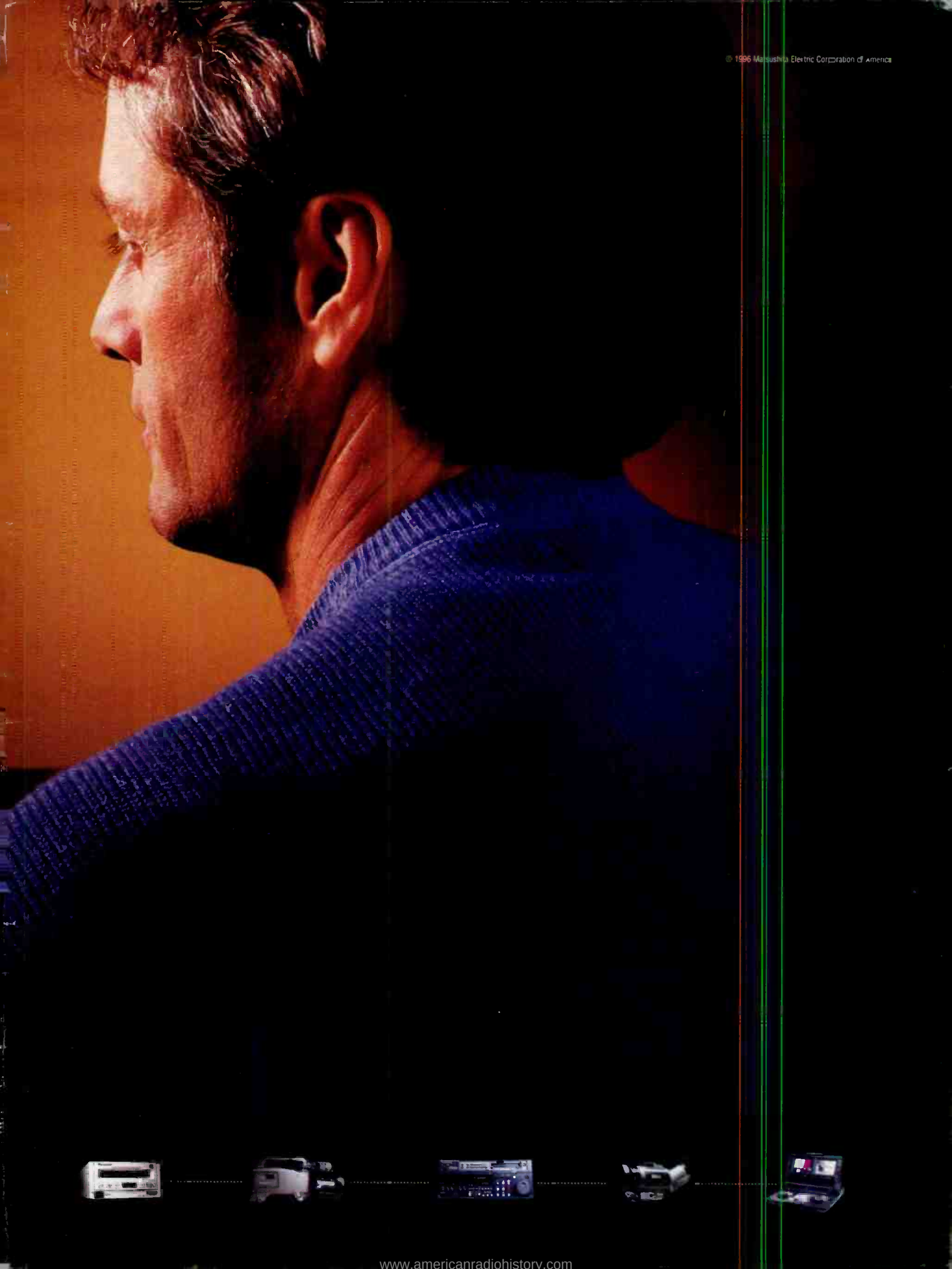
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DVCPRO



Gore calls for kids quotas

Suggests stations file electronic copy of public files for posting on FCC Web site

By Harry A. Jessell

To the dismay of broadcasters, Vice President Al Gore in an NAB/TVB speech yesterday (April 16) renewed the administration's support for an FCC rule requiring broadcasters to air three hours each week of children's educational programming.

"Three hours a week in my opinion is really not too much to ask," Gore said. Just as in parenting, "quality time" is not enough, he said. Quantity also matters.

For the sake of parents, Gore also suggested that station identify educational shows in their program listings. "And how about airing children's programming when children are actually watching," he said. TV stations schedule educational programs at 6 a.m. on Saturday morning and complain that nobody watches, he said.

FCC Chairman Reed Hundt has been pushing for such a kids TV quota, but has been frustrated by opposition from two other commissioners cheered on by the broadcast industry. Gore and Hundt are longtime friends and political allies.

NAB officials at the Tuesday morning speech were unpersuaded by the Vice President's endorsement. "It's as unacceptable now as it was 10 years ago," said Jeff Baumann, NAB executive vice president and general counsel.

But those same officials were encouraged by Gore's comments on digital TV. Gore said he favors giving TV stations second channels and permitting them to simulcast digital and conventional analog channels for a number of years to insure a smooth transition.

Such a plan is the best way to insure the health of free over-the-air television in the digital future and to make sure taxpayer's are compensated for the private use of public resources, the Vice President said.

"He said all the right things in terms of spectrum," said Jim May, NAB's chief lobbyist. But what he did not say—how many years stations would



Vice President Gore asks for three hours of kids TV.

be able to simulcast before giving up their channel—is still cause for concern, he said.

The administration has been pushing for return of the channel by 2005. "That's wholly unrealistic," May said.

Broadcasters prefer a return date that is "marketplace oriented and consumer friendly"—say, 10 years after they begin digital broadcasting or after digital sets are purchased by a certain percentage of homes, he said. "That's something we could stand up and salute."

Gore also asked the broadcasters to back a new idea: "the Family Right-to-Know Initiative." Broadcasters would send electronic copies of their public programming files to the FCC for posting on its Internet Web site. "Parents would not have to trudge to [the station] to see how well you are doing."

The initiative would "sharpen the vision" of viewers without strengthening "the heavy-handed grip of the American government" on broadcasters, Gore said.

The proposal had some scratching their heads. "I'll have to ask my kids to tell me what that meant," says Tribune lobbyist Shaun Sheehan.

Ness gives boost to digital standard

Says lack of one will 'thwart' rapid, smooth transition

By Chris McConnell

FCC Commissioner Susan Ness this week offered reassuring words to advanced television proponents.

Addressing a membership meeting of the Association for Maximum Service Television (MSTV) held at the NAB convention, Ness said the burden of proof for showing why the FCC should not mandate the Grand Alliance digital transmission standard rests with those who oppose mandating the standard.

"Absent a mandated standard, investment and manufacturing decisions could be stalled, thwarting the ability to convert rapidly and smoothly to digital broadcasting," Ness said.



Ness's remarks drew applause from the broadcasters.

Her remarks drew applause from the association members and advanced TV proponents, many of whom have worried in past weeks about the FCC's plans for the Grand Alliance advanced TV technology.

Commission officials have been evaluating plans to ask a series of questions about the digital standard next month when they propose adopting the Grand Alliance system as the next U.S. broadcasting standard.

Planned questions include whether any aspects of the standard should be decided by the marketplace rather than the government; whether broadcasters should be required to use a digital transmission system adopted by the FCC, and whether adopting a standard

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would preclude the use of other, non-interfering broadcast technologies.

Ness opposed the idea of allowing multiple standards, citing the need for marketplace certainty. She also sounded

a cautionary note about the government's ability to reclaim the industry's analog channel once the transition to digital TV is complete: "Given the disheartening cooperation I have experi-

enced with broadcasters on the children's television docket, I wonder whether broadcasters will cooperate in returning the analog spectrum when the time comes." ■

FCC to study free time

By Chris McConnell

FCC Chairman Reed Hundt wants a hearing at an "early date" on whether television broadcasters should have to provide free time to the major presidential candidates. He also said the FCC may look into criticisms of Nielsen ratings research.

Responding to a letter received yesterday (April 16) from the Free TV for Straight Talk coalition urging the commission to hold the hearing, Hundt told an NAB audience that a hearing offered broadcasters an "unparalleled opportunity to justify the special place of free TV in our hearts and lives."

On the ratings issue, Hundt said:

"I'm aware that many broadcasters believe that Nielsen Media Research, the only company of its kind, undercounts younger viewers and is otherwise, in the words of NBC's chief audience researcher, 'measurably deficient in reliability, accuracy and utility.' If this is true, it harms free TV, harms competition and harms the public interest. I think the FCC should look into it."

Echoing Vice President Gore's speech earlier in the day (see page 4), Hundt restated his call for "a floor of three hours of truly educational TV."

On the issue of a digital TV standard, Hundt praised the advisory committee recommendation, but asked how the FCC can "balance" the goal of



FCC chairman also says commission should look into criticisms of Nielsen

setting a standard with that of encouraging further technical advances: "How can we avoid writing more than 200 pages of technical details into the code of federal regulations?" ■



Seizing the digital day

Despite his concerns about the high cost and uncertain return, News Corp. Chairman Rupert Murdoch says he has no choice but to embrace the conversion to digital. / **8** Westinghouse Chairman Michael Jordan says that unless broadcasters make the digital switch, they will be at a competitive disadvantage. / **10**

Avid makes new friends

Announces alliances with Hewlett-Packard and Panasonic. / **12**

DVCPRO on a roll

Panasonic's new digital tape format gets support from Ikegami and Avid. / **14**

Cover photos and digital photography by Craig Mathew/Mathew Photographic Services

April 17, 1996

Broadcasting
& Cable**Fast Track****SPECIAL MIDWEEK NAB CONVENTION ISSUE**

FCC Commissioner James Quello accepts NAB's Belva Brissett Award for his legacy of contributions to over-the-air broadcasting.

Sony on a roll

Cox spends \$13 million for a "total digital solution" at WSB-TV Atlanta. / **14**

Westinghouse amplifies TV presence

Through its CISCO subsidiary it wants to supply high-power amplifiers to transmitter makers. / **18**

The lowdown on high-definition

A conversation with Saul Shipiro, the FCC's answer man on digital TV. / **20**

Changing with the times

Six case studies examine what's involved when TV and radio stations rebuild their facilities. / **24**

The road well traveled

Charles Kuralt, NAB's Distinguished Service Award winner (page 44), looks back. / **34**

Vyvx buys**Global Access**

Fiber giant Vyvx Inc. is buying Global Access Telecommunications. / **46**

WELCOME HOME

BROADCASTING & CABLE'S Internet home page debuts tomorrow, April 18. Offering each week's Cover Story and many other features—some from the magazine and others exclusive to the home page—its address is <http://www.broadcastingcable.com>.

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Murdoch grudgingly embraces digital future

Renews offer of free air time for political candidates

By Steve McClellan

Despite what he calls the "terrifying cost" and uncertain return, Rupert Murdoch has cast his lot with the digital future.

The News Corp. chairman has lobbied aggressively for a flexible digital television regulatory policy that would allow broadcasters to decide how to use the spectrum—for high-definition quality video, multiple digitally compressed channels or some combination. But during his NAB convention keynote speech, Murdoch strongly downplayed the opportunities for compressed multiple channels.

He argued that broadcasters should not have to pay for digital spectrum—that given the economics of implementing the technology, versus the returns on that investment, "Congress should be looking for ways to help ease the financial burden of this transition," not adding to it.

The costs of making the transition to digital are "absolutely terrifying," said Murdoch—putting them at \$8 million-\$12 million for a local station going the full HDTV route. And for the Fox network? The cost, he said, would be

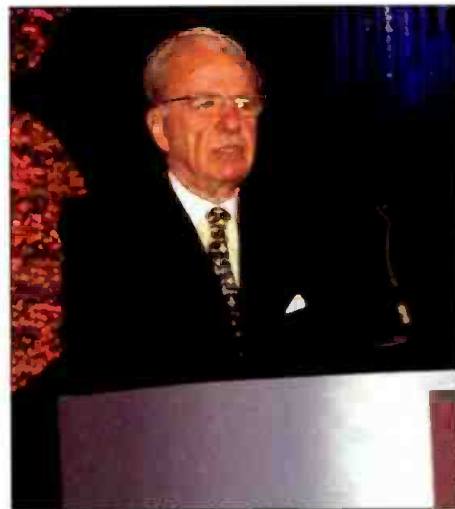
more than \$100 million, not including annual transponder costs of \$30 million or more.

"The revenue side of the new digital equation is even scarier," he said. In the past, "we at Fox have articulated dreams about deploying multiple channels of programing." But those opportunities appear limited at best, he said, based on a recent internal financial reevaluation of going digital.

"There is no evidence that sufficient advertising revenues exist to support these dreams. No one that I know has a proven business plan that will generate one extra dime to help pay for all the expense. HDTV in particular is an inherently defensive strategy designed to help free broadcasting hold on to existing viewers and advertising revenues."

Nevertheless, he said, Fox is firmly committed to going digital. "We really have no choice," said Murdoch. "As the stewards of the great heritage of free broadcasting, we must step up to the challenge of transitioning to digital. We must embrace technology."

Embracing technology is one of four commitments all broadcasters should make, said Murdoch. The other three:



Murdoch describes the costs of moving to digital TV as 'absolutely terrifying.'

programing innovation, serving audience needs and public service.

Throughout the industry, Murdoch said, "we're simply not doing an adequate job of achieving excellence and innovation in programing. Nobody is going to watch bowling on HDTV if they could be watching the Super Bowl, the Stanley Cup or the World Series even if those games are not on HDTV."

On the public service front, Murdoch acknowledged that despite his company's far-flung array of news services, what's missing is a TV news infrastructure in the U.S. "We are only now building it," he said. Dozens of Fox affiliates are adding news operations. As for a 24-hour news channel, Murdoch confirmed that one will be included in the company's DBS service when that launches next year. But it will also be a cable channel, he said.

Murdoch fired another shot at Ted Turner over the news-objectivity issue that the two have been quarreling about in recent months. "We'll provide objective news coverage," he said. Left unspoken was a remark in the released copy of his speech: "We may seek to develop another expert source of information regarding Cuba other than CNN's bureau chief and democracy consultant, Fidel Castro."

Murdoch also reiterated his offer of free political time to candidates, saying the U.S. was the only "civilized democracy" in the world where candidates were forced to buy time.

Fielding questions after his speech, Murdoch denied persistent rumors that News Corp. was talking to the New World Communications Group about upping its stake (now at 20%) in the company or acquiring it altogether. "There are no negotiations," he said. ■

Pressler favors second channel

Broadcasters received further encouragement that they will receive a second channel for digital TV from Senator Larry Pressler (R-S.D.).

The Senate Commerce Committee Chairman confirmed to an NAB audience that he favors giving stations extras channels for the transition to digital TV. But, he added, after a transition period, the government ought to take back one channel and auction it or collect royalties on it.

Talking with reporters afterward, he declined to say when the broadcasters should return the channels or under what circumstances they should pay royalties. Pressler told reporters that he doubted the administration would appoint a replacement for FCC Commissioner James Quello and a successor to Andrew Barrett during Congress's August recess. If it did, he warned, "there would be some budgetary problems that might pop up" at the FCC.

Barrett left the commissioner on March 31. Quello's term expires June 30, but he may (and he has indicated he will) serve until late 1997 or until a replacement is appointed.

Pressler also warned the FCC to use a light regulatory hand in implementing the Telecommunications Act. FCC Chairman Reed Hundt believes in "a higher level of government regulation" than Pressler, he said.—HAJ

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Jordan pushes for digital switch

Westinghouse chairman says inevitable move is better sooner than later

By Chris McConnell

Westinghouse Electric Corp. Chairman Michael Jordan wants broadcasters to get started on the conversion to digital technology.

Addressing a membership meeting of the Association for Maximum Service Television (MSTV) at the NAB convention, Jordan told broadcasters that if they do not make the switch, their current analog system will leave them at a competitive disadvantage to digital DBS and eventually digital cable services.

"You just don't give your competitor a sustained [product] advantage," said Jordan, who cited the picture quality of DIRECTV. "It is a better product," Jordan said. "I don't think we have any choice."

The product quality issue was one of three reasons Jordan cited for starting a transition to digital technology. The



Westinghouse Electric Chairman Michael Jordan shows off a prototype of solid-state transmitter Westinghouse developing for digital TV broadcasting. Transmitter employs high-power silicon carbide transistors manufactured by Westinghouse defense contractor (see story, page 18). KLAS-TV, CBS's Las Vegas affiliate, used a similar unit to broadcast an HDTV signal for reception and display on a theater-sized screen at its Convention Center exhibit.

other two were the decreasing costs of technology and prevailing policy winds in Washington.

"I think we've got some real momentum on the spectrum issue," Jordan said, voicing confidence the industry will not have to bid for the digital transition channel. But he also said the industry needs to keep putting

its best foot forward in Washington: "We need to continue to explain to people the benefits of free TV."

He also predicted that the costs of implementing the digital technology will decrease once the industry "coalesces around a standard."

Jordan also said broadcasters need to begin capital planning for the transition to advanced TV: "At CBS we're looking at that right now." While News Corp. Chairman Rupert Murdoch predicted the switch to full HDTV will cost his network at least \$100 million plus an additional \$30 million per year in transponder costs, Jordan said the costs will not be so high.

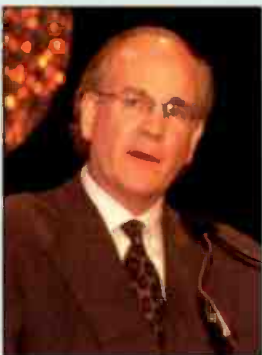
He added that broadcasters, unlike cable and DBS operators, need the FCC to act before they can deliver digital signals. "One thing that is very important is the adoption of a standard," Jordan said, adding that he hopes the FCC will move quickly.

And he also said that broadcasters should move quickly as well. The industry has a chance to make digital TV "happen" in the next four to five years, he said: "I think the door is open for us to make the move and step through it."

Broadcasters attending the meeting liked what Jordan had to say. "We have to be on the cutting edge," said Meredith President Philip Jones.

"He's clearly correct that the time is now," added Gregory Schmidt, LIN Television VP/GM. Schmidt said that he would like to know the difference between Jordan's estimates of the transition costs and those cited by Murdoch. Cosmos Broadcasting's James Keelor added that cost estimates eight years ago ran as high as \$35 million. ■

Wright urges digital nondiscrimination



NBC President Bob Wright urged Congress and the Clinton administration to develop and embrace a non-discriminatory policy for broadcasters entering the digital age.

"Some people feel broadcasters should be treated differently from other users of spectrum, either because we use spectrum or because we are upgrading our service from analog to digital," said Wright. "Truth is, all our pay competitors are going digital, all use spectrum and all got it at no cost from the government."

Broadcasters, said Wright, "are being singled out," by those in Washington who would require broadcasters to pay for digital spectrum.

Arguing that the Telecommunications Act has "greatly strengthened all of our pay competitors," Wright said it now was time for Washington policy makers to "create a regulatory framework under which free TV, too, can improve the quality of our products, bring new choices to viewers and increase competition in the video-to-the-home market."

Digital technology will enable broadcasters, as well as its competitors, to offer movie-quality video, CD-quality sound, "datacasting" and much more, says Wright. "When pay services sing this song, policy makers applaud," he says. "When broadcasters offer up these visions, policy makers should continue to applaud. Instead, we are met with proposals for new taxes."

Wright said policymakers "need to acknowledge—realistically—the public interest contributions that broadcasters make, and the significant benefits from encouraging, supporting and even requiring technologically advanced television."

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Avid makes new friends in Las Vegas

Forms alliances with Hewlett-Packard and Panasonic

By Glen Dickson

After a year of financial and operational growing pains, Avid Technology kicked off a crucial NAB '96 by announcing new strategic alliances with Hewlett-Packard and Panasonic.

The HP agreement calls for Avid to develop an open version of its Airplay software to control HP's broadcast video server (renamed for the convention as the MediaStream). The Airplay software will be able to control the serial digital transfer of promos and commercials from Avid's JPEG-compressed Media Composer nonlinear editor to the MPEG-2 compressed HP MediaStream server, allowing broadcasters to send edited spots directly to air without going to tape first.

The two companies will jointly sell and market the two products, with HP handling the server installations. "A lot of customers have asked us to split up the software and hardware for Airplay, so they could buy either the control software or the media engine [the disk drives that handle playback]," says Roland Boucher, Avid senior product marketing manager. One of the key facets of the deal is Airplay's adoption of the Louth automation protocol, he adds.

"Now the Louth system can control



Avid's Dan Keshian unveils agreements.

our media engine, and we can control other people's playback units through Louth," Boucher says. For now, those "other people" means HP, but Boucher says working with a system like the Tektronix Profile digital disk recorder is a future possibility.

The Avid/HP spot solution is due to ship late this year.

Avid's alliance with Panasonic gives the Japanese manufacturer's new DVCPRO acquisition format yet

another shot in the arm. Panasonic has agreed to support the Open Media Framework file format for storing DVCPRO digitized video on disk, and Avid has endorsed DVCPRO as a format for digital news gathering with existing Avid nonlinear editing and server systems.

According to Bob Sullivan, Avid vice president of business development, the agreement to join forces on DVCPRO "will in no way effect" Avid's commitment to its CamCutter digital disk camera nor Panasonic's commitment to its Postbox nonlinear editor.

Maybe so. But the DVCPRO alliance makes immediate business sense for both companies. Nonlinear editing capability and a server interface have been question marks for DVCPRO so far, as Panasonic's Postbox nonlinear editor isn't yet compatible with the format and a Panasonic server is only a rumor. On the other hand, most Avid DNG users are still using analog tape.

In another group announcement, Tektronix, Hewlett-Packard, Avid and Panasonic all have agreed to support the Fibre Channel networking standard. Fibre Channel offers a peak bandwidth of one gigabit per second, making it suitable for transporting large blocks of audio/video data. ■

Philips BTS introduces new film scanner

Hopes collaboration with Kodak will revolutionize post transfers

By Glen Dickson

The rebranded BTS made its first NAB appearance as Philips Broadcast Television Systems, reflecting Philips' desire to convert its power as a global electronics giant into a bigger share of the broadcast and cable equipment market.

Appropriately, Philips BTS's biggest product launch at NAB is the result of a strategic partnership with another consumer giant, Eastman Kodak. The new Spirit DataCine film scanner combines a 525-line/625-line telecine, an HDTV telecine and a film scanner capable of producing high-res-

olution digital files virtually in real time, says Mike D'Amore, Philips BTS vice president of marketing.

The system's film scanning capability could revolutionize the post production industry by dramatically improving the speed of graphics production for effects-heavy film and television shows, he says.

"It requires no further conversion for computer graphics and animation," D'Amore says. Effects specialists Tape House Editorial in New York is the first post house to buy the system.

According to D'Amore, the Spirit DataCine is capable of scanning film at 23 frames per second but is limited to

10 frames per second by today's computer interfaces. "But that's still significantly faster than the 7-30 seconds-per-frame transfer time for most digital film scanners," he says.

Philips BTS also debuted its VDR family of video disk recorders, which D'Amore sees as a substitute for VTRs.

The compact single channel VDR-110 unit, which offers memory expansions up to 56 GB and play time from 12 minutes to more than three hours at 4:1 compression, sells for roughly \$9,000. D'Amore sees the unit as a recording front-end to the BTS Media Pool server. ■

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DVCPRO tape format on a roll

Ikegami, Avid will support format; BTS sells 37 VTRs to Allbritton

By Harry A. Jessell

Panasonic's new digital DVCPRO tape format is apparently gaining marketplace momentum.

"It's been building very steadily," says Steve Bonica, president, Panasonic Broadcast & Television Systems. "What was a concept two years ago is now the talk of the town."

At a Sunday press conference at the NAB, Bonica and other Panasonic executives presented evidence of DVCPRO's growing acceptance:



Panasonic's Bonica announced support for its DVCPRO format

■ Ikegami, a major ENG camera manufacturer, and Avid Technology, a maker of non-linear editing systems, pledged to support the DVCPRO format. Last year, in a move seen by many as a direct challenge to DVCPRO,

Ikegami and Avid showed a prototype of a camcorder with a disk-based recorder, the Camcutter. Despite the support for DVCPRO, Avid still plans to introduce the Camcutter, probably this summer, says Greg Clukey, director of industrial marketing.

■ New York 1, Time Warner's regional cable news service, became the first news organization to embrace the quarter-inch format. Its purchase of 38 VTRs and 22 camcorders is valued at \$1 million. The format is "exactly what we were looking for," says New York 1's Harlan Neugeboren. It's easy to learn, easy to use and lighter than other formats, he says. "We took it out of the box, plugged it in and it worked."

■ Philips BTS announced the sale of 37 DVCPRO VTRs and 16 camcorders to Allbritton Communications of Washington. The DVCPRO units, along with a BTS Media Pool server, will be used in a new digital plant Allbritton plans to build in Birmingham, Ala.

To make the format more attractive, Panasonic also promised a laptop editor by the third quarter of this year and a high-speed (four times normal) DVCPRO player for transferring by the first quarter of 1997.

The laptop, which features two monitors, two VTRs and the ability to oper-

ate off a car battery, will sell for less than \$30,000. The high-speed player will permit users to dub a DVCPRO tape to a non-linear editing system or disk-based server in a quarter of time. "The target price is \$20,000, but we're a long way from completion," says Bonica. ■

Sony makes \$13 million digital deal with Cox

Will provide end-to-end solution at WSB-TV Atlanta

By Glen Dickson

A year after presenting its vision of the broadcast facility of the future, Sony opened NAB '96 by announcing its first "total digital solution" sale. In a deal valued at \$13 million, Cox Broadcasting has signed a letter of intent for Sony to design, supply and integrate a new digital facility for WSB-TV, the ABC affiliate in Atlanta. Construction on the facility will start this year with completion due in 1998.

"We feel we're making the best decision today on a system that will support us for the next 30 or 40 years," says Greg Stone, the station's GM, who estimates the facility will cost \$30 million. "We're picking a technical solution that works for us, along with a good business partner in Sony."

The Cox facility will use a full complement of Sony news production and broadcast operations software and hardware, anchored by a digital switching, routing and broadcast control system based on Sony's proprietary SDDI networking. WSB-TV plans to use a 128 x 128 digital router matrix and two DVS-7000 digital broadcast switchers, two DME-7000 digital multi-effects units and a DVS-M1000C digital master controller.

For news production, WSB-TV will use the Oracle Newsroom Manager newsroom automation system (available by fourth quarter this year) linked to an array of Sony DNE-1000 non-linear editors. The Oracle system, which

it developed along with Sony, will provide desktop editing at journalist workstations. A Sony on-air server will handle news playback under the control of Sony's News Integrated Broadcast Operations software.

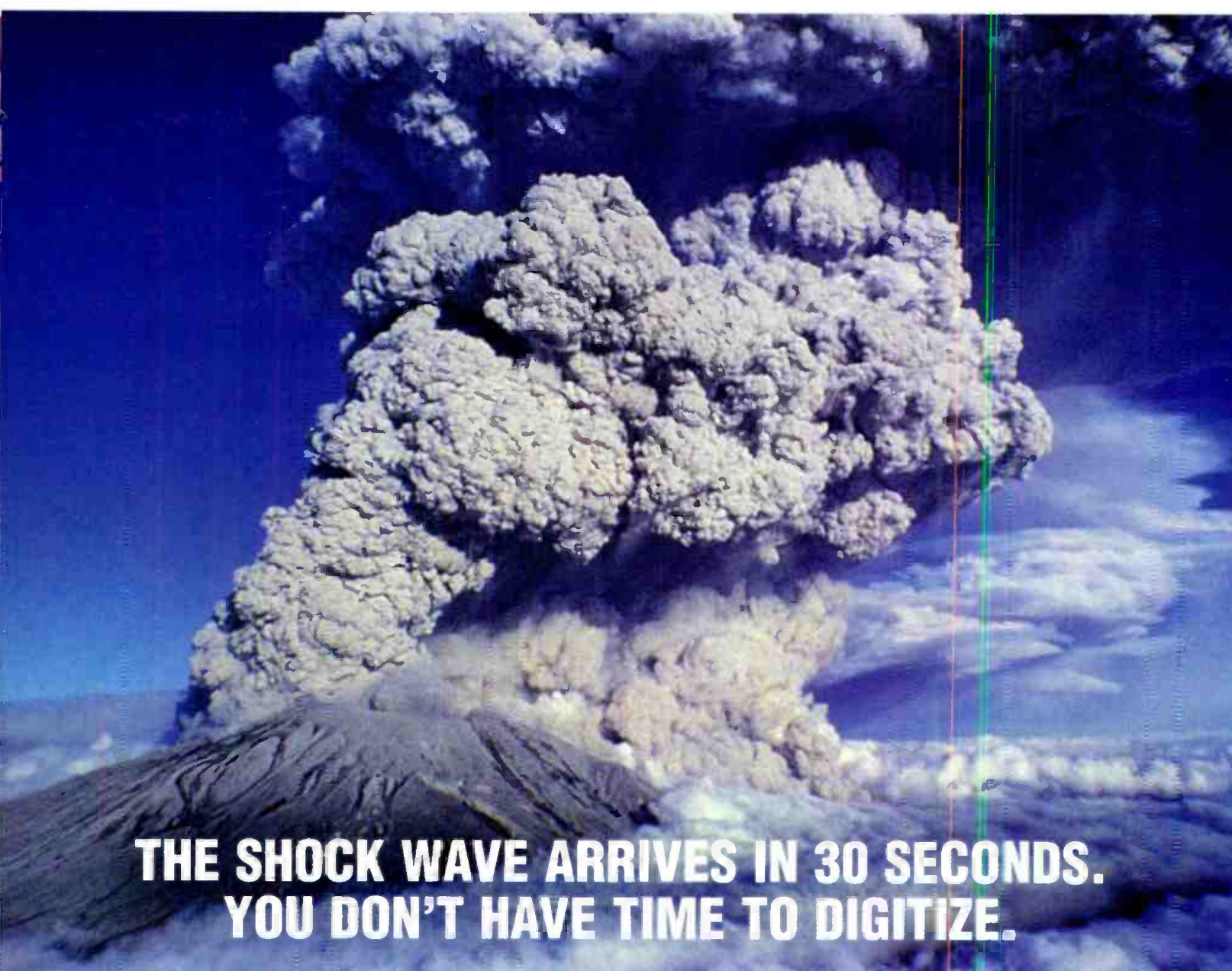
The station will have three full studios with more than 10 Sony BVP-500 digital cameras. According to Sony's Lawrence Kaplan, senior vice president of broadcast systems, WSB-TV will use the new Betacam SX format for field acquisition along with DNW-series hybrid recorders. The station probably will use Digital Betacam for commercial playback, he says.

Sony Broadcast President Charlie Steinberg says the Cox deal is significant not only as a big sale, but as a model for Sony's system philosophy. "It's not just the money," he says. "It's a symbol of where we're going."

In other Sony NAB news, Steinberg announced a partnership with AT&T in which the telco will provide fiber optic transmission of compressed video. The service, which will be commercially available by fourth quarter 1996, will allow the transfer of an MPEG-2 4:2:2 compressed video stream over a 45-megabit-per-second DS-3 pipeline at faster than real time. Sony also has formed a partnership with Microwave Radio Communications to provide the same capability via digital microwave transmission.

Kaplan says that Sony is developing a multiplexing interface box for the AT&T fiber service that will allow a news crew to feed the output of a Digi-

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tal SX camcorder directly into a fiber link and distribute the signal to multiple stations. At its inception, the AT&T service will be strictly point-to-point.

These new partnerships to develop

transmission technology complement Sony's new MPEG-2 digital satellite modulator, which allows for the transfer of one MPEG-2 stream at twice the speed of real time, or two streams in

real time.

"Now that you have digitized video, you also need to be able to get it back [to the station] quickly to make it truly efficient," says Steinberg. ■

RT-SET launches two tiers of virtual studios

MTV first U.S. customer of high-end Larus system

By Glen Dickson

Israeli virtual studio developer RT-SET introduced two levels of virtual studio systems at an NAB press conference and announced MTV Networks as its latest customer. RT-SET, 19% owned by Chyron Corp., is targeting its high-end Larus system at live-to-air applications while marketing the cheaper Otus configuration to post-production users.

"The revolution to digital brings integration along with it," says RT-SET chairman and chief technology officer Aviv Tzidon. "The things you used to see in post production, now you can do in real time in the virtual studio."

Other RT-SET customers are production house CKS Pictures of Cupertino, Calif., and SBS Broadcasting of Korea. SBS used the Larus system on-air in its coverage of the recent Korean elections.

The rendering and control software for the two systems is almost identical, says Paul Schmidman, RT-SET managing director for the Americas, and is priced at roughly \$300,000. The top-of-the-line Larus relies on the new Silicon Graphics Onyx InfiniteReality supercomputer for its processing power, driving the price of the system to around \$700,000. Otus, which is designed for live-to-tape use, works with the SGI Indigo² Impact. A complete Otus system can be purchased for under \$400,000, says Schmidman.

MTV Networks picked the Larus system after considering other virtual set manufacturers, says Yaron Sheinman, chairman of RT-SET parent BVR Technologies. RT-SET's ability to control up to six cameras from its integral video card was a big selling point, he adds. (Competitor Orad, which is being beta-tested by ABC News, requires a separate Onyx to control each camera.)

RT-SET also unveiled several software developments for its virtual studio system, including new depth-of-field capability, a focus adjustment that shows the appropriate distance between any real or virtual object; texture dissolve, which enables a texture to dissolve into another in real time at whatever rate is required (eliminating the "floating effect" that plagued early virtual sets); and dynamic light sourcing, which allows light sources to move in real time with objects.

The company also has introduced a

3-D prompter, a laser beam to guide the movements of live actors within the virtual set's blue-screen environment. This allows them to react appropriately to computer-generated objects, which are seen by the audience, but not by them—one of the big challenges of blue-screen work. ■



Since February, Chyron has purchased Pro-Bel and acquired a 19% stake in RT-SET. At the NAB press conference were (l-r): Roger Henderson, group managing director, Pro-Bel Ltd.; Isaac Hersly, president, Chyron Corp.; Michael Wellesley-Wesley, chairman, Chyron, and Aviv Tzidon, chairman, RT-SET.

Chyron closes Pro-Bel buy

Spends \$21.4 million on British router/distribution firm

By Harry A. Jessell

T rue to its strategy of growth through acquisition, Chyron Corp. announced Sunday at the NAB the April 12 closing of its \$21.4 million purchase of Pro-Bel Ltd., a UK-based supplier of routing and distribution systems.

Pro-Bel products "completely complement" Chyron graphics line, says Chyron Chairman Michael Wellesley-Wesley. With Chyron sales and support, he says, Pro-Bel should be able to increase its share of the U.S. market.

The closing follows by just two months Chyron's purchase of 19% of RT-SET Real Time Synthesized Entertainment Technology Ltd., a Tel Aviv-based developer of virtual studios (see story, above). Chyron paid around \$6 million in common stock for the stake in RT-SET and an option to increase it to 51%, Wellesley-Wesley said.

Neither Wellesley-Wesley nor Chy-

ron President Isaac Hersly would say what other companies Chyron has targeted. What Chyron is looking for are suppliers of "production tools of some sort...that can take advantage of sales support and marketing infrastructure," Hersly says. "Monitors, tape and cameras" are the only products Chyron is not interested in, he says.

The goal now is to absorb Pro-Bel, says Wellesley-Wesley, who adds that another acquisition is not likely until the end of the year.

Chyron, which saw its stock (NYSE:CSE) shoot up 450% last year, will consider buying only companies with strong brands, a reputation for quality and a record of profitability. "We don't want anything that would dilute our earnings per share," Wellesley-Wesley says.

For 1995, Chyron reported revenue of \$53.9 million, up 26% from 1994. Operating income (from continuing operations) rose 115% to \$9.1 million. ■

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Westinghouse "amplifies" TV presence

Will supply high-power amps for to TV and radio transmitters

By Harry A. Jessell

Westinghouse Electric is looking to grab a piece of the TV transmitter business.

The Baltimore-based Westinghouse Communications and Information Systems Co. (CISCO) intends to supply high-power solid-state power amplifiers for TV and radio transmitters through a "joint venture or partnership" with an established transmitter manufacturer, said Paul DeGonia, CISCO's director of HDTV development.

"We have talked to every transmitter manufacturer in the U.S., DeGonia said.

The power amps are based on silicon carbide transistors that CISCO developed for airborne radar and is now trying to adapt for broadcasting. The transistors can withstand the high temperatures produced by high-power transmitters.

"Westinghouse sees the conversion to digital TV over the next several years as the primary market for its power amplifiers."

According to CISCO, transmitters employing the technology will be smaller and easier to maintain than today's tube-based transmitters. And because of the improved reliability and reduced maintenance requirements, said CISCO President Richard Hadala, a silicon carbide transmitter's "life-cycle cost" will be 25%-50% less than its tube-based counterpart.

CISCO demonstrated the technology at the NAB convention in a low-power transmitter that KLAS-TV used to

broadcast an HDTV signal for reception at a Westinghouse exhibit in the convention center.

CISCO sees the conversion to digital TV over the next several years as the primary market for its power amplifiers. To broadcast HDTV and other digital services, TV stations will have to buy a second transmitter.

But it also expects to sell the technology into the slow, but steady market for conventional TV and radio replacement transmitters, DeGonia said.

The silicon carbide transistors are still too costly for broadcasting applications, DeGonia said. But CISCO is working hard to improve the production and reduce the cost, he said. "Almost all the work we are doing is focused on improving the yield of the [transistor] wafers."

If all goes well, he said, the transistors should be ready for market by the middle of 1997. ■

FCC looks at LMA's/TV duopoly

Stewart says question of coexistence should be solved by June

By Donna Petrozzello

FCC Mass Media Bureau Chief Roy Stewart has set a June deadline to resolve questions about the coexistence of duopoly ownership of TV stations and existing local marketing agreements.

In a panel discussion, Stewart says the FCC staff had put a top priority on reviewing local market definitions and considering adopting an approach—similar to the tiered structure for radio station ownership—for multiple TV station ownership in a single market.

Stewart also noted that the commission will need to develop regulations for expanded TV ownership at the same time it addresses whether to grandfather existing LMA agreements. Both issues were left to FCC review under the Telecommunications Act adopted by Congress earlier this year.

Stewart said that perhaps as many as 100 viable LMA agreements now are in place for TV operators. He said FCC commissioners are divided on the issue:

It may be "difficult for the FCC to say that LMAs will be illegal" without threatening the fiscal viability of stations in such agreements.

—Allied Capital's Katherine Marien

Commissioner James Quello "wants to open up the limits," while Commissioner Susan Ness "is interested in competition." He did not indicate how Chairman Reed Hundt or Commissioner Rachelle Chong were leaning.

Other panelists noted the disadvantages of having LMAs unravel if duopoly is adopted. Media lender Katherine Marien of Allied Capital Lending contends that it may be "difficult for the FCC to say that LMAs will be illegal" without threatening the fiscal viability

of stations in such agreements.

Panelist and Verner Lipfert, Bernhard, McPherson & Hand attorney Erwin Krasnow said Congress is not looking to undercut LMAs and may invite the FCC to rule favorably on allowing those agreements to co-exist with duopolies.

In the face of redefining station ownership rules, Stewart said the FCC also will need to consider to what extent nonequity interests, including stock investment and partnership interests, constitute "attributable interests" in station ownership.

Panelist and Dow, Lohnes & Albertson attorney John Feore encouraged the FCC to uphold its traditional stance that nonequity interests do not constitute ownership investments. Stewart called the task of defining attribution "an interesting challenge."

"I think it is in the broadcasters' and the FCC's best interest to get a handle on nonequity issues and I expect the FCC to deal with all of these issues by June," Stewart said. ■



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The lowdown on high-definition



Saul Shapiro is the FCC's answer man when it comes to digital television. The assistant bureau chief for technology policy is spearheading the Mass Media Bureau's efforts to write rules for the new service and hopes that the commission will be able to start assigning licenses next year. Before that happens, the FCC will have to await a final word from Congress on whether to auction the digital TV channels. But Shapiro's shop has already taken in comments on proposed ATV service rules and next month plans to propose a new digital standard for over-the-air TV broadcasting. Additionally, the bureau this summer hopes to propose a plan for assigning each broadcaster a channel to deliver digital TV. Shapiro discussed those efforts and other digital TV policy issues in an interview with BROADCASTING & CABLE's Chris McConnell.

Would spectrum auctions kill free over-the-air TV?

I cannot see any connection between paying up front for access to spectrum and the business model that develops to provide the service. You know, Disney and Westinghouse between them just spent billions of dollars to get access to existing analog licenses. No one has indicated to me that they have any intention of charging people for those services.

I just don't get the connection. I think those are scare tactics, and I'm actually very concerned that those kinds of tactics could affect the outcome of the debate. The only way that this debate can be discussed and reach a good conclusion is to be open and honest, and have a fair and frank debate based on the facts. And there's just nothing to indicate that an auction would be the end of free television.

So if broadcasters do secure the second channel, should they be required to broadcast high-definition pictures?

I'm not convinced that if we mandate—anyone, either the broadcasters or the set manufacturers, or consumers—that they must have some amount of this high resolution, that that's necessarily going to expedite transition to this digital technology. I know a lot of broadcasters aren't convinced of that as well, even though in a lot of the comments they've asked for more government regulation in mandating high definition in particular. I also think, in the context of today's regulatory environment, that Congress and the American people are looking for less regulation, not more.

What about non-video, "ancillary" services? Should broadcasters pay a fee to deliver those?

That's probably the most complicated aspect of this proceeding, and it seems to me it would be something that broadcasters should be fairly concerned about. I don't mean the issue about paying fees for these services, but the possibility of the FCC acting as a bit police—bit cop—and having to set up an entirely new bureaucracy that's somehow going to monitor which bits are being used for which services.

Where does that leave you in terms of writing rules for ancillary services?

It's a tough nut. It's tough in terms of how we establish what the fees are, and it's tough with respect to how we establish the minimal amount of bureaucracy to collect those fees. Ultimately, it's really tough on the broadcasters to have this additional government intervention.

So should broadcasters be allowed to provide ancillary services without paying a fee?

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ing a subscription service, and there are no fees. Some broadcasters today are, to a small extent, using these [vertical blanking interval] technologies to provide ancillary services, and they're realizing some marginal revenue. I mean, it's obviously not the core of their business. We're letting them go about their business, and on their own they're finding novel ways to use the spectrum more efficiently, to make their businesses more profitable, and in the end, they probably will be able to serve their communities better.

If Congress wants fees to be collected, I don't want to second-guess the wisdom of Congress, but it seems it would be much less intrusive on the broadcasters' business to just say, "Here's a broadcast license. Here's your fee based on your annual revenue. Use it as you see fit."

might allow us to do something akin to what we had earlier, where we had equal service areas. We could set priorities to insure that low-power TV stations are given a great opportunity to survive.

Will your channel-matching plan use any of the recommendations made last year by MSTV in its channel-matching proposal?

The transition plan is what I call assigning the licenses to the incumbents. Under a transition scenario, the broadcasters are the ones who are being asked to invest. The broadcasters are the ones who are putting their business at risk. The broadcasters are the ones who are being asked to operate two transmission facilities. We need them to go along. We don't want them fighting with us. So we have to create a plan that

"So we have to create a plan that they're comfortable with, that they feel would secure their future ability to compete. Now, on the other hand, if Congress tells us to auction channels, I think a different plan would be appropriate."

Congress has been holding hearings on whether the digital channels should be auctioned. Does that leave your work in limbo?

I wouldn't say we're in limbo. You know, we had a lot of momentum back through last summer and into the fall, in anticipation of getting the advisory committee recommendation. We have the [digital TV en banc hearing], and all the technology demonstrations that went along with that. And we were hoping to be able to put the recommendation out for comment in January.

Then, of course, they sent us home on furlough, and the snowstorm hit, and Congress passed the [1996 Telecommunications Act]. It left a lot of obligations to the commission to undertake, to meet the legal requirements of the bill. So the digital television proceeding has taken—I won't say a backseat, but the heat's been turned down a little. What that does is give us a chance—you know, in between working on attribution rules and ownership limits and V-chip stuff and all those other things—to take a closer look at the standard, at the recommendations.

Do you have to wait for Congress to make a decision on auctions before you complete your plan to match each broadcaster with a digital channel?

You know, one of the great things about the digital technology is that it gives us a lot of flexibility—not only in the type of programming that can be delivered and the amount of resolution but also in making a plan. And we can adopt all kinds of priorities and goals in laying out the plan, and in trying to achieve certain conclusions in doing the plan, and they include what [the Association for Maximum Service Television] has been pushing, which is for full representation of existing service areas to the best of their ability, and then maximize these service areas. It

they're comfortable with, that they feel would secure their future ability to compete. Now, on the other hand, if Congress tells us to auction channels, I think a different plan would be appropriate.

Aside from spectrum fees and HDTV, what issues are you examining in preparing these rules?

Fundamentally, we should be asking, "What's in the interest of consumers?" What do they want from the multichannel video providers? Do they want, as [FCC Chairman Reed Hundt] is fond of saying, more educational programs for kids? Do they want free political time for candidates so that the political process is not corrupted by fund-raising? Do they want low-power services that are targeted to ethnic niches? Do they want Murdoch or Turner or AT&T to have a stronger voice in broadcasting?

We really have to look closely at what is in the interest of the consumers, ultimately. And I think that's being overlooked a lot as large corporate interests jockey for position and for profit—which is their nature. I mean, we expect them to do that. They should do that.

When will we see digital TV?

To actually see it at home? I'd like to think—regardless of what Congress decides this year—that we'll be allowed quickly to get licenses out in '97.

Certainly, if they're auctioned, you know whoever puts down new money for this is going to move quickly to introduce the service and try to recover some of that investment. And they could be up and running in a year or so. For instance, NBC has told me that they would get up and running here in Washington very quickly. They own the station. They own the tower. They have room on the tower; they've been thinking about it for a long time. ■

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Changing with the times

Broadcasters are continually upgrading their facilities to cut costs or simply stay competitive—a new VTR here, a switcher there. But eventually it comes time to start over with a top-to-bottom renovation or all-new studio. It's not an easy decision. A full blown rebuild of a TV station can cost \$15 million; the revamping of a radio station, upwards of \$1.5 million.

What's the payoff? More working space for everyone from the GM on down, a chance to embrace more digital technology and the improved efficiency and quality that come from employing the state of the art. Here's six—three TV stations, two radio stations and a production house—that have opted to trade big bucks for big change.

KHOU-TV

Houston (CBS, ch. 11)

Owner: A.H. Belo Corp.

Architects: Corgan Associates Architects, Dallas, and IMMAD Broadcast Services, Markham, Ont.

Size: Renovation of 36,000 square feet with 24,500 sq.-foot addition.

Budget: \$15 million

Completed: August 1995

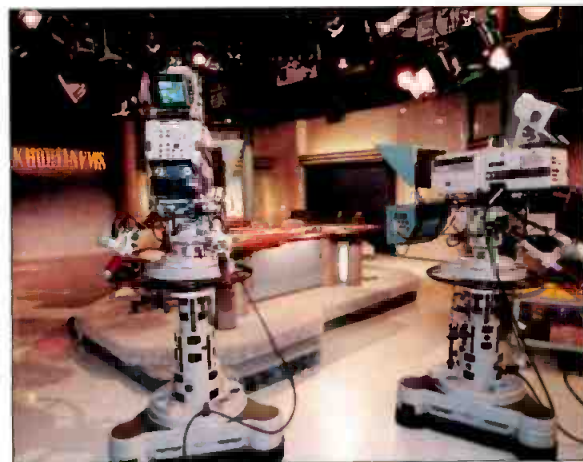


The new 24,500-square-foot addition expands square footage to more than 60,000.

Doing the Texas two-step



The all-digital production control room is built around a Grass Valley 400-2 switcher and Neve audio console.



Doubled in size, the "small" studio is now used for the news

KHOU-TV Houston is the nation's first all-digital TV station—well, almost all-digital.

After a two-year, \$15 million upgrade and expansion, the only equipment not digital are the monitors, editors and ENG recorders, says chief engineer David Carr. But they eventually will be replaced with their digital counterparts, he says.

Carr also is looking at file servers to eventually replace the station's digital (D-2) tape equipment, which includes Sony DVC-500 and DVC-80 Library Management Systems.

KHOU-TV has plenty of built-in redundancy, Carr says. It contains two virtually identical production control rooms. If one fails, technicians can move next door without missing a beat, he says. "In an emergency, you wouldn't have a learning curve."

Each of the control rooms features a Grass Valley 4000-2 production switcher and a Neve audio console. Other new gear: Quantel Edit Box and HAL, three two-channel Quantel Cypher

Character Generators, Alpha Image DYN Digital Routing Switcher and four Sony BVP-370 studio cameras.

When Belo decided to expand the Houston station, it also concluded that it was time to make the move to digital. "To go with the building expansion without providing for technological growth would have been wasteful," Carr says.

KHOU-TV is making the most of its extra room. In the old facility it has two studios: a large one for news and a "very small" one for other production, Carr says. In the new building, the small studio has been doubled in size and is now used for news. "And that has freed the large studio for commercials and other local productions," he says.

Carr also claims that the station is ready for digital broadcasting. Before purchasing any piece of equipment, the station made sure that it was suitable for HDTV or multichannel digital broadcasting. It also spent \$8 million for a transmitter building with room to accommodate a second digital transmitter, Carr says. —HAJ

WDSU(TV)

New Orleans
(NBC, ch. 6)

Owner: Pulitzer Broadcasting Co.
Architects: Rees Associates
Size: 50,000 square feet
Budget: \$12 million
Completed: March 1996

A domed 125-foot tower (right) houses the microwave antenna for the studio-to-transmitter link.



New in New Orleans

Something had to be done. WDSU(TV) had long ago outgrown its aging studio in the middle of New Orleans' colorful French Quarter. What's more, the tourists who packed the narrow streets made it difficult to get in and out of the station—a nuisance for executives, a real hassle for news crews.

So last month the Pulitzer Broadcasting station moved into spacious new studios and offices on the edge of downtown, away from the crowds and close to the highways. It took \$12 million and two years to build and make ready the 50,000-square-foot facility.

Although removed from the historic Quarter, the NBC affiliate still celebrates local culture. Designed by Oklahoma City-based Rees Associates, the new building echoes several of the city's architectural themes, primarily Italianate. "That's what is so wonderful about New Orleans," says Lisa Matthews, the project designer at Rees. "You have a variety of styles to choose from."

The front doors open into a secure vestibule and, behind a glass wall, a broad staircase leading to the second floor. The staircase is in an interior courtyard (another borrowed local feature) that brings natural light flooding into the building. The courtyard also minimizes the number of exterior windows, which cuts down on security problems, Matthews says.

Beyond the staircase in a two-story space are the newsroom and news set. Those areas are separated by an arch and are arranged so that the newsroom provides an active backdrop for the

anchor desks.

According to chief engineer Chet Guillot, the station is now about half digital and will be fully digital in three to five years as it continues to upgrade. At the heart of production control is a digital production switcher (a Grass Valley 4000-3). But the new audio-video router (a Utah Scientific AVS-2) is analog.

The station will make the move to video servers for playback and disk-based recorders for ENG as soon as those technologies are debugged and proved. Guillot says. And any expansion modules attached to the router will be digital, he adds.

All the video cabling is digital-ready, he says. "Digital cables will pass analog signals, but not all analog cables will pass digital signals."

Other new gear includes a Wheatstone TV 600 audio board, an RTS Adam Intercom, Quantel Paintbox and Picturebox, Leitch video distribution amplifiers. Digital audio distribution amplifiers and four BTS studio cameras (three LDK 9s and one LDK 9P).

Building a new facility rather than renovating makes for a smooth transition. Guillot says. The station aired its last newscast from its old studio at 10 p.m. on Friday, March 8, and was ready to air its



A Grass Valley 4000-3 digital switcher directs traffic in production control.



The newsroom provides the backdrop for the anchor desks in a two-story studio.

first newscast from the new studio at 10 the next night. The station missed just one show in the transition, the Saturday news at 5 p.m., Guillot says.

The microwave antenna linking the station to its transmitter is hidden within the building's most distinctive architectural feature, a four-sided 125-foot tower capped by a domed structure. The building is oriented so that the tower has a clear shot to the transmitter, 10 miles away in Chalmette. —HAJ

WMUR-TV

**Manchester, NH
(ABC, ch. 9)**

Owner: Imes Communications

Architects: In-house WMUR-TV design team.

Size: 70,000 square feet

Budget: \$6 million

Completed: December 1995

WMUR-TV's new 70,000 square foot facility (right) was a busy place during the New Hampshire political primary.



WMUR's master edit suite features an Abekas 8100 video effects switcher and Dveous DVE, a Zaxcom audio board, and TypeDeko graphics from Digital Graphix. All elements can be controlled via PC using the OZ system controller from Videomedia.

WMUR-TV Manchester, N.H., isn't your typical local television station. In addition to being an ABC and CNN affiliate, the Imes Communications station runs two Fox channels in northern New Hampshire under an LMA and originates a local cable channel, C-MUR, in a joint effort with Continental Cablevision. And every four years, the station becomes the focus of national attention as the media hub for coverage of the New Hampshire political primary.

With all of that action, WMUR-TV's 20,000-square-foot facility was starting to feel a little cramped. So in 1994 the station started planning a move to a new 70,000-square-foot home and an overall transition to component digital hardware. Six million dollars later, they're almost done.

"We needed heavy and extensive news capabilities," says WMUR-TV Vice



Makes the digital switch

President of Engineering Joe Paciorkowski. "We're doing nine and a half hours of news a day—we had an enormous bottleneck at the old facility from that."

Construction on the new site began in May 1995 after the station decided to renovate a Service Merchandise building across the street. WMUR-TV managed to move in by the end of December 1995, giving the news operation just enough time to prepare for the February primary.

According to Paciorkowski, all of the design and systems integration of the facility was done in-house. WMUR-TV hired outside software consultants to write database programming for the station's Digital Equipment Corp. Alpha Studio file server, which WMUR-TV has been experimenting with since last summer. That software design team also has been busy developing a proprietary nonlinear editing system for the station.

Although the Alpha Studio has been successful in playing loops of spots throughout the facility, WMUR-TV won't go online with it for air until the database and control software is perfected. "Once you put content on this and put it online, it's going to be very difficult to shut it off again," says Paciorkowski. "The database is an enormous hurdle."



WMUR-TV's master control room. Language capabilities between the BTS Saturn switcher and Venus router allow for direct control of all VTRs, including shuttle commands, without direct deck access.

To begin the move to component digital, the station purchased more than \$750,000 worth of BTS switching equipment, including a Venus master control routing switcher with LAN-based Jupiter facility software, two Saturn master control switchers and two Diamond Digital-30 serial component production switchers.

orkowski. "We installed six DigiBus frames for the primary."

Master control will remain analog until the DEC server becomes operational, says Paciorkowski. "The digital paths will be getting over to production," he says. "We'll go to the DD-30s to go to master control."

Getting the file server up and running remains WMUR-TV's top priority. "There have been growing pains with the server," Paciorkowski admits. "If it were real easy to do, everyone would have one now."

—GD

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WNAB-TV

Nashville, Tenn.

Owner: Speer Communications Ltd.

Architects: Harris Broadcast

Size: 136,000 square feet

Budget: \$20 million

Completed: Due for completion this summer.

The facility's master control center (right) has four separate operator stations.



Speer's digital complex up and running

Harris Broadcast Systems is nearing completion of its \$20 million contract to design and outfit a comprehensive 136,000-square-foot broadcast and production facility for Speer Communications Ltd. Under the agreement, Harris is helping Speer design the operation and provide serial component digital production and broadcast systems, including master control centers, production control rooms, editing suites, transmission

developed. I've always tried to be on the leading edge, and I believe that if you don't build with an eye to future technology, then you're building for planned obsolescence."

The multimedia complex in Nashville now houses WNAB-TV (a Warner Bros. UHF affiliate that Speer is in the process of purchasing), the MOR Music TV cable network and various production and post-production facilities. A network radio facility and dub-and-edit support center are still under construction; both are due to be completed this summer.

Speer's commercial production and post-production centers are available for hire, and the company also operates a film transfer business. For transmission, the facility has an internationally capable teleport and a fiber-optic gateway. Harris also is building a fleet of mobile units for

Speer for both WNAB-TV production and commercial vending use.

According to Harris Broadcast Systems product line director Jay Adrick, BTS, Scitex Digital Video (Abekas) and Leitch were the prime suppliers for the Speer project. Harris began the facility design in May 1995 after win-

ning the contract a month earlier at NAB. Harris's systems integrators moved onsite in August, and WNAB-TV and MOR Music were on-air by the end of November. The company had a total 25 installers and technicians working both in its Florence, Ky., plant and onsite in Nashville.

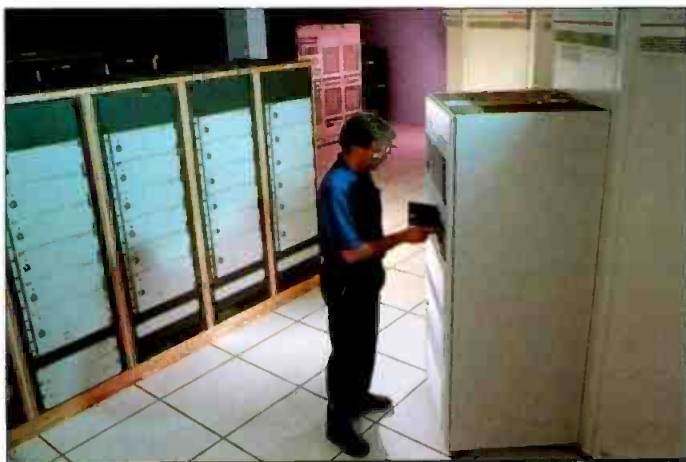
"The heart of the system is two large BTS Media Pool digital file servers, which are used in multiple tasks," says Adrick. An 8-channel system handles the on-air playback of program segments and interstitials for WNAB-TV and MOR Music; the other server, a 7-channel unit, is used for production. According to Adrick, the facility has more than 100 hours of online disk storage capacity at 4:1 compression.

"They also have the largest nearline storage system in the video world today—11,000 50-gigabyte streamer tapes [digital linear tape], with four drives that are providing nearline storage."

The facility has two graphics rooms. One uses a Silicon Graphics Onyx supercomputer running Discreet Logic Flame effects software; the other has an SGI Indigo Impact workstation with Pinnacle software and Chyron character generators.

For live production, there are four large stages equipped with BTS LDK-10 cameras and Vinten TSM robotics, and four small stages for MOR Music and WNAB-TV programming. The two live studio production control centers are all-digital, using Abekas A83 switchers and A57 DVEs along with Wheatstone audio consoles.

—GD

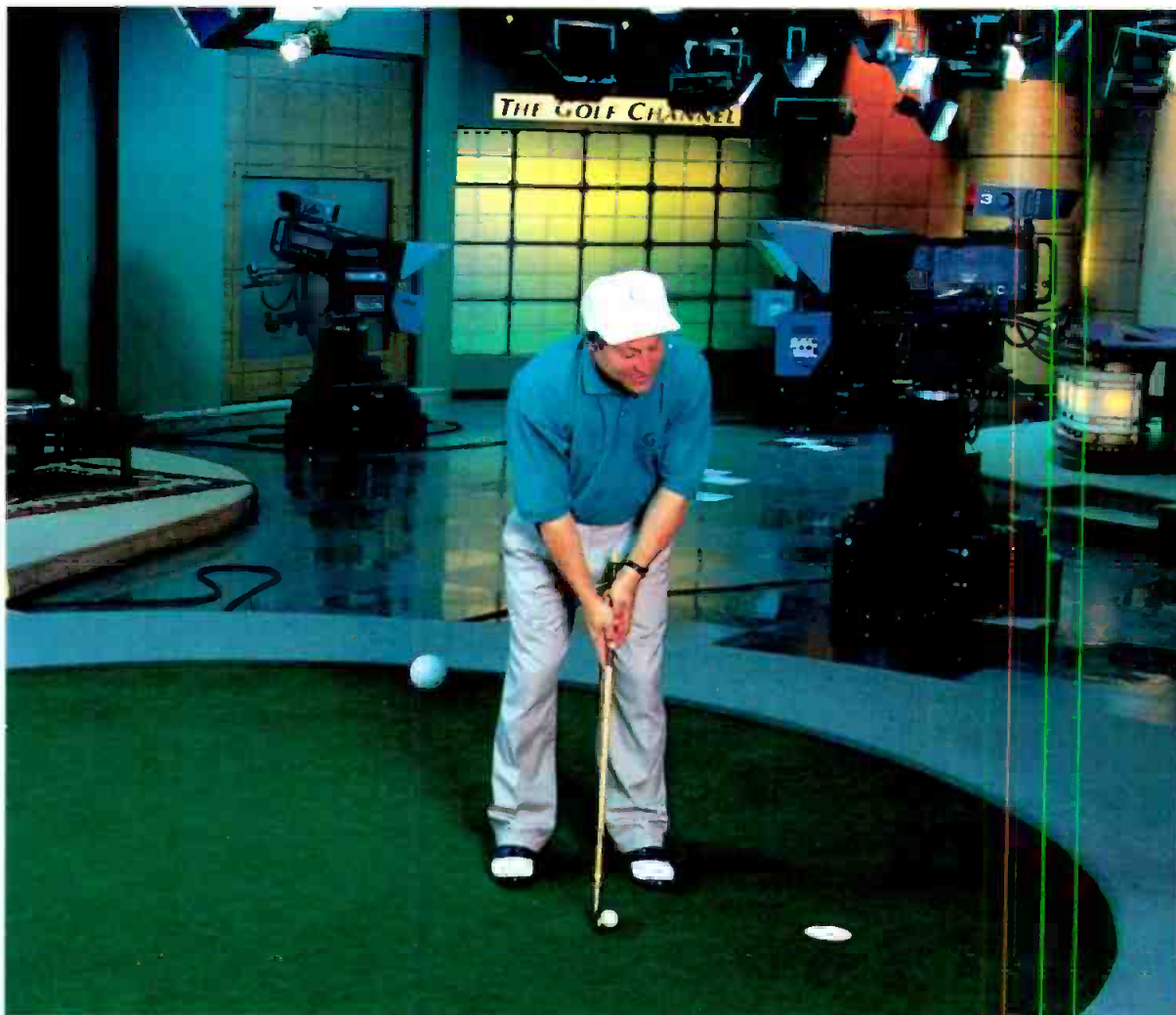


Speer's technical core houses a bank of BTS MediaPool disk drives with other 100 hours on online storage, two StorageTek Silos with over 10,000 hours of nearline storage, and an SGI Onyx graphics supercomputer.

gear and field production equipment.

"You can't call this facility state-of-the-art, because a lot of the equipment we need is not even available commercially and is being specially built for our purposes," says Richard Speer, president and CEO of Speer. "We want to be able to use new technology as it is

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Consolidation is radio's buzzword

**WYRK(FM)
WJYE(FM)
WECK(AM)**

BUFFALO, N.Y.

Owner: American Radio Systems, Boston

Architects: S&B Communications of Buffalo

Size: 1,100 square feet

Budget: \$200,000 (transmitters, antennas); \$250,000 (broadcast equipment, computers); \$300,000 (studio construction)

Total: \$750,000

Completed: June 1995

To consolidate and upgrade operations at its Buffalo, N.Y., stations, American Radio Systems spent \$750,000 renovating WYRK(FM), WJYE(FM) and WECK(AM).

The renovation involved building six new studios: two dual-purpose on-air and production studios for WYRK and WJYE, two new production studios for all three stations, a new on-air studio for WECK and a shared newsroom studio, says project engineer Dave Halik at S&B Communications of Buffalo. Combined, the studios cover 1,100 square feet, Halik says.

ARS also installed new computer systems and recording consoles with digital delivery systems, replacing analog sound boards and other traditional studio functions, says Ralph Christian, vice president/GM of the three stations.

Another improvement, Christian says, is the use of computer delivery systems from Digital Generation Systems and Digital Courier that use high-speed phone lines to transmit commercials from national advertisers directly to the stations' computers for later downloading and airing. As a result, the stations no longer receive those com-



The remodeled production studio for WYRK(FM) Buffalo with new computer systems and broadcast console.

mercials via overnight delivery on reel-to-reel tapes, Christian says.

In addition, the computers download music and on-air announcements programmed and scheduled on their hard drive by on-air talent, which eliminates disk jockeys' reliance on cart machines and compact discs, Christian says.

Since the computer organizes playlists, on-air announcement schedules and commercials and maintains a log of items that aired in various day-parts, Christian says the computers essentially eliminate the need for on-air talent to keep daily programming logs: "They have made us a paperless studio."

"From the technical end, we've become very sophisticated with the new equipment," Christian says. "It gives our announcers more time to tighten up the product and perfect our programming."

The project also involved replacing WYRK's and WJYE's vintage RCA and Harris Allied transmitters with new solid-state Continental transmitters, each with 27.5 kilowatt capacity, says



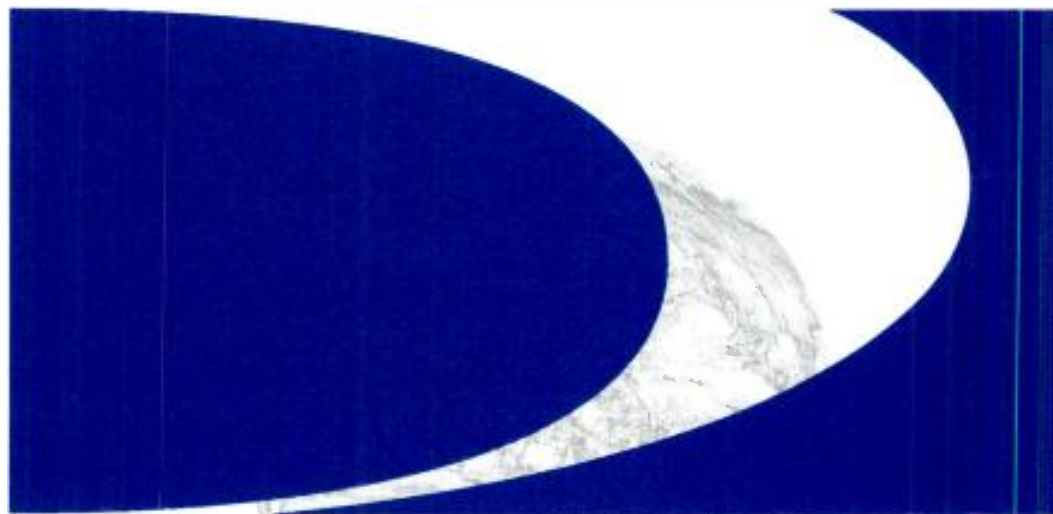
Terminals equipped with enhanced radio computing services in the on air studio for WYRK(FM) Buffalo.

S&B Communications engineer Brian Cunningham. The RCA and Harris transmitters are now used as auxiliaries. WECK's signal is transmitted over phone lines and broadcast from a separate location.

Although country WYRK, soft adult contemporary WJYE and big band WECK had operated in one building, they were on separate floors. With the renovation, the three share one floor.

David Pearlman, ARS co-chief operating officer, says the group is considering similar consolidation for its stations in other cities that occupy one building, preferably on the same floor of one building. Within the next several months, Pearlman says, ARS should finish building consolidated studios for its West Palm Beach, Fla., stations. —DP

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KZOK-FM KMPS- AM-FM

Seattle

Owner: EZ Communications Inc.,
Fairfax, Va.

Architects: Murray Builders,
St. Louis

Size: 12,000 square feet

Budget: \$812,000 (construction)

\$200,000 (office furniture)

\$400,000 (equipment)

\$35,000 (computer systems)

Total: \$1,447,000

Completed: December 1995

Shortly after purchasing classic rock KZOK-FM Seattle in fall 1994, EZ Communications began a yearlong process of moving the station into a building shared by the group's country KMPS-AM-FM facilities.

In December 1995 EZ unveiled three studios with dual production and on-air capabilities and renovations to four studios where new computers and digital equipment were installed. All seven studios are shared by the three stations. The renovation package also included revamping management and sales offices in a separate building.

The cost of renovating the 12,000 square feet was \$1.5 million, say EZ officials. Murray Builders of St. Louis designed and renovated the studio and



EZ Communications' renovations to KMPS AM-FM Seattle's on-air studio bring new digital console equipment and computerized scheduling capability to the stations.

Three in two in Seattle

office buildings and built a covered walkway linking the two.

Joe Geerling, EZ director of engineering, describes the new studios as "hybrid studios, because they form a bridge between analog equipment and what will become all-digital, then mix the two where it is most efficient."

A notable addition to the KZOK-KMPS studios is a digital audio storage and automation computer that schedules commercial breaks, song playlists, on-air announcements and news breaks. The radio computing services (RCS) system eliminates the need for cart machines and for DJs to keep a written log of songs, breaks and promotional announcements, Geerling says.

EZ upgraded the connection between remote broadcast feeds and studio broadcast consoles by installing a routing switcher. With the switcher, the stations can expect a clearer signal

from remote broadcasts, approaching studio sound and production quality, Geerling says.

EZ also installed a Vox Pro digital telephone call editor in the studios. The Vox Pro automatically tapes phone calls made to a show and allows DJs to edit the calls digitally. This accelerates the editing process and allows the on-air talent to more precisely choose the calls they want to air.

Murray Builders President John O'Hara says EZ President Alan Box approached the company in early 1995 with the idea of consolidating KZOK-FM and KMPS-AM-FM. Before the renovations, KZOK-FM's studios were several miles away from the KMPS facilities.

O'Hara says Murray Builders is under contract with EZ for several similar renovation projects at the group's stations in Sacramento, Calif., and Philadelphia. —DP



KZOK-FM Seattle disc jockey Darren Erickson cues up commercials on a digital broadcast console installed last fall in the station's on-air studio.



KMPS AM-FM Seattle news director Don Riggs puts digital broadcast equipment to use and reads from a computerized scheduling system in the station's renovated on-air news room.



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THE ROAD WELL TRAVELED

Charles Kuralt may be gone from CBS News, but he's far from forgotten. He and his broadcasting legacy were to be honored Monday when the National Association of Broadcasters was to present Kuralt with its highest honor, the Distinguished Service Award.

Kuralt, 61, left CBS News in April 1994 after 37 years, 15 of those as host of the acclaimed Sunday Morning. He was replaced on Sundays by Charles Osgood, but no one has ever filled his motor home as roving "On the Road" correspondent. Those reports about "the other folk who make up most of the country," as Kuralt has called them, provided respite on the CBS Evening News from 1967 to 1989.

Kuralt began his career with CBS in 1957 as a radio writer. Two years later, at 25, he was named a CBS News correspondent, the youngest person to win that job. He served in Vietnam, Latin America and Los Angeles before making "On the Road" his official home.

In a March 22 interview with BROADCASTING & CABLE Assistant Editor Elizabeth A. Rathbun, Kuralt discusses the changes he has witnessed in broadcasting—and life after CBS.

You've won three Peabody Awards. You've won 13 Emmys. You've won a duPont-Columbia. You've won a presidential Frankel Prize in the Humanities.

What does the NAB's Distinguished Service Award mean to you?

It's meaningful because it represents the industry, this line of work that I was in for so long. This just occurred to me: When I was 14, I won a student writing contest that the National Association of Broadcasters sponsored; I think it was the NAB and the Jaycees, and it was called "The Voice of Democracy" contest. Part of the prize was to come to Washington, where I met Bob Richards. He was our host, and we had a splendid dinner and we met the president at the White House. The president being Harry Truman.

So it's almost like coming full circle, to win an award from the NAB at 14, then again at 61.

Taking a look at the industry now that you've stepped back, what can you say about the state of TV news?

In every sense, I think broadcasting is doing a better job with the news than it did back then. Remember, in the mid-'50s when I started, our principal effort was a little 15-minute black-and-white newscast every day. Ed Murrow was doing *See It Now* once a week, which was a distinguished thing. But in general, there wasn't much news on the air, and CBS



Since leaving CBS, Charles Kuralt has been spending time in one of his favorite places—Ely, Minn.

News really did most of what there was. ABC—it's hard to imagine now that they're so good—but we didn't think of them as competition back then.

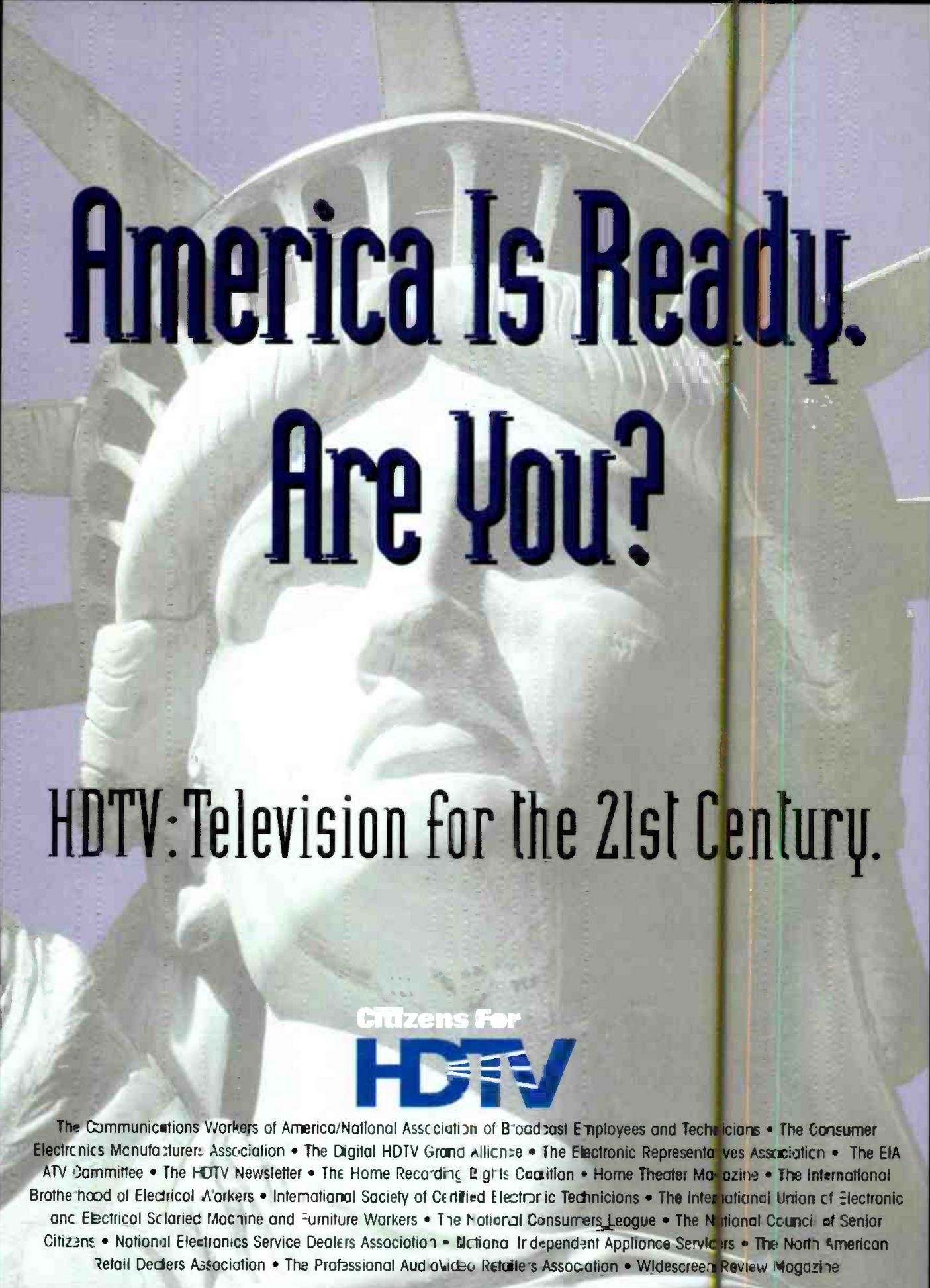
When you look around today, with Ted Koppel's good program [*Nightline*], and MacNeil/Lehrer, as I still think of it [now *The NewsHour with Jim Lehrer*], and *60 Minutes* and *Sunday Morning*, my old program, [you see] very good, useful information programs.

In addition to the volume of good programs and the technical expertise and technical ability that exist today, there is also the human factor. There's a lot broader spectrum of voices and faces on the air than there was back then.

Of course, there is a good deal of trash too. But a discerning viewer can certainly find out more about the world from broadcasting today than he could when I started out.

You mention trash television. What's your opinion of it?

People who complain about trashy, tabloid journalism should remember that there is still an "off" button on the thing. You don't have to watch every second of every day.



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But in those old days, you really didn't have very much choice. You watched whatever you could get on your rabbit ears, out of the sky. But now, people who are interested in bridge can find a bridge program; those who are interested in fishing can find plenty of fishing programs. That's the big change. People just have to be discerning.

[As for the V-chip,] it's a nice, earnest effort, but....

Is it appropriate?

I have my doubts. I am, in general, a First Amendment absolutist. I think that anything that can be said may be said, anything that can be written may be written, and anything that can be on television should be. I wonder if it would have come about, though, if this hadn't been a presidential election year.

The great charm of broadcasting, this wide spectrum, is that there can be something for everybody. I don't believe in strangling information.

I feel especially strongly about the Internet. I think this new law that is intended to restrict erotic material on the Internet is just foolish as can be. The great thing about broadcasting, and about the Internet, is the very breadth and freedom of it.

Are you an Internet junkie? Do you get on there and play around?

No. I have very little acquaintance with it. I have just enough to know that it isn't really very useful for me yet. I'd like to use it for research. You can waste an awful lot of time on it. I've noticed that. And I have wasted that time.

What do you watch on TV? What are your favorite shows?

I watch news programs. I try not to miss *60 Minutes* because I know all those people, of course. And right now I'm watching the NCAA basketball tournament. That's the kind of thing I watch.

I also watch a good deal of public broadcasting. I can get hooked by *Masterpiece Theater* and certainly by concerts. You know, if Pavarotti is singing, I'm probably listening.

How's Charles Osgood doing on *Sunday Morning*?

Oh, he's doing wonderfully well. I think he was born to do that program. And he has abilities I haven't. He's a musician, among other things, so he brings a good deal more knowledge to the program than I ever did.

And I'm happy that the program is about the same as it was. I mean, they haven't made big, wholesale changes in it. The only change I can see is that he's doing it and not me. I think he's very good. He's a good writer.

Why is good writing so important to you?

Maybe this is an old man's observation, but it does seem to me that there used to be a good deal more capable writing than there is today. When I first came to CBS News, for example, the on-the-air staff was entirely a staff of scholars and scholar-journalists and reporters, good writers.



With Diane Sawyer on *'Morning'* in 1981

Good writers are rarer than that today. There are still plenty of them. I think of Bruce Morton, who's now at CNN, and Charles Osgood. Andy Rooney. And others.

I think it has something to do with young people not reading as much. Good writing comes from good reading; it's derivative. You learn to write by reading writers you admire. I can hear the rhythms of good writers that I've read when I sit down to write.

Speaking of writing, congratulations on making the *New York Times's* best-seller list with "Charles Kuralt's America."

Thank you. I happen to know that that book finally falls off the best-seller list this Sunday. But it's been 20 weeks, and that's as much as an author can expect.

Do your plans include writing more books? How about TV?

I expect to do another book. I don't know quite what the subject is just now. I'm wrestling with several. I can tell you

that the next book will not be about me. I've done that now for two or three books in a row, and that's enough. But there are a lot of interesting subjects, some of them historical, that I would like to have a go at.

I think of myself now as a writer rather than a broadcaster, really. But I'm still doing odds and ends of broadcasting. I'm doing something for the Disney Channel, a little five-minute show once a week called *This I Believe*, which goes back to Ed Murrow's project of the same name in the '50s. So I'm keeping my toe in the water.

Any chance of future work with CBS?

There's a chance of anything, but the real reason I left...was that I realized I had lots of other things I wanted to do, mainly, write books and travel and think and read, and I wasn't going to get a chance to do it unless I did it soon.

I think my contract with CBS still has another year to run, but neither of us is putting it to use.

I know you had some major surgery. How have you been doing?

I had [quadruple] heart-bypass surgery in October. It leaves you feeling that you've been hit by a truck. But it doesn't seem to have changed me. As soon as I could stand up and walk, I was eager to do so. I seem to have itchy feet, and I like to travel. Once I discovered that I was going to recover from this and be able to travel, and do all the things that I once did, I was eager to do so.

I have always just been fascinated by travel. The old days "on the road" were just meant for me. The idea of getting into the old motor home and plugging in the coffee pot and heading down the road, not entirely sure where we were going to spend the night but knowing that something wonderful might be waiting right around the next bend, was an ideal job for me. I would say an ideal job for anybody. I loved it.

I've been to every corner of every state over and over again. And now it's just really a question of returning to



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favorite places. [But not in the "On the Road" motor home.] The motor home, much to my surprise, has become kind of an icon. It's part of the Henry Ford Museum in Dearborn, Mich. I'm eager to get there and take a look.

Meanwhile, there's a lot of the world I haven't seen. I've never been to Eastern Europe, for example.

You bought a radio station last September [WELY-AM-FM Ely, Minn.]. Are you involved in its operations?

I have been, in a very minor way. I love the community. I love that area. It's just breathtaking country.

I didn't set out to be a radio station owner.... It was just one of those things that happened. The station went bankrupt, probably for the very good reason that it may be too small a community to support a radio station. But I hated the idea that that station, which people depend on, was off the air. So I figured that was something I could do.

Media companies—radio and TV—are getting so big. Do you think this has any effect on corporate culture?

I'm so far outside that world. I do regret what has happened to newspapers.

Which is?

The death of some very good ones. Most of the afternoon papers in the country, for example. And as the newspaper chains grow bigger, some of them at least lose that essential "localness"—if you can put that in quotes—that distinguishes one paper from another in the same state or in the same region. I wish that we could turn back the clock to where the local radio station owner went down to the Rotary Club meeting and heard opinions every day.

Our station works exactly that way. They sent a tape of what we did the morning [of a particularly big blizzard], and the very first words at sign-on at 6 a.m. were, "This would be a good day to check on your neighbors. Go see how they're coming along, if they have enough heat and food." And it almost brought tears to my eyes. I thought, that's what a radio station ought to be.

How about TV? Some people are critical of the possible standardization of news, for example.

I'd hate to see it. We've seen a good deal of that anyway, with young journalists moving from, as they call it, one market to another. I hate to hear communities referred to as markets, but I'm afraid that's what broadcasting does.

And these reporters frequently are reporting on a town they don't really know very well. They may be in Memphis, but they're trying to get to Chicago. That's a weakness of local news. There must be some very strong, intelligent local newscasts left, but you don't see many of them.

I never will have one, but if I had a local TV station, I'd put the best people in town on the air and leave them on. People who grew up there and know their community. And not give so much importance to how well-coiffed their hair



Kuralt's home-away-from-home for 22 years is now on display in the Henry Ford Museum in Dearborn, Mich.

is, or how slick, how smooth they seem to be on the air. I think people would appreciate knowledgeable folks on the air. I might go broke that way, but that's what I would do.

What makes you inclined toward the career you made for yourself, covering mostly features as opposed to hard news?

I never did like the deadline pressure and the intense competition that comes with covering hard news. I never liked being on a story with 10 other camera crews. It struck me that they probably all would do a

better job than I could do on a breaking story.

And then maybe it was just a lack of ambition. But whatever it was, I found that what really filled my heart and made me happy was doing small feature stories and having plenty of time to do them. And getting to know people a little bit, and hear a few stories, and feel the seasons change. That business of taking time out in the country was far preferable to me than covering the White House, or Congress, or covering a war. Somehow or another, America, my home country, is the one that interests me the most.

Why do people respond to your work so strongly? What are people looking to you for?

I don't know. I think there's a certain familiarity in the "On the Road" stories. People would say, "I know somebody just like that here in our community." It's very hard to connect to stories about the presidential election because most of us don't know presidential candidates or anything like that. But if it's a story about a woman who carves fiddles in the Ozarks, people say, "Why, that reminds me of..." someone they knew.

And it's funny. People remember those stories. On airplanes or in airports or walking down the street, people will stop me and say, "Boy, I remember that story you did about that farmer who built a yacht in his barnyard." They couldn't tell you what the news was that day.

There was something about the humanity of that one man. His desire to get off the farm and go see the world touches people, I think. It touched me. I mean, that was the whole thing that kept me going.

As for me, I always felt that, if possible, I ought to stay out of the story and just be the guy who's standing in the corner telling people about it. Some young reporters make the mistake of trying to put themselves in the story. I think it's well not to. And I suppose there's a certain amount of appreciation of that.

Is there somebody coming up who is doing what you did?

I don't know if there's any appetite for it. Most young reporters really would like to do important jobs, and no one would ever say that what I did was important, but it satisfied me. There never were stories that advanced the national debate or anything like that. They were just interesting people. It was a great job. I think the best job.

Do you miss it?

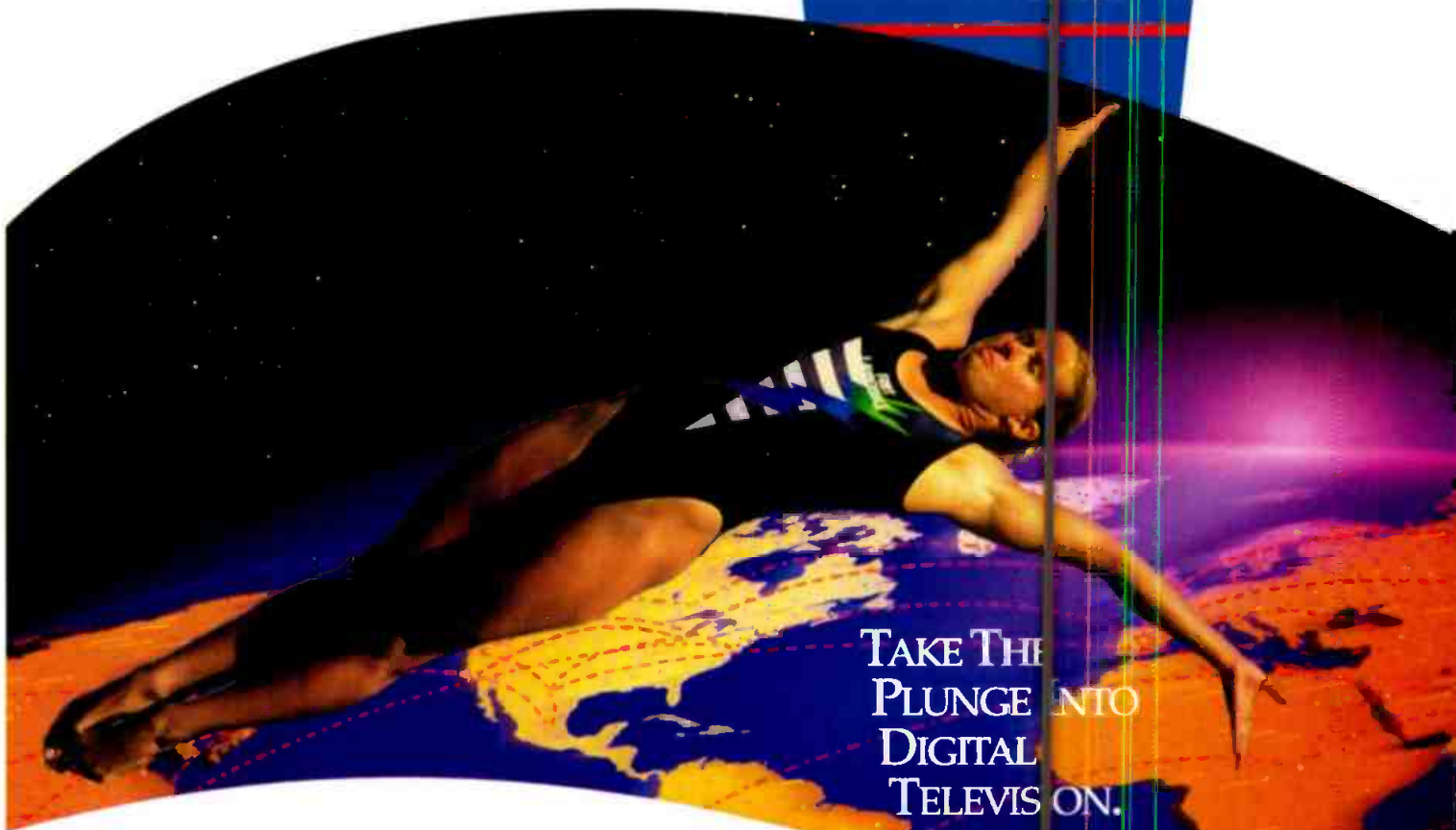
No, I don't. I'm busy with other things now. I think life moves on. ■



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FCC looks at LMA's/TV duopoly

Stewart says question of coexistence should be solved by June

By Donna Petrozzello

FCC Mass Media Bureau Chief Roy Stewart has set a June deadline to resolve questions about the coexistence of duopoly ownership of TV stations and existing local marketing agreements.

In a panel discussion, Stewart says the FCC staff had put a top priority on reviewing local market definitions and considering adopting an approach similar to the tiered structure for radio station ownership—for multiple TV station ownership in a market.

Stewart also noted that the commission will need to develop regulations for expanded TV ownership at the same time it addresses whether to grandfather existing LMA agreements. Both issues were left to FCC review under the Telecommunications Act adopted by Congress earlier this year.

Stewart said that perhaps as many as 100 viable LMA agreements now are in place for TV operators. He said FCC

commissioners are divided on the issue: Commissioner James Quello "wants to open up the limits," while Commissioner Susan Ness "is interested in competition." He did not indicate how Chairman Reed Hundt or Commissioner Rachelle Chong were leaning.

Other panelists noted the disadvantages of unraveling LMAs if duopoly is adopted. Media lender Katherine Marien of Allied Capital Lending contends that it may be "difficult for the FCC to say that LMAs will be illegal" without threatening the fiscal viability of stations in such agreements.

Panelist and Verner Lipfert, Bernhard, McPherson & Hand attorney Erwin Krasnow said Congress is not looking to undercut LMAs and may invite the FCC to allow those agreements to co-exist with duopolies.

In the face of redefining station ownership rules, Stewart said the FCC also will need to consider to what extent nonequity interests, including stock investment and partnership interests,

constitute "attributable interests" in station ownership.

Panelist and Dow, Lohnes & Albertson attorney John Feore encouraged the FCC to uphold its traditional stance that nonequity interests do not constitute ownership investments. ■

No kids news for Mass Media Bureau

By Chris McConnell

FCC Chairman Reed Hundt has not given the Mass Media Bureau marching orders on how to evaluate license renewal applications if the commissioners do not reach an agreement on children's TV rules, bureau officials say.

"We have received no specific instructions," FCC Video Services Division Chief Barbara Kreisman told broadcasters at the NAB convention. Kreisman added that the bureau will be looking for a way to process renewal applications if no decision is reached on whether to quantify a children's educational programming requirement, but added that the commission cannot act on applications due to arrive in June until after the Sept. 1 deadline for petitions to deny renewal applications.

"We've got a little time," Kreisman said. Mass Media Chief Roy Stewart said the bureau will wait for a resolution of the contentious issue.

Speaking at a "Policymakers Breakfast," Commissioners James Quello and Rachelle Chong reaffirmed their opposition to any quantified standard on children's programming.

"We've been reviewing license renewals for 60 years without a quantitative standard," Quello said, adding that the FCC should not set an informal standard through the renewal process.

Commissioner Susan Ness maintained that broadcasters should have a processing guideline standard to provide assurance that their renewal applications will be granted. ■

Fritts ups volume on 'quiet realities'



Fritts says broadcasters aren't getting their message across.

In his opening remarks to the convention, NAB President Eddie Fritts identified what he termed the "quiet realities" of broadcasting. They are realities that critics frequently ignore, said Fritts.

"First, the public understands how well we serve them," he said. Local on-air talent are considered "celebrities and leading citizens." When it comes to providing news and information about local markets, "there is no credible competition." Fritts also argued that broadcasters listen and respond to input "without government intrusion." He cited the increase in children's educational programming since the passage of the Children's Television Act four years ago, as well as the voluntary program ratings system.

Broadcasters must continue to lead the "technological parade," he said, adding that the FCC recognizes broadcasters' technological commitment to the future. The migration to digital will create jobs and boost the economy, he added.

Fritts also said that broadcasters must "reinforce our prominent role in enhancing American society," a roll he described as a "partnership" with viewers and listeners.

While broadcasters play a vital role in society, said Fritts, the industry has to do a better job of getting that message across. Policy makers must realize, he said, that more regulation for the industry is not the answer to many societal ills that some try to blame on broadcasters. —SM

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TV faces online competition for ads

Panel says Internet is becoming bigger factor in media mix

By Donna Petrozzello

To withstand increasing competition for ad dollars, network television will need to offer advertisers the ability to interact with the audience and it must deliver quality, compelling programming, say leading advertising campaign directors.

In an NAB discussion moderated by CapCities/ABC correspondent Jeff Greenfield, the advertising panelists agreed that the Internet, along with direct mail and home videos, is becoming

a more attractive outlet for advertisers eager to package their message in more than a 30- or 60-second TV spot.

"The number of options available has exponentially increased," said Peter Larson, CEO of the Brunswick Corp. "In a list of mandatory places to advertise, clients are now naming the Internet."

The Internet's key benefit for advertisers, Larson said, is its ability to let consumers click on client's home pages for additional information about products and services. This interactivity, and the "trendiness" of the Internet, make it increasingly attractive to advertisers looking for new ways to attract consumers' attention, said Larson.

Laurel Cutler, executive vice president of Foote, Cone & Belding, described network television as "the summit for advertising packaged goods." She agreed that advertisers of more complex products, such as insurance and autos, will look toward "the new media for better opportunities for complex purchases. Network TV is not suited to become an interactive medi-

um in itself."

Joel Segal, executive vice president and director of broadcast for McCann Erickson USA, estimated that 42 million households will have Internet access within five years. As a result, he said, consumers will devote less time to watching network television and advertisers will have to find a way to advertise on both.

Yet the panelists agreed that networks will continue to draw top dollars from advertisers who want to "brand" their product by buying time around network shows that deliver broad, lucrative audiences. "The ability of a program to brand a product is immensely important," said Cutler.

The advent of the V-chip, however, could set new standards for advertisers, panelists agreed. Lazarus said that V-chip ratings will force advertisers to "look at shows as either enhancing or having a negative impact on their product." Larson argued that the "benefit" of the V-chip will be to "force advertisers to consider the environment their ad is in."

NAB's newest hall of famer

Radio's controversial political satirist Don Imus refrained from bashing the Clintons or fellow broadcasters in his acceptance speech at his induction into the NAB's Radio Hall of Fame.



A less cynical "I-Man" thanked fellow broadcasters and the NAB, lavished praise on Westwood One Chairman Mel Karmazin (his syndicator), his show cast and the WFAN(AM) New York staff. He received a standing ovation.

But never one to shy away from controversy, Imus alluded to his much-publicized criticism of the Clintons in a public appearance last month, saying that the "President and First Lady are not here because they are probably someplace testifying."

Imus was quick to distinguish himself from previous NAB Hall of Fame honorees: "Most of the people who've been inducted are dead, so I'm fortunate in that area."

—DP

Fries offers prescription for success

In his annual NAB address to radio broadcasters, Radio Advertising Bureau President Gary Fries emphasized the need for sales staffs to sell radio as a bridge between marketers and consumers.

Fries says marketing plans have shifted in recent years and that brand managers have replaced media planners as the "gatekeepers" of advertising revenue. For 1995, Fries said radio ad revenue climbed by 8%, or approximately \$11.5 billion, from 1994 across all markets.

For the current year, Fries predicted similar 8% growth in revenue between local and national advertisers. Yet, he said radio claims only about 7% of revenue spent on advertising in all media. Fries says the key to steering more advertising revenue to radio is reaching brand managers.

To appeal to brand managers, Fries said radio sales teams need to concentrate their pitch not on "ratings, cost per point and spots," but on the ability of radio to "communicate to the American consumer." To date, radio general managers have not trained sales staffs about "how to reach their brand managers," he said.

Fries suggested that salespeople and general managers should meet with brand managers and thank clients for advertising on radio. Also, sales teams need to discuss creative strategies for meeting clients' goals with radio advertising, Fries said. "We identified early on that the shortest distance to increase our budgets was creativity," Fries said.

But while Fries said radio will be challenged with educating and training sales staffs to present radio as a solution for marketers, he also said the "state of the radio industry, simply put, is very good."

—DP

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Digideck, WavePhore outline strategies

Companies developing datacasting review their game plans

By Richard Tedesco

The chief executives of the preeminent companies pushing datacasting outlined their respective views of the immediate future for that emerging technology at an April 15 NAB session.

Digideck is awaiting FCC clearance to field test its system in June, according to its president, Brit Conner, who estimates the company is a year away from producing prototype devices for the DataCast venture.

WavePhore Networks, which has formally joined the Intericast alliance, still is planning a third-quarter launch, according to Scott Calder, WavePhore president.

Calder delivered a wide-ranging discourse on the state of data communications by way of ultimately showcasing WavePhore's technology. Citing the continuing spate of unexpected corporate alignments—such as NBC/Microsoft

and Microsoft/Hughes—and U.S. sales of PCs outpacing those of TV sets, he observed: "The adage that truth is stranger than fiction applies to what's happening today," adding that: "Everyone seems to be getting into everybody else's business."

Pointing to the statistics that 70% of U.S. PCs are now on LANs, with half of them equipped with modems and 50 million-70 million users regularly accessing the Internet, he sees an environment where users are getting access to "digital everything."

While Calder said he perceives a "major transition" in the role of the PC in an era of increased connectivity, he warned that the transition also could create a horrendous data bottleneck. And not incidentally, he foresees WavePhore coming to the rescue with an approach that would automatically cache data frequently by particular users at times when they're not linked for inter-PC communications.

WavePhore currently transmits data directly to PCs for Reuters, Dow Jones and Associated Press via satellite, VBI and FM sideband. It also transmits its WavePhore Newscast, including material from Knight-Ridder/Tribune and DowVision, to 20,000 desktops, according to Calder.

For Datacast, Digideck intends to translate signals from RF to bitstream data that PCs could receive with the installation of add-in cards, according to Conner. He reports that Datacast is in discussion with a major TV manufacturer interested in incorporating the technology in its sets.

That would entail inclusion of graphics and data chips in sets along with modems that would enable data overlays, e.g., stadium graphics for ticket ordering while viewing a sporting event. ■



King of the Road

Former CBS News correspondent Charles Kuralt, whose bus provided the nation a window seat on the roads previously less traveled, received the NAB's Distinguished Service Award at the convention's opening joint session Monday (April 15). Of his many years of reporting on the road about remarkably ordinary people, Kuralt joked: "All I was trying to do was stay out of the office. If they can't find you they can't fire you." On a serious note, he said that the best broadcast journalists are those "who know that what they are doing is a lot more than a job." The award, he said, provided "closure on a happy career." For an interview with Kuralt, see page 34. —SM



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Vyvx buys Global Access

Positions itself as "one-stop" shop for transmission services

By Glen Dickson

In a move that could have tremendous impact on the transmission service market, fiber giant Vyvx Inc. has agreed to acquire Global Access Telecommunications Services, the second largest reseller of worldwide satellite video transmission services.

The Global Access acquisition should be complete in early May, says Vyvx President Del Bothof. Terms of the deal were not disclosed.

With the Global Access acquisition, announced Monday at NAB, Vyvx completes its strategy of becoming a full-service transmission provider with worldwide capabilities. While Vyvx has over 11,000 miles of fiber optic cable in the U.S., the company, a unit of The Williams Companies, first added satellite transmission to its portfolio last fall when it purchased four teleports from ICG Wireless Services in Atlanta, Denver, Los Angeles and Carteret, N.J.

"This cements everything we've

been talking about," says Bothof. "Fiber does not go to every point."

Global serves over 700 customers, including U.S. and international broadcast and cable TV networks, and schedules more than 4,500 satellite uplinks per month. The Boston-based capacity reseller has 21 domestic transponders and eight sales offices across the U.S. and maintains operations centers and sales offices in London and Singapore. Vyvx has also been expanding internationally with fiber in the UK and has plans for fiber penetration in Germany, the Pacific Basin, Japan, Singapore and Hong Kong.

"We've been looking for a strategic partner," says Global President Jack Morse. Morse says that as Global's revenues have quadrupled over the last 18 months (on an "annual run" basis), the company realized that it needed help to "compete against the big guys" like Keystone Communications.

Keystone also made news in Vegas by announcing that it will provide MPEG-2 compressed ATM distribu-

tion over IBM's Global Network. Keystone has committed 50,000 hours of usage to the IBM network, which it will use predominantly to provide backhauls to sports clients, says Keystone President Peter Marshall.

The Global Access acquisition will bring the number of Vyvx employees to 220. Morse says that he doesn't expect any layoffs since Global will continue to manage its satellite capacity. Eventually, the companies will become one under the name "Vyvx," he said.

Bothof says the Global buy isn't "a traditional acquisition," where two companies merge to cut overhead in search of profits. "These are two profitable businesses," he says. "This combination will only enhance that."

The move will allow Vyvx and Global to make more efficient use of their combined bandwidth, says Morse, as Global can offload point-to-point clients to Vyvx's fiber and Vyvx can now serve multipoint customers with Global's satellite capacity. Morse and Bothof expect that synergy to create savings and convenience for customers who book both fiber and satellite time.

"More and more customers are looking for a total provider," says Bothof. "They only want to have to make one call."

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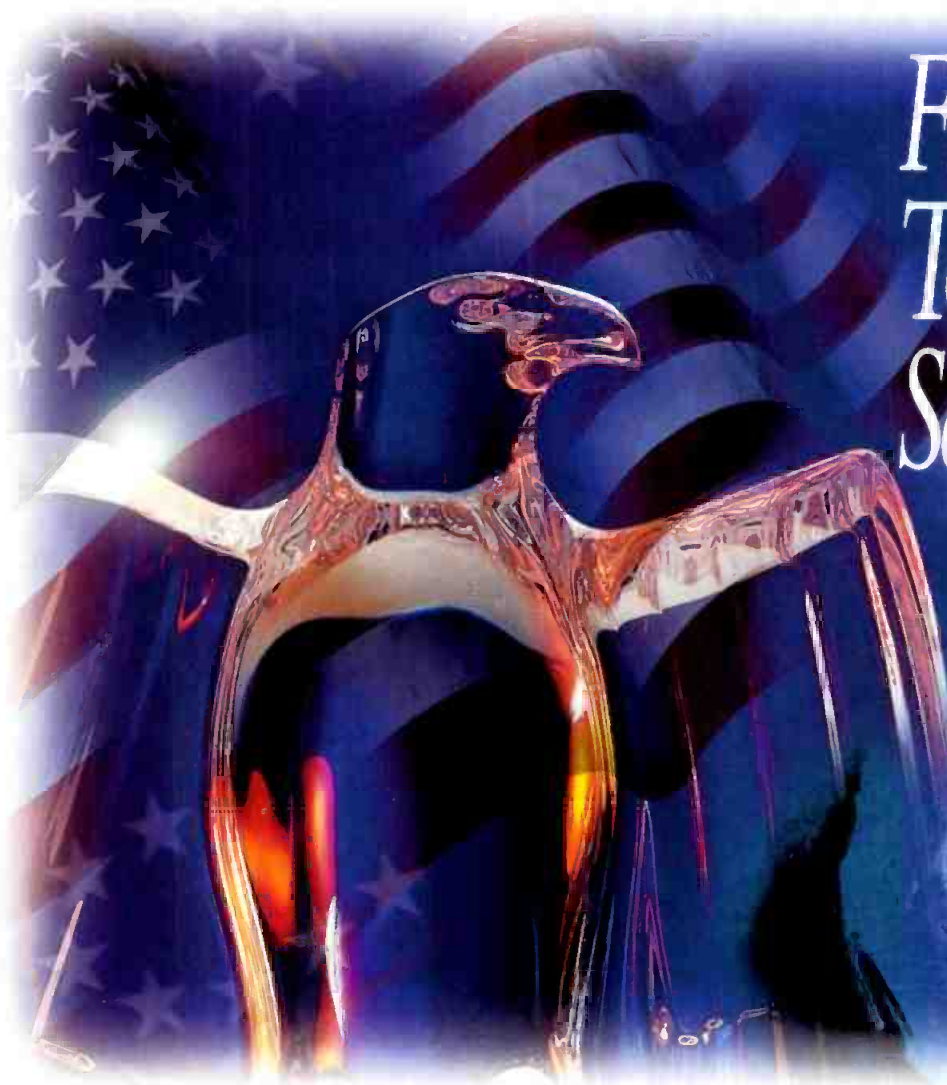
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