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Editor's Comments

Probably the most significant thing since our last edition has been the impact on every aspect of our lives from the devastation caused by hurricane Katrina. Having recently been in the south with the Road Show and the areas affected by Katrina, there isn't much that we can say that hasn't already been said with respect to our concerns and emotions. During the Road Show over the years, we've met and made many friends and associates in the areas devastated by this "Act of God." It is most frustrating, to say the least, not to be able to do something to help alleviate some of the pain and suffering.

One thing that has always been a feather in the cap of we Americans is that we are a resilient lot and there is no doubt that the folks in the affected areas will bounce back. Nonetheless, our hearts and best wishes go out to all who suffered any loss and if there is anything we can do, please contact us.

The Road Show - A Taste of NAB 2005



Here we are in Pittsburgh, PA. The Road Show, A Taste of NAB 2005 has been an overwhelming success to date. We've completed forty-six venues with a total of 1026 in attendance and after today it will be forty-seven and who knows how many folks in the Pittsburgh area will show up? Our highest attendance so far has been Montgomery, AL with 44 folks there. As of August 30th, we've received over 140 E-mails thanking us for our efforts. Many of them also asked us to return next year.

As some of you may or may not know, we had to regretfully cancel our presentations for Syracuse and Rochester, NY due to a health issue: perhaps next year, if they'll have us.

It seems that those who have said we were "full of it" were right, but that is not true any longer. No one should ever have to go through the pain of an impacted intestine. We can't begin to thank the folks in Binghamton, NY for their kind help and support during our time of hospitalization. We're back on the road again and looking forward to completing the nineteen remaining venues. We have contacted the SBE chapter in St. Louis, MO to see if they'd like us to stop by, but have heard no response as yet. That would make it twenty remaining, if they say yes.



We are proud to include the following from a press release issued by the Society of Broadcast Engineers on August 2, 2005. The Road Show is part of what made this possible.

"The SBE Educator of the Year Award goes to Lawrence "Larry" B. Bloomfield of Florence, Ore. Bloomfield has had a diversified career in broadcast engineering. He has served as a TV station chief, built an AM radio station and has been a contributing writer for industry publications. He has been an instructor at Southwestern College in Chula Vista, Calif., and at Guam Trade and Technical School and has taught aspiring HAMs at the Oregon Central Coast Amateur Radio Club.



"Since 1997, Bloomfield has published Tech-Notes, a free broadcast industry electronic newsletter, with more than 1,100 subscribers that addresses the changing technology in broadcasting. Bloomfield also maintains the Tech-Notes website, where he shares industry technical news and other information.

"Bloomfield has also become well known for the "Taste of NAB" road shows which he has conducted for several years. Starting in May and extending as late as October, he packs his van with broadcast equipment, supplied by supporting companies, and

schedules visits to dozens of cities across the country. In each program, many of which are held in conjunction with SBE chapter meetings, he displays and discusses the equipment, providing just a “taste” of what is displayed at the annual April NAB Convention in Las Vegas so that those not able to attend NAB may see some of the equipment firsthand.

“Bloomfield is a Senior member of SBE, having joined in 1996, and is an active member of Chapter 76 in Eugene, Ore.”

News

SBE to assist Hurricane Katrina losses



President Ray Benedict has announced an effort by SBE to assist those members who have suffered severe loss due to Hurricane Katrina. SBE will act as a clearing house, putting those who can offer help in touch with those who have requested it.

A special e-mail address has been established, hurricanehelp@sbe.org, so members in need, or members on their behalf, can contact the National Office and relate their need. Those who can offer assistance are also asked to contact the National Office to let us know what assistance they are able to offer. The National Office staff will contact members across the country that have offered their help, and put them in touch with those seeking assistance.

Assistance could be needed to provide temporary housing, clothing and personal items or possibly equipment or parts for station facilities that have sustained damage. People may also call the National Office at a special number, (317) 846-9092, to offer help or report a need. Announcements will be sent shortly to the industry press, chapter chairs and the various SBE e-mail lists to publicize this effort.

Harris Corporation to Acquire Leitch Technology Corporation

Harris Corporation has entered into a definitive agreement to acquire all of the shares of **HARRIS** Leitch Technology Corporation at a \$14.00 (Canadian dollars) cash price per share. Total price consideration, net of cash on hand, will be approximately \$450 million (US dollars).



Leitch is a well known provider of video systems for the television broadcast industry; including routers and distribution equipment, signal processing, signal management and

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monitoring, servers and storage area networks, branding software and post-production editing systems. Harris is the worldwide leader in providing digital broadcast technology solutions for global broadcast media markets, including television and radio transmission systems, networking solutions and enterprise-wide software and media management systems.

"The acquisition further positions our company to lead the broadcast industry's transition to high-definition digital services," said Howard L. Lance, chairman, president and chief executive officer of Harris. "Their broad product portfolio provides an excellent complement to our current products and software, and significantly expands our presence in these fast-growing market segments.

Leitch has a veteran management team with strong domain knowledge and has launched important new products to meet the changing needs of the digital marketplace. Our combined products and systems serve every segment of the increasingly complex supply chain that brings digital audio, video, and data content to consumers. The acquisition of Leitch, following our acquisition of Encoda Systems in November 2004, clearly establishes Harris as the company that broadcasters turn to as they upgrade their equipment and software systems to operate in a digital environment."

"The combination of Leitch Technology and Harris Corporation will create a powerful force in the global broadcast industry. We view the opportunity as extremely positive for our employees, customers, and shareholders," said Tim Thorsteinson, president and chief executive officer of Leitch Technology.

The acquisition is to be completed by way of a statutory plan of arrangement and is subject to approval by Leitch shareholders, customary regulatory and court approvals, and other closing conditions. The transaction is expected to close in approximately 60 days.

For additional information, contact Harris Corporation at webmaster@harris.com.



Szypulski Named SBE Broadcast Engineer of the Year

The Society of Broadcast Engineers has announced the winners of its 2004 SBE National Awards. The winner of the SBE Broadcast Engineer of the Year Award for 2004 is Theodore "Ted" H. Szypulski, CPBE. Szypulski is Director of Engineering Special Projects for ESPN in Bristol, Conn. He directed the design and construction of the ESPN "Digital Center," a 120,000 square foot, all high definition (720p) building, from which the initial HD broadcast of ESPN SportsCenter began full-time production on June 7, 2004.



The new facility, besides being all-HD, is totally tapeless. It includes three studios, five production control rooms and 10 master control rooms. The project's size and

requirements required some equipment that hadn't even been invented yet. Szypulski personally designed many of the sections of the building including redundant power systems, installation of the largest HD/TDM router in the world, advanced audio systems, 16 output distribution amplifiers, a new version of audio monitoring station and multi-viewer processors with more features and larger-than-ever routing matrix.

Szypulski directed the teams of systems integrators and systems engineers necessary for the building and personally provided detailed guidance on the design, construction and testing of all systems.

Szypulski is a graduate of Rensselaer Polytechnic Institute with BSEE and MSEE degrees. He has been a member of SBE since 1983 and holds the Certified Professional Broadcast Engineer certification from SBE. He is active with SBE Chapter 14, Connecticut Valley.

Other awards are also announced

The SBE Educator of the Year Award story is posted above.

Winner of the SBE **Technology Award for 2004** is Ross Video for its "OverDrive Live Production Control System." OverDrive is a revolutionary Windows-based production control system allowing news, sports and live production to be executed more consistently and efficiently with fewer staff. Using innovative templates, piccons and custom control macros, OverDrive ties all device controls together, allowing a show to be executed from one central graphical interface. OverDrive enables the entire production to be run with a one-, two- or three-person crew instead of the traditional crew of six to eight people. Video effects, robotic cameras, video servers, audio mixers, graphics equipment and more are all under the control of OverDrive during a production.

The award for **Best Technical Article**, Book or Program by an SBE Member goes to Roswell Clark, CSRE, CBNT, of Tampa, Fla. Roswell authored an article titled, Disaster Planning Put to Good Use, which appeared in Radio magazine in the October 2004 issue. Roswell reports about the importance of a disaster plan for broadcasters and how the plan at Cox Radio Tampa, where he is director of technical operations for Cox Radio's six-station cluster, was put to the test during Hurricane Charlie. Roswell is a member of SBE Chapter 39, Tampa Bay Area, and has been a member of SBE since 2000.

Local chapters have also earned awards based on their own achievements. Some categories recognize two chapters, based on their size. Class A represents those chapters whose membership is less than the median chapter size, while Class B are those chapters that have membership greater than the median.

Best Regional Convention or Conference: Chapter 22, Central New York – 32nd Annual Broadcast & Technology Expo; Conference Coordinator: Tom C. McNicholl, CBTE

Best Chapter Newsletter (Class B): Chapter 24, Madison, Wis. – Newsletter Editor: Michael J. Norton, CSTE, CBNT

Most Interactive Chapter: Chapter 5, Atlanta – Chapter Chairman: William P. Magliocco, CPBE, CBNT

Best Chapter Frequency Coordination Effort (Class B): Chapter 54, Hampton Roads, Va. – Frequency Coordinator: Ted Hand, CPBE

Best Chapter Website: Chapter 54, Hampton Roads, Va. – Webmaster: Ted Hand, CPBE

The following awards were determined using statistical information based on Dec. 31, 2004, figures on file at the SBE National Office.

Most Certified Chapter (Class A): Chapter 117, Palouse Clearwater, Idaho – Chapter Chairman: Steve Franko, CBNT; Certification Chairman: Dave Brawdy, CPBE

Most Certified Chapter (Class B): Chapter 131, Inland Empire, Calif. – Chapter Chairman Robert G. Dawson, CTO, CBNT; Certification Chairman: Paul E. Claxton, CPBE, CBNT

Greatest Growth in New Members (Class A): Chapter 125, Mississippi – Chapter Chairman: Donnie B. Driskell, CSTE, CBNT

Greatest Growth in New Members (Class B): Chapter 56, Tulsa, Okla. – Chapter Chairman: Raymond E. Klotz, CPBE, CBNT

Highest Member Attendance at Chapter Meetings (Class A): Chapter 133, Buffalo, N.Y. – Chapter Chairman: John L. Merrill

Highest Member Attendance at Chapter Meetings (Class B): Chapter 118, Montgomery, Ala. – Chapter Chairman: Larry J. Wilkins, CPBE, CBNT

Award recipients will be recognized during the SBE National Awards Dinner, which will be held during the SBE National Meeting taking place Oct. 19-20, 2005, in Grapevine (Dallas/Ft. Worth), Texas. The National Meeting is being held in conjunction with the Broadcast Engineering Expo (BEE) Regional Convention, sponsored by SBE Chapter 67, North Texas.

The SBE has more than 5,200 members in 109 chapters across the United States, as well as members in 30 countries. Most chapters meet monthly and offer educational programs and an opportunity to network with their peers. SBE also offers the largest and most accepted certification program for broadcast engineers, operators and technicians.

For more information about the SBE or the SBE National Awards SBE visit their website at www.sbe.org.



Columbia Square to go Away

The show will go on for Hollywood's first radio station, just not in Tinseltown and their television counterpart will be moving soon too.



Eighty-five years after going on the air, KNX radio, a 50KW dynamo, ended its run at Los Angeles' historic Columbia Square broadcast center early in August. The station relocated to its new Miracle Mile studio southwest of Hollywood which leaves Hollywood without a radio station. Over the years, Hollywood has been home to 68 radio stations.



Hollywood has also been losing its television stations. Once upon a time, it had up to nine TV facilities, but in the last few years, five TV stations have left for other parts of the Los Angeles area. Columbia Square has also been the home of KCBS-TV (once KNXT) and they will also be relocating soon to Studio City, leaving KTLA-TV and KCET-TV as Hollywood's remaining television stations.



The radio and TV stations, which were once independently owned, are mostly owned by corporations that see a financial incentive in consolidating operations.



According to the PR folks at the various broadcast facilities, the radio and TV buildings in Hollywood are old, making it hard to conform to the latest technology. The truth to be said would make one wonder if the dirt isn't worth more than what is built on it.



Still, the loss of radio and TV operations represents the end of a golden era. Those in Southern California can fondly remember when hundreds of fans would line up outside the various studios to see live shows featuring the likes of Jack Benny, Art Linkletter, Burns and Allen, Orson Welles and Jackie Gleason. In that era spanning the 1940s and 1950s, all four radio networks (ABC, CBS, Mutual and NBC) had



Hollywood studios within steps of each other around Vine Street, which was known as "Radio Row."



NBC was at Sunset and Vine, now in Burbank. ABC was across the street on Vine, now in Glendale. Mutual was also on Vine, but no longer exists and never was a television network. CBS' Columbia Square was on Sunset, but as television grew, the network part of CBS moved to facilities at Fairfax and Beverly, calling it, Television City. There was a time when that part of Hollywood was a very busy place.



Digital TV: Tech sees new uses in old spectrum

By: Grant Gross, IDG News Service, Washington Bureau

A two-decade debate in Washington, D.C., over the television spectrum now occupied in the U.S. by some analog TV stations may come to an end this year, with IT vendors and broadband users the beneficiaries.

Since broadcasters began lobbying the U.S. Congress for digital spectrum in 1986, IT vendors have identified enticing uses for the analog spectrum that TV stations would give up in a transition to digital TV, often called DTV. Since then, Congress and the U.S. Federal Communications Commission (FCC) have pushed all U.S. TV stations to give up analog spectrum for digital, but the transition has stalled over policy debates and the lack of a firm deadline.

Digital transmissions take up a narrower band of frequency than analog signals, freeing up some spectrum for other uses. The FCC has reserved parts of the so-called upper 700MHz spectrum band for public safety uses, but the remaining spectrum that will be freed up by the transition to digital would be ideal for next-generation wireless data services such as WiMax, and multimedia services for wireless phones, say DTV advocates such as the High Tech DTV Coalition. Many tech companies see potential for broadband growth in that frequency band, with companies planning services such as video and music for wireless phones.

"There are broadband applications waiting in line," said Mary Greczyn, spokeswoman for the High Tech DTV Coalition, which represents companies such as IBM Corp., Microsoft Corp. and Intel Corp. "All of these companies have already been investing a lot of time, money, and energy into broadband applications."

In December 1997, FCC voted to reallocate some frequencies in the band for TV channels 60-69 -- which occupies the upper 700MHz band -- to public safety and new commercial uses, in exchange for the digital spectrum TV stations received, but the transition has been mired in debate for years.

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Digital signals can provide viewers with a better picture, but televisions in millions of U.S. homes receiving over-the-air analog signals aren't capable of receiving digital signals without new equipment.

This year, Congress seems ready to set a firm date for the spectrum transfer. Committees in both the Senate and the House have conducted hearings on a deadline, and Representative Joe Barton, a Texas Republican and chairman of the House Energy and Commerce Committee, has distributed a draft bill that would set Dec. 31, 2008, as the hard deadline for a complete transition to digital television.

Senator John McCain, an Arizona Republican, has introduced his own bill setting the deadline at the end of 2008. The SAVE LIVES Act focuses on turning spectrum over to emergency responders, who say they need more spectrum to improve communications systems. Law enforcement agencies could use the spectrum for day-to-day operations and for mobile data applications that give police and firefights text and high-resolution images.

The National Association of Broadcasters (NAB), in a Senate hearing last week, said it would accept a 2009 deadline after balking at a hard date for years. Already, more than 1,500 of 1,700 U.S. TV stations offer digital signals along with traditional analog broadcasts, NAB says, but tens of millions of analog sets receiving over-the-air signals are still used in the U.S.

Until now, Congress has required broadcasters to give up their analog spectrum by Dec. 31, 2006, but there's a huge exception to the deadline. Broadcasters must give their analog channels to the government only in television markets where 85 percent of homes can receive digital signals.

A DTV transition under the current law could take several years. Because of the big exception to the 2006 deadline, there's been little impetus to convert the millions of owners of analog sets to digital TVs.

A major sticking point in Congress is what to do with all those analog TVs. Cable television customers won't be affected by the DTV transition -- they don't receive over-the-air analog signals -- but an estimated 15 percent U.S. households have TV sets receiving over-the-air analog signals.

While some retailers advertise high definition television (HDTV) sets costing thousands of dollars, US\$50 converter boxes would allow analog TV set owners to receive signals broadcast in digital.

Some lawmakers want Congress to provide a subsidy for analog TV owners getting over-the-air signals, with some in Congress suggesting that only low-income TV viewers should get the subsidy. A \$50-per-set subsidy for all analog TV that receive over-the-air signals would cost about \$3.6 billion, while a low-income subsidy would cost \$355 million, according to the New America Foundation, a Washington, D.C., think tank.

"Why should anyone have to pay to keep their television set working?" asked Gene Kimmelman, senior director of public policy for the Consumers Union, during a Senate hearing on DTV July 12.

But Senator John Ensign, a Nevada Republican, dismissed concerns about analog sets not working. "These televisions are not going to go black," he said. "These televisions just need converters. It's not a cost of any significance, but the benefits are huge."

The debate over subsidies is not the only issue to resolve, however. Owners of local broadcast stations -- those stations often affiliated with major TV networks such as ABC and CBS -- are concerned about whether cable television operators will carry all their digital signals. DTV allows television stations to "multicast" multiple signals on one band, potentially giving viewers many new station options, but cable operators have resisted carrying those additional broadcasts.

Cable operators argue that multicasted over-the-air broadcasts represent potential competition, and they shouldn't be required to prop up the competition by carrying those signals on cable as well. A 1992 law passed by Congress requires cable companies to carry local broadcast signals, but cable operators say a requirement to carry multiple feeds from every local broadcast station would crowd out capacity for services such as broadband and voice over Internet Protocol (VOIP).

But the NAB argues that Congress has long recognized a public benefit for a healthy local broadcasting industry, providing local news, weather and other information. It's in the public interest for Congress to require cable operators to carry these multicast signals and preserve competition between the often national or regional cable companies and local broadcasters, the NAB argues.

"We think the same public interest requirement should still apply in a digital era, in addition to the analog era," said Dennis Wharton, NAB spokesman.

Despite the concerns from broadcasters and consumer groups, backers of a DTV transition hard deadline, including the High Tech DTV Coalition and the Consumer Electronics Association trade group, say the benefits of both DTV and the freed-up spectrum are too important to let the date slide further.

Each wireless tower transmitting in the 700MHz band can cover twice as large a geographic area as a tower transmitting in the 1900MHz band, where many cell phones operate, according to the coalition. That makes the 700MHz better for long-range data services such as WiMax and for rural broadband services, said the coalition's Greczyn.

Coalition member Qualcomm Inc. also plans to use part of the 700MHz spectrum to offer video and audio services over next-generation wireless phones. Parts of the lower 700MHz spectrum are already being used to offer broadband in rural areas such as North Dakota.

Beyond specific applications, use of the spectrum raises a larger issue -- that the U.S. needs to better encourage broadband adoption, said Michael Calabrese, vice president at the New America Foundation. The U.S. has fallen to 16th in the world in broadband adoption, and U.S. broadband connections are typically 10 times slower than those in South Korea, Calabrese said in July 12 testimony.

"Today the true threat to American competitiveness is the lack of affordable, high-speed Internet access for millions of homes and small businesses," he said. "This broadband gap, if it continues, will result in slower rates of U.S. innovation, e-business creation, job growth and technological innovation in an increasingly digital world."



Digital Cinema Initiatives (DCI) Announces Final Overall System Requirements and Specifications for Digital Cinema

Agreement Gives Manufacturers of Digital Projectors and Theater Equipment One Universal Standard in Creating the Next Generation of Cinemas

Digital Cinema Initiatives, LLC (DCI), a limited liability company whose members include Disney, Fox, MGM, Paramount, Sony Pictures Entertainment, Universal and Warner Bros. Studios has completed the final overall system requirements and specifications to help theatrical projector and equipment manufacturers create uniform and compatible digital cinema equipment throughout the United States, it was recently announced by Walt Ordway, Chief Technology Officer, Digital Cinema Initiatives.

"After three years of careful planning, discussion and reaching out to all the various constituencies who make up our industry, DCI member studios are pleased to have reached unanimous agreement on the necessary overall system requirements and specifications for digital cinema," said Ordway. "We now have a unified specification that will allow manufacturers to create products that will be employable at movie theatres throughout the country and, it is hoped, throughout the world. In fact, the specification is being translated for international markets."

"These specifications should provide a common ground to spur innovation and encourage many more players who were previously resistant to invest capital in technology that may or may not have been viable," said Ordway. "And as the market gets more competitive, the price of the equipment and its installation - previously thought to be a major barrier to digital cinema - will become increasingly affordable, to the point where that stumbling block should no longer be of consequence."

DCI member studios and industry leaders hailed this long-awaited development, which will be applicable to both 2K and 4K resolutions.



"Twentieth Century Fox will release all of its theatrical feature film digital content in full compliance with the DCI specification," Bruce

Snyder, President Domestic Distribution, and Paul Hanneman, Executive Vice President Sales and Strategic Planning Twentieth Century Fox International, said in a joint statement. "For the industry to flourish and to provide a smooth transition to an all digital future, it is essential there be one digital distribution and exhibition format. That format is the DCI specification."

"With this essential specification now in place, Warner Bros. now plans that by the end of 2005 we will be releasing our movies in two formats: 35mm film and DCI digital cinema," said Dan Fellman, President, Domestic Distribution, Warner Bros. Pictures. "Having the DCI spec in place is a big step forward in the global distribution of digital films. We look to this standard to be used in our International releases," said Veronika Kwan-Rubinek, President, Distribution, Warner Bros. Pictures International.



"Sony Pictures completely supports the work done by DCI on the digital cinema technical specifications. We look forward to releasing our feature films digitally to cinemas deploying digital cinema systems compliant with the DCI specifications worldwide," said Jeff Blake, Vice Chairman, Sony Pictures Entertainment and President, Columbia TriStar Motion Picture Group, Worldwide Marketing and Distribution.



"The DCI specification represents the right level of quality to ensure that the digital cinema experience remains the ideal way for moviegoers to enjoy films well into the future. We look forward to delivering our films into the DCI digital cinemas in the US and around the world," said Chuck Viane, President of Buena Vista Pictures Distribution, and Mark Zoradi, President of Buena Vista International.



"Paramount embraces the DCI specification for the theatrical exhibition of digital cinema and we look forward to releasing our films in compliance with this standard of distribution," said Wayne Lewellen, President, Distribution for Paramount Pictures. "Exhibition and, most importantly, the movie-going audience are greatly benefited by the work done by DCI and its resulting specification."



"Universal Pictures is pleased that a unified format has come to fruition as this will allow both moviegoers and studios to enjoy the benefits of the digital cinema experience," added Nikki Rocco, President, Distribution for Universal Pictures. "DCI has worked tirelessly to create an approved uniform standard that will provide our industry a level of satisfaction regarding how films are being shown in the digital format."

John Fithian, President of the National Organization of Theater Owners (NATO), stated, "This spec, created over the past three years by DCI with input from exhibitors and vendors, is an important step toward making digital cinema a reality. With this piece now in place, we look forward to working with all the involved parties to achieve our mutual goal - bringing the best possible moviegoing experience to the consumer."

"The ASC is proud to have collaborated with DCI during the development of a final specification for digital cinema," said Richard Crudo, President of The American Society of Cinematographers. "With the future hard upon us, part of that effort involved creation of the StEM (Standard Evaluation Material) film. Besides marking a great milestone in our traditional role as 'guardians of the image,' it also recalled one of the main reasons that led to the start of our organization in 1919. And though the industry may not yet realize what debt they owe this achievement, its significance will be plain to anyone who views a motion picture for many, many years to come."



"This is an important milestone in the advancement of the theatrical motion picture," commented Frank Pierson, Academy of Motion Picture Arts and Sciences president. "In its first hundred years our art form made a forceful universal impression, at least partly because worldwide standards for projecting film were adopted early on. The next hundred years are likely to be similarly affected by DCI's work in defining how digital motion pictures will be presented to world audiences."

Said Jim Cameron and Jon Landau, "All of us at Lightstorm Entertainment are thrilled that DCI has finalized their digital cinema standards. We believe this now opens the door for the roll out of digital cinema, which will revolutionize the cinematic experience for moviegoers around the world. We look forward to presenting our next feature film in 3D Stereo at DCI compliant theaters."

George Lucas and Rick McCallum said, "It's a giant leap forward for those of us who create movies and, perhaps more importantly, for everyone who sees them. We have been advocates of digital cinema for nearly a decade, and this is a day we have long hoped would come. Digital cinema will increasingly become the standard and will change the way movies are made, seen and experienced around the world."

"Standardized digital theater equipment is as significant to motion picture exhibition as DVD was for the home video industry," said John Lasseter, Executive Vice President, Pixar Animation Studios. Mr. Lasseter directed Toy Story 2, the first film in motion picture history to be entirely created, mastered and exhibited digitally. "Even the best film presentation starts to wear out after a few weeks, but with digital cinema the last screening is as pristine as the first. DCI's new universal standard will enable audiences to see Pixar's digitally rendered films with the same consistency of color, detail, and resolution the world over."

"Hallelujah - It's about time!" commented Robert Zemeckis.

"This is a great day for digital cinema with the completion of the DCI Specification. I am looking forward to releasing my films in a manner that reflects my creative intent," added Robert Rodriguez.

Internationally, the announcement was greeted with equal support. The UK National Film Trust released the following statement: "The completion of the DCI specification is a

major milestone for all digital cinema efforts around the world. The NFT's Digital Test Bed (UK) supports and will continue playing an active role in the efforts to see the specification turned into standards that will help make high-end digital cinema a large scale reality in the UK, Europe and in the rest of the world."

"We congratulate DCI in the completion of the digital cinema specifications. This is a significant milestone in the digital cinema development worldwide as it brings us a big step closer to realizing the true benefits of digital cinema. IDA is happy to support DCI's specifications as Singapore can contribute as the Digital Exchange hub to better manage and distribute content digitally," said Mr. KHOONG Hock Yun, Assistant Chief Executive, Industry, Infocomm Development Authority of Singapore (IDA).

International exhibitors also expressed their enthusiasm for this crucial turning point in the implementation of digital cinema worldwide.

"We acknowledge DCI's tremendous work on gathering inputs from the whole industry and now releasing its Digital Cinema Technical Specification," said Laura Fumagalli, exhibitor of the Arcadia Cinema in Milan. "By introducing Digital Cinema equipment compliant to DCI's Specification, Arcadia continues its commitment to offer Italian patrons the best theatrical movie experience."

"The movie-going experience is a special one, but in order to continue drawing large audiences, theatres must outpace competing media," said Charles S. Swartz, executive director/CEO of the Entertainment Technology Center at USC. "DCI's digital cinema specifications not only set the stage for higher quality theatrical presentation, they also help insure the global nature of cinema exhibition for films and countries, large and small. The Entertainment Technology Center at USC is proud to have played a part in DCI's landmark work."

Ordway concluded "We have finally reached a consensus that all of our various constituencies can not only live with, but should also embrace. Studios, exhibitors, and most important of all, the audiences who love movies will now be able to enjoy all the benefits and possibilities that digital cinema offers."

Digital Cinema Initiatives, LLC (DCI) was created in March 2002 and is a joint venture of Disney, Fox, Paramount, Sony Pictures Entertainment, Universal and Warner Bros. Studios. DCI's primary purpose is to establish and document voluntary specifications for an open architecture for digital cinema that ensures a uniform and high level of technical performance, reliability and quality control.



White House Aide Said To Be Top FCC Contender

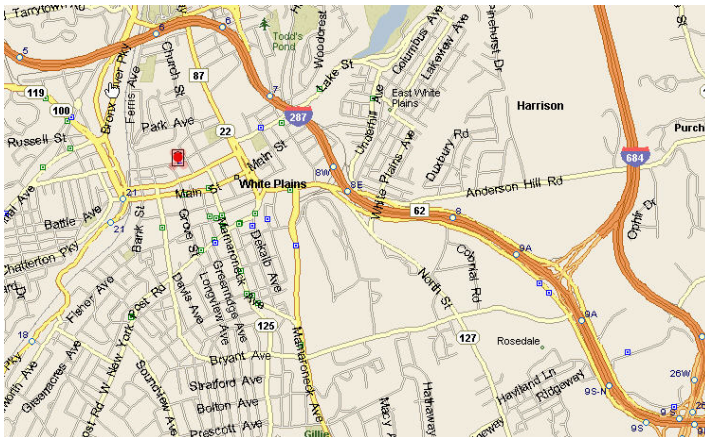
Reuters reports that White House aide Michael Meece has emerged as a top contender for one of two Republican seats on the Federal Communications Commission, according to sources familiar with the matter.

Meece is the deputy director of the White House public liaison office and previously worked as deputy chief of staff to Don Evans when he was US Commerce Secretary during President Bush's first term.

The FCC has been tied with two Republicans and two Democrats since March, when Michael Powell stepped down as chairman.

The other seat to be filled is held by Republican FCC Commissioner Kathleen Abernathy, who plans to leave soon.

SMPTE Headquarters Relocates



As SMPTE continues to be a catalyst to progress, modernity, and technology, the Society has held the belief that for sometime now its headquarters building in White Plains, New York, was outdated, and in need of too much renovation to bring it up to what would be fitting for an organization on the cutting edge.

SMPTE is therefore happy to announce that its headquarters has relocated to a new building in White Plains, with all the modern and upgraded features lacking in the old building. Please change your address book to reflect SMPTE's new address:

3 Barker Avenue
White Plains, New York 10601
Tel: 914-761-1100
Fax: 914-761-3115
www.smpte.org

DTV Beta: Internet TV - DTV Beta: Internet TV on Your Mac
WINDOWS VERSION AND FULL LAUNCH COMING SOON
Internet TV is Open and Independent

DTV is a new, free and open-source platform for internet television and video. An intuitive interface lets users subscribe to channels, watch video, and build a video library. Our publishing software lets you broadcast full-screen video to thousands of people at virtually no cost. The project is non-profit, free and open source, and built on open

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standards. A Windows version of DTV and a full website are well underway and will arrive in the next several weeks.

Check it out at: <http://participatoryculture.org/download.php>



DVRs On the Rise

A report released about six weeks ago says nearly half of U.S. homes will have a digital video recorder in five years, with cable DVRs expected to overtake their satellite counterparts.

At the end of last year, 7 million households had a DVR. By 2010, that number should climb to 55 million, or 47% of all households, according to the market research firm Jupiter Research's report on digital television. (At the moment, DVR penetration stands at about 12%.)

While TV networks and advertisers are nervous about the impact of DVRs, satellite and cable operators stand to benefit from increased deployment in the next two of three years, says Jupiter Research's Todd Chanko, the lead analyst on the report.

"Cable multiple system operators appreciate the DVR as a key customer-acquisition tool and revenue driver while the two satellite operators see ever-more-robust DVRs as their answer to video-on-demand," Chanko said in a release.

The report also predicted that cable DVR homes would surpass satellite DVR homes in 2007, despite satellite's current lead in deployment.

The number of homes receiving and watching HDTV will increase from 10 million in 2005 to 69 million by 2010, the report states-hinting that current HD production will not meet future demand.

"Television networks and pay-TV operators alike are unsure of consumer demand for HDTV," Chanko said. "Behind closed doors, the executives are still measuring the real costs to produce and distribute HDTV against the benefits. That's why there are only 26 hours of HDTV programming a day across seven broadcast networks - and almost half of those hours are supplied by PBS."



Ensign Intros Franchise-Buster Bill



Sen. John Ensign recently introduced sweeping and controversial legislation that would eliminate the need for cable, Telephone Company, or any other pay-TV provider to obtain local or state franchises. The Senator says it is designed to "update the nation's telecommunications laws and increase choices for consumers."

Ensign's bill also contains federal consumer protection standards and ensures local governments' right to franchise fees up to 5% of gross video revenues.

His bill is aimed at accelerating telephone companies' entry into the video business without drawing opposition from the cable industry. The legislation was enthusiastically endorsed by the National Cable & Telecommunications Association, the U.S. Telecom Association, and the Consumer Electronics Association.

For the full story, visit:

<http://www.broadcastingcable.com/article/CA630147.html?display=Breaking+News&referral=SUPP>



FCC OKs First Multicast Must-Carry

The FCC has decided to grant broadcasters analog and digital multicast must-carry in Alaska and Hawaii.

Analog must-carry becomes effective Dec. 8 of this year, digital must-carry by June 8, 2007. The FCC did not grant dual must-carry, finding that the analog signal does not have to be carried once the digital must-carry deadline kicks in.

In the contiguous 48, DBS companies are not required to carry local broadcast stations, though if they choose to carry one, they must carry all. Alaska and Hawaii were considered special cases, with remote populations that may not have adequate access to either local TV stations or cable service.

The FCC has already ruled that it did not interpret digital must-carry to apply to cable carriage of all of broadcasters' multicast signals, but instead to only a replication of its primary signal. Broadcasters are hoping to get Congress to give similar direction in a new DTV transition bill teed up for September mark-up.

For the full story, visit:

<http://www.broadcastingcable.com/article/CA6251588.html?display=Breaking+News&referral=SUPP>



Mouse Back in NAB House



ABC Network Cameraman Dale Walsh
Photo: Courtesy of Dale and Kris Tresler

Rejoining NAB are the ABC television network, the company's 10 TV stations and 70 radio stations.

"ABC believes that the best interests of our industry, our company and



ultimately the viewing public can be promoted by returning to the NAB at this time," said Preston Padden, Executive VP/worldwide government relations, for The Walt Disney Company. "With policy differences now behind us, ABC and NAB are once again in a position to work together towards our important common goals,"

For its part, Fox said it had not plans to follow ABC back into the NAB fold. CBS and NBC declined to comment, though CBS is said to have told its affiliates it could be open to rejoining the association depending on its direction under new leadership, including the successor to long-time President Eddie Fritts.

One would never know by attending the NAB convention that any of the networks had ever withdrawn as the badges were very apparent.

For complete details, visit:

<http://www.broadcastingcable.com/article/CA632183.html?display=Breaking+News&referral=SUPP>



MSTV video shows "Neighbor's Static" interferes with DTV reception

If a picture is worth a thousand words, then a video



recently posted on the Association for Maximum Service Television speaks volumes about the likely interference unlicensed radio devices, such as wireless Internet enabled laptops, operating on "vacant" broadcast channels will cause to DTV reception.

The video, "Your Neighbor's Static," shows significant real-world interference to reception of DTV transmissions in a two-story Washington, D.C. townhouse. It starts with a test device emitting control signals below the strength of the FCC proposed limit of 200 microvolts/meter being turned on in the same room as a new DTV set tuned to the over-the-air DTV transmissions of several area channels. The test device simulates out-of-band spill over interference generated by a high power unlicensed device operating on a "vacant" TV channel in a band envisioned for such devices at the FCC and in Congress.

The effect of the interference from the test device varied from DTV channel to DTV channel, but in all instances it was noticeable and unacceptable. Sometimes, the audio portion of a DTV program cut in and out. On other channels, pictures broke up or froze.

Throughout the video, the transmitter and antenna are moved farther away from the DTV set - first into the next room over, then two rooms away, next upstairs into a bedroom and finally to into an adjacent home. In all instances, the interference remained.

The video corroborates research by the Communications Research Center in Canada which found that higher power unlicensed wireless devices "desensitize TV tuners over a

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wide area." According to the video, the research center found interference to DTV receivers up to 78ft from such a device.

The video also shows the same test device generating interference to reception of analog TV transmissions. According to MSTV president David Donovan, the video was prepared to remind members of Congress and policymakers that a spectrum allocation for unlicensed wireless devices that results in more interference in the broadcast band would have a significant detrimental impact on digital sets and a negative effect on the sale of digital-to-analog converter boxes that Congress is relying on to advance the shutoff of analog TV service.

In a worst case scenario, consumers experience interference from such unlicensed devices would think there was a problem with their newly purchased DTV sets, return them to retailers and retard the transition process.

To view the video, visit www.mstv.org



Information & Education

BROADCAST STATION TOTALS AS OF JUNE 30, 2005

The Commission has announced the following totals for broadcast stations licensed as of June 30, 2005:

AM STATIONS	4759	
FM COMMERCIAL	6213	
FM EDUCATIONAL	2585	
TOTAL		13,557
UHF COMMERCIAL TV	779	
VHF COMMERCIAL TV	589	
UHF EDUCATIONAL TV	253	
VHF EDUCATIONAL TV	126	
TOTAL		1,747
CLASS A UHF STATIONS	489	
CLASS A VHF STATIONS	109	
TOTAL		598
FM TRANSLATORS & BOOSTERS	3906	
UHF TRANSLATORS	2669	
VHF TRANSLATORS	1822	
TOTAL		8,397

UHF LOW POWER TV	1604	
VHF LOW POWER TV	494	
TOTAL		2,098
LOW POWER FM	498	498
TOTAL BROADCAST STATIONS		26,895



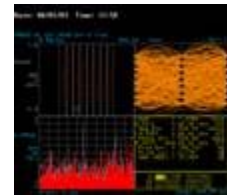
DTV Training

From: Gary Sgrignoli

With the advent of the 2nd Periodic Review last fall setting the post-transition channel election and replication/maximization process in motion, and Congress discussing a December 31, 2008 analog "turn off" date, the last phase of the DTV transition has surely begun!



These day-long digital VSB transmission seminars have been offered around the country for the last 7 years, with more on the way. Some of the cities across the country that have hosted seminars in the past have been Chicago,



Champaign (IL), Milwaukee, Indianapolis, Cincinnati, Dallas, Baltimore, Salt Lake City, Washington DC, Columbia (SC), Des Moines, Kansas City, Minneapolis, Denver, Albuquerque, Phoenix, Atlanta, New Orleans, Orlando, Philadelphia, Pittsburgh, Lansing (MI), Topeka, Boston, Manchester, New York City, Raleigh, Portland ME, Reno, San Jose, Los Angeles, San Diego, Oakland, San Francisco, Sacramento, Portland, Seattle, and Calgary (Canada). The plan is to visit new cities as well as to revisit some of the ones mentioned above.

Upcoming all-day VSB seminars this summer and fall are scheduled for:

Date: Friday, September 16, 2005

Location: WHRO in Norfolk, VA

Time: 8:30 am to 5:30 pm

Hosts: SBE Chapter 54 and WHRO-TV

Sponsors: Cavell/Mertz/Davis, LARCAN, MRC, Modulation Science, Rhode & Schwarz, Sencore, & The Whitlock Group

Date: Thursday, September 29, 2005

Location: KLRU in Austin, TX

Time: 8:30 am to 5:30 pm

Hosts: KLRU-TV and SBE Chapter 79

Sponsors: TBD

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Currently, I am setting up other fall seminars, with on-going discussions with potential hosts in the following cities:

Seattle, WA	(October 2005)
Raleigh, NC	(October 2005)
Denver, CO	(fall 2005 or winter 2006)
Baltimore, MD	(fall 2005 or winter 2006)
Atlanta, GA	(winter or spring 2006)
Birmingham, AL	(winter or spring 2006)

As usual, the modest registration fee for these seminars covers an updated 1-1/4" thick (594-page) detailed seminar notebook as well as lunch. If you know anyone wanting to attend such a seminar (e.g. any local station engineers or business clients in the area), please forward this information to them.

Local TV broadcasters often host these seminars in conjunction with local broadcast organizations such as SBE and SMPTE. These seminars are meant to be "break-even" events for the hosts with the travel expenses and speaker fees paid by corporate sponsors, while the handout books and refreshments are covered by the very modest registration fees (often between \$45 - \$60 per person) charged to the attendees. The seminars often draw between 30 - 60 people (and sometimes more), and one credit is given towards SBE re-certification. Also, the material in this seminar (as well as the new DTV measurement seminar that will join the original starting this fall) will help those preparing to take the 8-VSB Specialist Certification test that will be offered this fall by the SBE. See the national SBE website for more details (www.sbe.org).

If you know of any broadcast-related groups that would want to co-host or co-sponsor any future VSB seminars in their cities, please let me know. The fall seminar schedule is currently being planned. I believe that these educational seminars are well worth the time, energy, and money to attend, especially in this last phase of the DTV transition where so many requirements are in effect for broadcasters.

Also in the planning for later this year is the creation of a new, 2nd type of VSB transmission seminar that focuses on the types of DTV measurements that are desired in the laboratory, at transmitter sites, and at remote field sites. Topics covered will include: signal power & jitter measurement theory, laboratory/Tx site/remote field site measurement methodology (including FCC compliance), what DTV RF parameters to measure, why they should be measured, how to measure them, and what type of test equipment to use (including needed as well as desirable features and specifications). These new DTV measurement seminars (also day-long in length) will be offered starting this fall as well as the usual general VSB seminars (which are considered a prerequisite for these new measurement seminars). They will be operated in a similar manner as the original seminars, again with corporate sponsors covering the bulk of the costs and only modest registration fees for the attendees. "Stay tuned" for more information later this summer !!!

As the DTV transition continues to roll out, the channel election comes closer to completion, and the final date for analog shutoff comes closer to reality, let's all work towards continued success and progress as we move through the rest of 2005.

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Features, History & Opinions

DirecTV Pushing HD Options

Firm Rushes Wide Range of New Offerings to Meet Holidays

By James Hibberd TVWeek.com

With high-definition television set prices in a sudden free fall, DirecTV is scrambling to implement an unprecedented array of technology and programming options in time for the holiday season to attract new HD subscribers. The News Corp.-controlled satellite provider has been launching satellites to expand its HD offerings and plans to soon roll out a proprietary HD receiver capable of processing next-generation MPEG-4 compression streams, which will ease bandwidth constraints.

"Everything our retailers are telling us is that they expect this season to break all records for [sales of] high definition and flat screens, so it's important to have the local [channels] up and new receivers up and in the major markets prior to the holiday season-which we will do," said Bob Marsocci, VP of communications for DirecTV.

Trouble is, cable operators in most markets currently offer less expensive HD packages with more channels than DirecTV, which charges customers hundreds for an HD receiver-a competitiveness gap DirecTV CEO Chase Carey acknowledged during a recent second-quarter earnings conference call. Then there's satellite competitor EchoStar, which this summer gobbled up the HD Voom channels from Cablevision and cut its HD package prices.

"If you look at the comparative offerings today, cable has the better offering, plain and simple, and that's a dangerous place to be," said Bruce Leichtman, president of Leichtman Research Group. "DBS has been so successful getting the high-end subscriber, if they don't act quickly, they can lose them. What's working in DirecTV's favor is the cable operators have not been as aggressive at exploiting their advantages as they should be."

With subscriber growth slowing during the last quarter, DirecTV has recently dropped the price of its premium HD DVR receiver from \$999 to \$699 and then to \$499. When its as-yet-unnamed MPEG-4 receiver debuts, DirecTV will lose a longstanding requirement that customers must own their equipment and offer a monthly rental option-just like cable operators, executives said.

DirecTV also plans to offer HD versions of local broadcast stations, a key programming service for attracting HD customers, available by the end of the year in its 12 top U.S. markets-New York, Los Angeles, Chicago, Philadelphia, Boston, San Francisco, Dallas, Washington, Atlanta, Detroit, Houston and Tampa, Fla.

But implementation of the new services is coming down to the wire.

The MPEG-4 receivers were supposed to be released this fall, but were pushed back. The receivers will hit the first test market in October and the first 12 markets "by end of the year," said Eric Shanks, DirecTV's senior VP of advanced services and content.

ESPN2, a long-sought channel among DirecTV's core sports-fan contingent, is finally coming online Sept. 9. Another key channel, TNT HD, is still absent from the service.

The rollout also means converting about 500,000 existing HD subscribers to the new receivers, which are expected to cost subscribers between \$250 and \$275.

Mr. Shanks would not promise a free upgrade, but he said the transition would be "as painless as possible."

To support the addition of local HD signals and new receivers, DirecTV plans to launch marketing campaigns in key cities, though details are not yet available.

"The holidays are the busiest subscriber growth period in any given year, coupled with cable becoming more competitive," Mr. Marsocci said. "We're going to have pedal to the metal when it comes to marketing product and service."

Looking ahead, DirecTV plans to have 1,500 local HD channels and 150 national HD channels by 2007.



Broadcasters Mass for DTV Carriage Push

This is one of those never-ending battles in which both sides are wrong on some points and right on others. It's impossible to take sides, for an outsider.

Cable certainly would require less bandwidth to support digital multicast must-carry than they need for analog must-carry. With 256-QAM, a complete over the air (OTA) multiplex only requires half of the bandwidth in a cable's 6 MHz band, where a single

analog program stream takes up the entire 6 MHz band. So it doesn't make sense for cable companies to complain on those grounds.

It would instead make a lot more sense for cable companies to support the tuner mandate/cable agreement, so they can transition to digital cable without incurring the continued expense of providing set top boxes (STBs), and support a hard date for analog OTA shutdown, which would encourage the CE manufacturers and the buying public from still buying NTSC TVs in droves.

But broadcasters are looking for a free ride, in the sense that they should be able to "sell" their multicast without having the government force it down the cable systems' throats. It would be far better instead for the National Association of Broadcasters (NAB) to support the heck out of the tuner mandate/cable agreement that works to the NAB's benefit, support a hard date for analog shutoff, and push the heck out their RFQ for a good supply of OTA receiver STBs, perhaps from multiple vendors, with their stamp on it when it meets their specs. Then the OTA broadcasters could compete directly with cable companies that don't carry their entire multiplexes.

And this would also work for DBS subscribers.



Keeping TV Equipment History Alive

Much can be said about Chuck Pharis and his collection of legacy television equipment. Pharis' most recent project is the restoration of a black and white remote truck. The truck, once owned by ABC's WXYZ in Detroit, has fallen on very hard times and bares little resemblance to its original purpose.



Recently retired from ABC Television in Hollywood, Pharis is now dedicating all his time, when he isn't out doing contract video work, to the restoration of not only "the



truck," but many of the television cameras of just about every variety and manufacture you can imagine and other equipment that he has stashed away in a three story building he has built next to his



house in Sylmar, CA. Pharis says he hopes to open it up one day as a museum of television equipment where the equipment actually works. In Pharis' own words: "I have built a television camera museum on the back of my house. I will display all my (155)+ cameras there, and also have a place to restore them. Sorry, I do not give tours at this time."

Pharis had a small fraction of his operational equipment at NAB this year and you may have seen it at the western end on the second floor of the south hall. He had a working TK-30 and TK-31 image orthicon cameras, a TK-1C Indian Head Test Pattern generator

and the original art work that was used to make the Indian Head Test Pattern generator. We did a story about Pharis and his equipment at the 50th anniversary of Disneyland in our last edition http://www.tech-notes.tv/Archive/tech_notes_131.pdf (see page 3). If you haven't visited Pharis' website, it's a must: <http://www.pharis-video.com>



Professionalism

Mario Hieb, P.E. mario@xmission.com

I can't agree that SBE is a "professional" society because broadcast engineering is not a traditional profession, using criteria that define traditional and recognized professions (medicine, law, etc.). Here's why:

1. There are no minimum educational requirements to be a broadcast engineer.
2. Generally, a license is not required to be a broadcast engineer.
3. SBE has a Canon of Ethics, but they aren't enforced and are often ignored.
4. Incompetent engineers work freely with no sanctions or regulation by the profession.
5. Broadcast engineers are not required to learn the traditional principles of engineering, including mathematics, physics, etc.
6. SBE membership and certification are not recognized as prerequisites by state professional licensing authorities.

If broadcast engineers adopted the practices of traditional professions, their status and compensation would go up considerably.

Mario



Scattered thoughts about the job...

Burt I. Weiner biwa@earthlink.net

The following are some of my scattered thoughts based on what I have seen and experienced in radio and TV.

I don't think it's as satisfying to simply swap boards as it was when we had the time and facilities to repair down to the component level. I think it was more satisfying when you could do that. The time to do that is seldom available plus it's not practical to keep the myriad of components on hand plus it's difficult to find them in the local store if such a store even exists nearby. We live in different times and to some degree, a



different industry. It's no longer the technical side of show business. However, this is certainly not the main issue or problem.

I remember when the typical station's Chief Engineer was a much respected, knowledgeable member of the staff and his word was not questioned. He was considered to have the best interests of the station at heart. I rarely see that now.

I see "chief engineers" that are no more than handymen, scapegoats that have no knowledge of the technical side of the business and in all reality should not be allowed in the front door. This is because no self respecting knowledgeable will accept the job, the pay, and its headaches.

What I perceive as the real issue in our industry's workplace is that the engineer is seldom treated as a worthwhile person. They are generally treated as a "necessary evil" at best. "Burn them out and then get another one". I know of many situations where individuals are over worked, 12+ hours per day, expected to accomplish their assigned tasks and are not allowed to put in for any overtime. I think that to a small degree this would be more palatable if the engineers were at least treated with demonstrative respect.

What I see as a most amazing fact is how little a knowledgeable (employee) engineer's advice is generally accepted. Of course there are exceptions but they are indeed the exceptions to the rule. When I see a really knowledgeable engineer being truly mistreated I suggest that they get out on their own. That's easier said than done but it is doable if they have or can develop the business sense. Quite often the same person coming back from the outside is considered to be much more knowledgeable and their advice is generally treated as good advice. Management is much more willing to accept this advice for a handsome fee than they were when they had it essentially for free. Is it because they are now paying handsomely for it? I've experienced this and have seen it quite often.

This various issues have been described over and over on this and other lists. We all know the stories. I don't know the real answer but it is more than just education of a manager or PD. It will need to be an attitude change of the industry which I am sorry to say, I don't see forthcoming. De-regulation driven by the dollar has fostered much of the problem. The problems will continue until there is some kind of an attitude adjustment and as long as the present attitude is accepted and as long as there are those willing to work under these conditions.

Burt



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To the editor of the NY Times

Clive Warner clive@citiria.com

Sir -

The piece "Revolution on the Radio" is puffery rather than engineering fact.

"HD radio" is all about the rich stations getting richer, and to hell with the 'mom and pop' stations.

Ibiquity is locking the US broadcasting system into a monopoly controlled by themselves (they are the only company with the rights and knowledge of a proprietary 'codec' used for transmission). It's as if Microsoft were given the sole right to supply computers to the US.

Thomas R. Ray III, director of engineering for Buckley Broadcasting, is quoted: "In AM, this avoids having signals fade in short tunnels and will prevent noise from electrical motors. It gets rid of the majority of problems with AM radio."

In AM the situation caused by so-called 'HD' radio is appalling. Every station that adopts this system immediately wipes out a good portion of neighbor stations reception areas due to the horrible 'buzz saw' noise that IBOC (HD) creates in adjacent channels. Night-time reception will become unusable.

Next, the radios. There are hardly any in existence. And even those that exist cost a fortune. A minimum price of \$259 for a radio? No thanks. I'd rather buy an iPod and an iTrip and have change left over, AND be able to play what I want, when I want, rather than listen to someone else's tiny restricted playlist with guaranteed-no-naughty-words.

Even in Europe where digital radio broadcasting (DAB) has been around for quite a while, there are no portable receivers. This is because digital receivers require chips that consume lots of power - far too much power for battery-operated devices. So those people who enjoy being able to listen to the radio on portable devices will turn to iPods and the like. Radio audiences will decline even further.

Radio listeners have been deserting the medium because of poor programs, often originated from 'voicetracked' studios hundreds of miles away. They're sick of the blocks of advertising, the restricted playlists, the payola. 'HD' will be the final nail in radio's coffin.

Clive)



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Where is the next generation of engineers?

It's hard to attract young people to a career that requires potentially 24/7 work, or at least being on call; few really free vacations; dubious benefits; and a salary that barely makes a single person a decent living. Schools that train broadcast engineers are few and getting fewer. Plus, broadcasting is no longer "cool" the way it used to be. With radio listenership declining in favor of things like iPods, it's a wonder ANYONE is interested in becoming a radio Engineer.

Jerry Mathis thebeaver32@hotmail.com
Clear Channel Radio, Tupelo & Meridian MS

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It seems to me that many are coming out of the IT world, as broadcasting moves into the age of networked audio and complete TCP/IP based facilities. Not sure if there are anymore schools that even teach broadcast engineering.

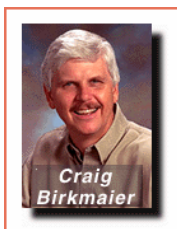
Sadly, broadcasters stopped trying to recruit good engineering talent, once the FCC dropped the requirement of the first class radiotelephone license. That appears to be where the line was drawn in the sand. Since a broadcast facility could employ anyone with a technical background, this reduced personnel and wages.

Equipment in the 1980's was the first era to be viewed upon as "trouble-free" (well sort of) and this further hurt engineering. Many radio stations figured that their transmitter would play on without the need of a fulltime body to oversee it. This reduced good engineering jobs even more, and many of the well-known engineers were either downsized, or they saw the writing on the wall and left before getting cut.

The days are long gone where an interested "kid," who loved the technical parts of radio, would hang out at a station in hope of getting the chance to do something/anything. That was one way to get in the door. Today, what do stations have to offer, outside of taking care of a cluster where you're working non-stop 24/7/365.

I think part of this issue is what is, or would be, attractive to working as a broadcast engineer? What is the appeal?

-Frank Foti
Padrino padrino@telos-systems.com



Different Times, Different Culture?

Craig Birkmaier craig@pcube.com

Newscorp appears to be moving rapidly to develop an enhanced presence on the Internet, as the company seeks to leverage the

increasing adoption and higher speeds of broadband connections here in the U.S.

The following Business week story (link below) provides some interesting statistics and insights about the News Corp strategy. This makes one wonder what is different this time around. The fallout from the failed AOL/Time Warner merger has finally settled, with THAT company apparently trying to distance itself from the notion that television assets can be repurposed for the Internet.

Perhaps the times have changed enough to justify News Corps move to broadband, or perhaps Murdoch has better control over his troops, and can put their energy to positive use, as opposed to the civil war that broke out when AOL tried to influence the Time Warner culture.

This should be interesting to watch.

http://www.businessweek.com/technology/content/aug2005/tc20050816_5029_tc024.htm



HD standards conversion

Mark Schubin tvmark@earthlink.net



Some of you may have seen something I sent requesting information on motion-compensating HD standards conversion.

I was hoping for a list of facilities that provide it. I got something quite different. I'm astonished by it.

Some background:

The earliest standards converters were simply format converters. They went between the UK's then 405-line TV and Europe's 625-line, both at 25 frames per second. When the U.S. wanted in, some form of frame-rate conversion was required.

One technique (used by Bosch) involved aiming a camera of one standard at a screen of another. The earliest digital converters simply dropped or repeated fields. Some attempted a crude interpolation between fields.

Then came the motion-compensating standards converters: the AVS Cyrus, the Snell & Wilcox Alchemist with Ph.C., the Vistek Vector with VMC, and a Thomson unit the designation of which I can't remember. These looked at the motion, estimated what the images would be at the appropriate field times, and created those fields. Today, motion-compensating standards conversion is common.

I figured HD motion-compensating standards conversion would be less common, but I wasn't expecting nonexistent. I've been referred to three possibilities:

1. HD standards conversion that's NOT motion compensating.
2. Down conversion to a motion-compensating standards converter followed by up conversion.
3. Slowing 25 fps to 24 and converting it to 29.97 fps via 3-2 (leaving everything 4% long and off pitch).

So, I'd very much like to hear if I'm way off base, and there are (non-laboratory-prototype) standards converters around that can go from 1080i/25 to 1080i/29.97 and vice versa or have we come this far in HDTV without any motion-compensating standards conversion?

(FYI, the Digital Vision - Vistek unit isn't expected until next year).



ADS Tech's New NAS Drive Kit Makes Sharing Files on a Network a Snap -- Even Over the Internet

Low-cost, Easy-to-Install Solution Becomes the Digital Hub for
Wired/Wireless Home and Small Business Networks

ADS Tech www.adstech.com announced today a new Network Attached Storage (NAS) Drive Kit. The kit is a 5.25-Inch drive enclosure that converts the user's own 3.5" Ultra ATA hard drive into a NAS device for instantly sharing data, photos, audio and video across a home or office network. Offering functionality previously only available with equipment costing many times the price, the kit can be used as an instant network server, an FTP or Web server or a data back-up server. It also supports the BitTorrent protocol for peer-to-peer file transfers.

With the kit, consumers and small businesses can choose the drive size that meets their requirements and can add it to a wired Ethernet or Wireless 802.11 G network without opening the PC. No user configuration or knowledge of IP addresses is required. An auto-discovery feature automatically adds the NAS device to all attached clients upon connection to the network. Easy-to-read LEDs display status such as Power, Network Activity and Drive Activity.

"Today, homes and offices can easily have hundreds of Gigabytes of documents, photos, music, recorded TV shows and movies," said Mike McCoy ADS Tech President. "With a NAS Drive Kit, even a novice can instantly create a digital storage jukebox that can be accessed by any PC on the network. Adding the NAS Drive Kit to an Ethernet-based home network allows users to share files and to gain "always-on" access to data, regardless of whether or not other computers on the network are active."

When used as a personal web server family members, the NAS Drive Kit enables schools to provide faculty and students with their own server space for personal Web sites. In some instances, students can even use the NAS Drive Kit server to turn in materials. Consumers, schools and small businesses can also use the web server to access their files when they're away from home or the office. When used as an FTP server, the NAS

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device provides consumers with an easy way to share photos and home videos; schools can share research and students can obtain course materials online. With support for the BitTorrent P2P file-sharing system, NAS Drive Kit users can take full advantage of the faster downloads available with this protocol for large data, audio and video files.

Measuring only 5.24"(H) x 8.75"(L) x 2.375"(D), the compact kit fits easily on a desktop.



Beta Hunger, Plugging the HighDef Holes, Mobile Grows & More

Andy Marken andy@markencom.com

Microsoft once again proved that the most valuable word in the advertising world is "FREE!"

With their usual aplomb they said they were finally going to release Longhorn. But since they have missed so many target dates for the product, they decided they better change the name to Vista. Since it was now a "new"/different product they would only be able to rollout a beta product. And that they would only let people who had no lives take a copy off MS's hands...for free.



Every tech editor/reviewer worth his/her salt has a copy, has spent hours rebooting it and writing about it. Every 3rd party software engineer has his/her copy. Every 12-15 year old geek has his/her copy. One copy each was downloaded in China, Russia and India.

People are writing about and bitchin' about what it has...what it doesn't have...what it should have...what it should eventually become.

It is brilliant marketing!

They tell you right up front it isn't very interesting and there's not much to it. But ask you to waste your time tell them exactly what you'd like it to ultimately look like, feel like, act like and be. Like the infamous Apple Lemmings ad all of the technical dignitaries rush forward to prove that...well to prove something.

MS will take all of the valuable research and development work you provide, analyze and prioritize it at the Redmond campus, add the top 10, put out another beta for these folks to test, review and provide feedback on.

After billions of column inches and 10s of thousands of free techie testing and detailed analysis a final gold copy of Vista will be released in 2007???

Hundreds of millions of licenses will be sold. Millions will be copied. We will declare that everything has to run on Vista. Because that's what "everyone" is using!!!

At that time we'll have the same conversation we had a few weeks ago with the president of a PC User Group..."Does the software run on Win 98 because that's the OS a lot of our members use?" And..."Can you burn CDs with it because many of our members use Adaptec CD Creator?"

The industry is so far ahead of the mainstream we often forget that ordinary mortals are where the real profits lie.

Don't think so?

Let's look at the numbers:

- In the U.S. there are about 150 million households and worldwide what 8-10X?
- PC sales WW this year - about 199 million
- U.S. homes with broadband - '05 - 42.3 mil; '10 - 77.6 mil
- WW DVD recorder sales in '05 - 21 mil
- WW DVD drive sales in '05 - 63 mil
- HDTV sales WW - '05 - 15.5 mil; in '09 - 52 mil
- 85% of U.S. homes have at least one DVD player
- Cellphone sales WW in '05 - 750 mil
- U.S. installed base of audio players (iPod, etc) - '05 - 41.6 mil; '09 - 67.9 mil

Panasonic reportedly has 60% of the plasma TV sales. Sony has 60% of the game system market. InterVideo's WinDVD has about 150 million users worldwide. There is an estimated 15 million video post protection seats (HW/SW system) in the world.

The collective industries (PC, CE) are cherry picking. They sell the early adopters and the community influentials. These in turn sell the risk-takers. Slowly and painfully the products move to the safe-buy folks.

The industry's marketing folks follow the phone solicitation and spam/phishing rules of engagement - hit enough households or PC screens and you'll make enough hits to make it profitable. Then they focus on selling those same folks more neat "stuff" and show how quickly we're penetrating the market. Ultimately, they drop the price to the point where it becomes an impulse or "what the H***" buy."

Explain, inform, educate? Who has the time or the desire? In our "leave no child behind" climate we've found that this takes time and money. So, let's just skim the cream off the top and then move on to the next cup (generation of technology).

Let's use another example near and dear to our heart...DVD.

You read the results of the BD and HD "third party" consumer studies done among early adopters. Surprise...each won their respective study.

But look deeper:

- Which do you like, Blu-ray or HD-DVD? 58% said Blu-ray
- What is the difference between DVD+, DVD-, DVD-RW? 58% didn't have a clue
- How do you program your VCR? Surprise...58%
- Which do you like, HD DVD or BD? 47% liked HD
- If two separate incompatible formats are available which will you buy? 45% will sit this one out

But by the time Hollywood has its way with the standards and Congress you may not care if either technology emerges....

What Neither Said

Content owners sit in both camps. Their participation has nothing to do with supporting one format...or the other. What they don't want is another CSS fiasco. They are covering all of the bases before content is made available. They are working to ensure unauthorized copying, playback and distribution of HD content.

They have and are working on copy protection schemes to cover every scenario!!! HD contents will include copy control information. Before the start of recording, copy control information within the digital broadcast signal is detected. If copying is allowed, (after content authentication interactivity occur as explained later) the contents and copy control information are encrypted and recorded on the disc. During playback, the recorded contents and copy control information will be decoded and output only from a device on which the contents protection technology is installed. High Def broadcast content will be protected with a 128-bit key that will change hundreds of times during playback. Unique ID code will be required on each disc (and disk) and each legal recorder/player will have a device key and RKB (renewable key block) the content protection technology will be implemented in the interface that will output playback content. TV sets will have to be equipped with a HDMI digital interface if you are going to enjoy content in the High Def format or the TV will downgrade the image to 480p. Recently perpendicular recording was announced for hard drives that will first be used in the very small (1-1.8-in) drives. Hollywood is now looking at how they can dictate, legislate or manage DRM (digital rights management) on the high-capacity drives that will be implemented in portable devices - AV players, multi-purpose cell phones, notebooks, huge capacity TV recorders. You know Hollywood is already holding "strategy" meetings at Seagate, Hitachi, Maxtor, WD and Toshiba. Can't wait to see the new toys at January's CES!

With the recent Grokster win under its belt, Hollywood, the RIAA (record folks) and IFPI (International Federation of Phonographic Industries) continue to press their "sue the bastard!" strategy which is having an effect at the manufacturer, portal, software and consumer level. The gun-to-the-head approach has corporate attention.

More importantly, consumers are showing that they are interested in doing the right thing without the threat of being drug into court (oh sure there is probably some concern but...).

Mobile Everything...Maybe

Our household is like yours - "typical." We all are increasingly connected but online activities vary...it isn't all music downloads and stealing videos.

For us, the laptop is a business tool)...staying in touch. For us, the longer battery life, the better. High-speed and WiFi access...don't even ask. Our wife uses her phone/PDA tracks the stock market with fervor and has been known to go online in a store to comparison shop. Our son goes on a daytrip with his MP3 player, BlackBerry and cell phone. Our daughter is really into IMing, uses the camera in her cell phone regularly

It's typical use of technology in a technology hotspot. But hotspots aren't the ROW or the sale of PC and CE products would more closely parallel census numbers.

Despite the hopes and fears of Hollywood, their content doesn't seem to have the wholesale appeal and/or danger of being sent and downloaded everywhere. The early adopters have played with video downloads and found them either less than exciting or disruptive to their multitasking. News, music, personal contact...that's a whole different ballgame.

While the RIAA may take credit for people increasing the volume of legal music downloads (it has tripled this year) but the fact is the new services have gotten better at their offerings and payment options. It's no wonder that Apple is rumored ready to launch its own cell/iPod and the mobile telecommunications firms are in heavy discussions with the content providers to get their piece of the music download pie, but storefronts are not in danger of going out of business because most of us will continue to buy CDs.

Video download is immensely popular in Japan, slightly popular in Europe and has been greeted with less than enthusiasm in the U.S. According to a recent In-Stat report only about 1/8th of mobile phone users are interested in buying mobile video content and 2/3rd weren't interested at all. Not that it is anything to sneeze at because customers will go from this year's estimated 1.1 million to 30 million in 2010. But that's still way short of the number of people who want to download music.

Two areas the industry will have to address sooner rather than later are the growing interest in online gaming and gambling. Lots of honest and unscrupulous folks are ready to meet the demand but how do we manage age verification and monitor problem gamblers when we are having such a difficulty in controlling identity theft?

If mobile device manufacturers, software producers and P2P providers don't solve it you can bet governments will !!!

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More from Marken [andy@markencom.com](mailto:andy@markencom.com)

-- Next Gen - The Public Be Damned! -- William Henry Vanderbilt  
-- H.264 - If the people have no bread, let them eat cake - Marie Antoinette  
-- You - The jackals are fighting over who gets the biggest slab of meat off the suckers - author unknown

Next Generation or "Hi, I'm From the IRS & Here to Help You."

Suddenly we can't wait for blue laser technology to arrive so we can get beyond the war of words to real products!

Imagine - 5x the storage capacity, sharp, brilliant movies and a real choice - BD or HD DVD. Well yes the two standards are totally incompatible but don't worry they will eventually work out their differences. When they do, you'll get to buy new burners, new players and new media all over again.

Oh we forgot to add that both sides have embraced some super digital rights management (DRM) technology that Hollywood would "like" included before they are going to knock out copies of their stellar masterpieces. The cool and super advanced DRM technologies include digital watermarking, programmable cryptography and self-destruct codes. Don't try and decide which is best for everyone involved - including the consumer - throw them all into the mix!

Don't the three sound like something you just have to buy and put in your home?

Digital watermarking is something they call a ROM Mark. It really only applies to the pre-recorded media you buy - movies, music and games. Don't worry about it because they say you'll never even know it is there. It was used in today's DVD technology but you could easily defeat it just by writing over it with a permanent marker.

Both sides like Advanced Access Control System (AACS) which requires your player to maintain connections to the content provider thru the Internet. If your disc doesn't pass their security check it isn't a big thing. The provider will simply send your player a "self-destruct code" ROM update that will blow up your player. Ok so it won't physically blow up. You simply won't be able to use it until a repair technician reprograms the player. And your entire library of discs that may have been encoded with the broken security may be unplayable also.

That is so cool !!!

Just in case you get past these two hurdles, they've added a third. This is a renewability method that lets content providers implement dynamic updates of compromised code. This is advanced form of CSS (content scramble system) they used before which was defeated in hours after it was released and is called SPDC. Simply stated every time

someone cracks the code the encryption algorithm will "learn from its mistakes" and improve the code. That's a challenge no DEFCON hacker can refuse !!!

If these fail Hollywood has a fallback plan when the 15-year-old kid cracks it all...their lobbyists will put the squeeze on congress to "protect us from ourselves." Don't worry their lawyers will continue to have paychecks by suing every Tom, Ricardo and Harriet who might have an illegal copy.

While both sides (and they will continue down their separate revenue - oops technology paths) are determined to win and have lined up an almost equal number of hardware and content providers. They are quite similar technically but dramatically different in the important areas of media structure and write/read techniques.

H.264 - "Pay no attention to that man behind the curtain." - Wizard of Oz

Our personal life has been so preoccupied with the here and now -- MPEG-2 (the dramatic increase of quality storage/viewing over MPEG-2 - VHS) -- that we missed the big picture. There is another standard out there and it isn't exactly "brand new!"

Contrary with what the blue technology folks would like you to believe, they didn't invent the superior storage capabilities of MPEG-4 or H.264. The technology - an open-standard -- has been around since 1998 and it's being widely used...except in storage.

It's big in broadcast and it's big in wireless content delivery. Truth is H.264 delivers the best compression efficiency for a wide range of applications - broadcast or satellite delivery, DVD, video conferencing, video-on-demand, streaming and multimedia messaging.

It is so good that Microsoft developed their own version - Windows Media Video 9 (previously called VC-9 and now VC-1/AVC). From the industry's perspective H.264 is a great codec because it scales beautifully from mobile content phones/devices up to high-definition broadcast. Since it makes efficient use of bandwidth and the distribution spectrum, H.264 broadcasters have already begun using the technology to send digital TV. It will be an efficient technology for them to use when they begin streaming video across the Internet to your home.

In their leading edge fashion Apple integrated H.264 into the Mac OS and QuickTime early this year and frankly we never even noticed the news. So this past weekend we visited an Apple store to see if it was as good as their web site PR said it was. It is darn good!

Even though you who are already Mac diehards know this, the "real world" doesn't. But the sales person also showed us how we didn't have to wait for blue ray technology to store and play back - high definition DVDs. Mac users simply use Steve's DVD Studio Pro to write the high def content to a regular DVD+/-R disc. It was a COMPLETE high def movie and nothing was lost in the writing...everything was there!

It was almost enough to convert us from Windows to Macs...almost.

The problem was that you could only play the high def DVDR disc on the Mac system since there was no MPEG-4 or H.264 players available. But with the number of chip people making combination MPEG-2/MPEG-4 - H.264 chips it shouldn't be too difficult to produce a combination player that reads the discs as well as a DVD recorder that writes huge volumes to today's DVD media ...should it?

"I'm mad as Hell, and I'm not going to take it anymore!" -- Howard Beale in Network

There have been a number of research reports recently that have come to the conclusion that we aren't interested in upgrading to the next generation of DVD technology - burners/media. But then all too often we don't know what we want.

We didn't know we wanted:

- Stereo instead of mono
- CDs instead of LPs or cassettes
- Stereo TV or HDTV
- DVD instead of VHS
- Digital or MP3 Audio
- Digital instead of Analog photos, film
- We did want:
- Pictures on radio
- Color TV to replace B&W
- We got:
- CD and DVD-Video
- Personalized, Customized Audio, Video
- CD and DVD Photos
- DVD quality TV, time-shifting, archiving, playback

But deep in the back of our mind, we know we don't want someone tell us that the product we just bought is going to be replaced by something yet to be defined, that is marginally better than the product we have today and at a significantly higher cost.

The fact is that the total HD TV set universe is still below 15 million. Only a small percentage of these sets actually receive over-the-air HD broadcasts. According to CEA President Gary Shapiro that in 2004 only 1.5 million integrated TVs and 475,000 set-top DTT receivers were sold to dealers. These include all forms of HD (cable, satellite and DTT). And unless you're really into sports and watch ESPN regularly the chances that the stuff you watch on your HDTV is really HD is pretty slim.

More importantly, what if you have a decent size library of DVD movies that you've bought or are one of those folks who use the NetFlix "Burn and Return" program?

Even if you go to a blue recorder/reader and HDTV set you are still going to be watching DVD (MPEG-2) quality. And will Hollywood upgrade their vast DVD library to High Def or continue to encourage you to buy from the current catalog?

The differences between High Def and DVD aren't as dramatic as they were between DVD and VHS. So the big question will be how much will people be willing to pay for that slight improvement or will there be an option?

Perhaps it might be better to have a low-cost burner and/or recorder that wrote your high def content to your present sub-\$1 disc? Say perhaps writing in MPEG-4/H.264? You know one that could also write your regular MPEG-2 content to the disc you've just begun using regularly?

We expect to see a few of these hit the market this next year. In fact you may see them at the January CES show.

Prices? Heck we don't know. But logic says they shouldn't be too much more expensive than today's DVD burners because the only change is in the combination codec and the unique selling proposition?

Great but you are probably worried that the discs won't play in anything but your PC -like today's Mac G5? No guarantee but if we were the manufacturers we'd offer stand-alone MPEG-2/-4/H.264 players for perhaps \$50. Or perhaps a starter bundle...you know burner and player for say \$200 - \$250. Both have got to be less expensive than the blue technology units will be whenever they hit the stores. In fact they probably won't reach that price point until 2007. Of course the blue media will have to come down a long ways and that will take even longer.

This type of combination MPEG-2 and H.264 would make all of the news releases on "mine is better than yours" a moot point. In the blink of an eye consumers could take back control of their choice as to what they want to buy. After all, you've already lived through the DVD+/- war of words and the upgrade path should be relatively economic, relatively painless.

Of course this doesn't take into consideration the DRM issues that Hollywood has and which are valid if that's your business. You can be certain they will turn their attention to the issue once people start buying the high def burners in quantity. As the Wizard said, "Do not arouse the wrath of the great and powerful Oz."

But this might -- just might -- be a simple solution that the next generation royalty owners overlooked.

Imagine if Apple once again showed the way and QuickTime became the player of choice...Jobs just might be onto something !!!!



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## Obituaries

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### Peter Jennings Dead at 67



Longtime ABC World News Tonight anchor Peter Jennings, 67, died late Sunday at his home in Manhattan, four months after being diagnosed with lung cancer.

The Canadian-born Jennings delivered the evening news to Americans nightly for 22 years. He also briefly served as anchor of the newscast for two years in the 1960s while he was still in his 20s, but became a correspondent in part because he thought he was terrible and would be fired. He returned to the anchor chair in August 1983 to become one of the best in the business for over two decades.

Peter died with his family around him, without pain and in peace, his family said in a statement. "He knew he'd lived a good life," the statement said. Jennings is survived by his wife Kayce Freed, daughter Elizabeth, and son Christopher. "For four decades, Peter has been our colleague, our friend, and our leader in so many ways. None of us will be the same without him," ABC News President David Westin said Monday.

ABC broke into regular programming around 11:40 p.m. Sunday night to report the news. Good Morning America anchor Charlie Gibson, who has frequently substituted for Jennings since April, anchored the 30-minute special report (Jennings himself had once anchored ABC's morning broadcast).

Ted Koppel, who joined ABC one year before Jennings in the mid-1960s, phoned in from Washington and reflected on Jennings, as did ABC News veteran Barbara Walters. Gibson's GMA co-host Diane Sawyer joined him on-set, visibly shaken.

Remarking on Jennings' good looks, Koppel reminded viewers that Jennings was a fresh-faced 26-year-old when he first sat in the anchor chair. Nightline devoted its Monday night broadcast to Jennings.

Walters said she and Jennings often showed up for the same stories and she admired his writing style. Throughout the special, ABC aired interviews with Jennings reflecting on his career and old pictures.

The other networks also interrupted programming to bring the news to viewers. NBC anchor Lester Holt hosted a brief special report, as did CBS News' Melissa McDermott, anchor of overnight newscast Up to the Minute, although New York station WCBS elected to broadcast their own local coverage.

MSNBC and Fox briefly cut in with the story. CNN aired the most extensive coverage, at times simulcasting the ABC feed, a rarity. CNN continued with story, with Carol Lin anchoring, long after ABC returned to programming at about 12:10 ET. Headline News carried the CNN feed.

The Toronto-born Jennings was the son of Canadian broadcasting pioneer, Charles Jennings, who was that country's first national radio news broadcaster in the 1930's. The younger Jennings, who transformed himself from a self-described "bored and lazy" teen to a top-notch reporter and ultimately urbane anchorman, started out on local radio in Canada in 1959, in part because a lot of national news avenues were closed to him. By that time, his father was managing director of the Canadian Broadcasting Corp's English-language network. There was a rule prohibiting relatives from working in the same division.

After a couple radio jobs, Jennings moved into local TV and then, keeping the broadcasting firsts in the family, joined the newly formed CTV Television in Ottawa in 1961, where he was co-anchor of its first commercial national newscast. Jennings joined ABC News in 1964, where within three days of joining up he was sent to Mississippi to cover the civil rights movement.

He almost didn't make the trip south. ABC had approached him about moving to New York along with a colleague. His friend said yes, Jennings declined, in part because he was intimidated by the move to the Big Apple, he told B&C in a 1986 interview. "About six months later I broke out in a cold sweat," he said, and said 'Oh my god, what have I done.'

What he did next was call up ABC President Elmer Lower and ask if the job was still open. It was.

Within a year ABC went on what Jennings described as a "youth kick," and the 26-year-old found himself tapped to anchor the then 15-minute evening news--Peter Jennings With the News from 1965 to 1967. The broadcast expanded to 30 minutes in September 1967, but two months later Jennings and ABC both agreed he should get back out into the field.

Jennings described that early anchoring experience as "I sounded like a young Bill Buckley and I looked like a teenager." If he hadn't quit the desk to become a national correspondent, he says, "there's no question they would have fired me."

The following year, he established the first U.S. television bureau in the Arab world, in Beirut, Lebanon, where he served as chief for seven years.

His coverage of the 1972 Munich Olympics, when terrorists took Israeli athletes hostage, was part of a milestone in ABC News history. In 1975, he worked briefly as a morning anchor for what was then AM America, then headed back overseas to become the London-based chief foreign correspondent.

His tenure on World News Tonight began in 1978, when he co-anchored from London with Frank Reynolds (based in Washington) and Max Robinson (based in Chicago). He was named the program's sole anchor and senior editor in August 1983 after subbing in Washington for Reynolds, who was suffering from cancer and a related illness, and had been forced to leave the broadcast the previous April.

Reynolds died July 20, 1983, prompting the move of Jennings, and the broadcast's headquarters, to New York and the dropping of the multiple-anchor format.

Jennings' appointment was treated at the time as the start of a new era of single-anchored, New York-based nightly newscasts since it followed by only two weeks NBC's announcement that it, too, would drop the dual-anchor format of Tom Brokaw in New York and Roger Mudd in D.C. in favor of Brokaw solo. Rather had taken over from Walter Cronkite in New York 1981.

Over the next two decades, Jennings would cover nearly every major news story and produce special reports on issues ranging from education and health care to tobacco.

Jennings was a former smoker, though he had given up the habit 20 years ago with a little back-sliding around the pressure-packed days of 9/11.

Smoking was one of the issues Jennings had focused on in his reporting career, including as recently as last September, when he did an hour prime time special on the "betrayal and neglect" of the tobacco companies and some public health agencies who didn't fight for anti-tobacco legislation when they had the chance.

Earlier this year, Jennings had been notably absent from coverage of two major news stories--the Asian tsunami and the death of Pope John Paul II. He was last on the air April 5, when he revealed his lung cancer diagnosis to World News Tonight viewers, having missed several broadcasts and a speaking engagement the previous week.

If 1983 was the beginning of the modern anchor era, Jennings' death closes a chapter on the Big Three network news anchors.

NBC Nightly News anchor Tom Brokaw retired last December and CBS Evening News anchor Dan Rather stepped down after an ill-fated 60 Minutes report on President Bush's Air National Guard service.

NBC's anchor-in-training, Brian Williams, took over smoothly for Brokaw and CBS' venerable Bob Schieffer is temporarily manning CBS' desk. Jennings' successor, however, is less clear.

In his absence, several ABC News staffers have hosted World News Tonight, most frequently Gibson and Elizabeth Vargas. But ABC never designated a successor for Jennings.

When CBS asked Schieffer to take over Evening News, he recalls Jennings was the first person to call and offer congratulations. "Peter Jennings was a great friend and a great competitor," Schieffer says. "What I liked most about him as a professional was his love of the news. He was never quite satisfied with what he knew. He always wanted to know more. And, his curiosity made all of us better."

Jennings was the "single best anchor ever," says CNN NewsNight anchor Aaron Brown, a former ABC News anchor. "He was as a reporter very tough and incredibly fair. As a boss, he was incredibly tough and mostly fair," Brown said. "I loved him a lot and will miss him forever."

Jennings was "simply one of the greats" and "the embodiment of the modern anchor," said Williams.

"Peter had a gift for bringing the world into American homes each night with grace, grit, style and wit. We were all the beneficiaries of his insatiable need to explore and explain our globe," Williams said. "We have all been robbed by his passing. Our profession will not be the same. We mourn for his family."

Brokaw reflected on his 40-year relationship with Jennings, whom Brokaw considered a friend as well as a competitor.

"As a competitor, he set the bar high and expected everyone around him to measure up. He made us all better," Brokaw said. "As a friend, he brought his passions and opinions to the relationship so it was never dull. I feel as if I've lost a member of my family."

Rather called Jennings "a fierce competitor, but a principled one." "With Peter on the story, you knew you weren't going to sleep very much because you had to have your eye on him all the time," Rather said. "But you also knew how ethical he was and what a passion he had for news."



## **Synthesizer Innovator Moog Dies At 71**



Robert A. Moog, whose self-named synthesizers turned electric currents into sound and opened the musical wave that became electronica, has died. He was 71. Moog died Sunday at his home in Asheville, according to his company's Web site. He had suffered from an inoperable brain tumor, detected in April



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## **From the Pen of Mendrala**

By: Jim Mendrala

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### **Read My Lips**

Lip-syncing and getting the sound and pictures to match is a real difficulty for Digital Video Broadcasters (DVB). Because the video and the audio signals can go through a different number of encoders and decoders in a viewer's receiver, they can wind up out of sync with each other. Anything more than a few milliseconds is bothersome to viewers, especially if the sound is ahead of the picture. With the new LCD and DLP displays correct timing of the audio and video, from the broadcaster, is a must.

The usual method of checking synchronization requires special equipment and a test signal that interrupts the broadcast. So engineers at Kyungpook National University in Daegu, South Korea, have come up with a way of embedding an easy to read test signal that can be run during normal broadcasts. They embedded the test signal in a part of the video that is not normally displayed on televisions and, similarly, embedded an audio marker in the part of the digital audio signal used for transmitting in multiple languages. They then came up with a way of measuring the difference between the signals with an ordinary oscilloscope instead of the use of special equipment. So broadcasters can make adjustments more frequently and for less money to keep the audio in sync with the picture.

A paper titled "The DTV-Lip Sync Test Using Time Indexed Audio and Video Signals Without Effect on Program", by Chan-Ho Han and Yu-Ik soohng is in the IEEE Transactions on Broadcasting, March 2005, pp. 62-68

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## **Parting Shots**

By Larry Bloomfield

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There are a couple of things bugging me; first is acquisition of Leitch by Harris. The choices we have of vendors are rapidly dwindling. The once prolific broadcast electronics manufacturing industry here in the United States is a mere shadow of what it once was – if you can find the shadow at all. The "Made in the USA" tag is vanishing, if almost nonexistent, from most all broadcast products. This is not to say that the equipment manufactured elsewhere isn't good, it is or it wouldn't survive. If this acquisition of

Leitch by Harris goes through, that would make Harris the "Wal-Mart" of the broadcast industry without the "everyday low prices."



Harris, which was founded by brothers Alfred and Charles G., started out as Harris Automatic Press



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Company in 1895. In 1957, Harris-Intertype acquired Gates Radio, which launched them into the broadcast business. Harris sold its printing equipment business in 1983. By 1995, Harris' centennial, they had become a worldwide company. Today, Harris has four major product areas: microwave communications, television and radio broadcast systems, secure radio communications, and government communications systems.

Leitch has been around for 34 some years and is known for their routers and distribution equipment, signal processing, signal management and monitoring, servers and storage area networks, branding software and post-production editing systems. When they



acquired VideoTek, awhile back, they picked up a complete line of video test equipment. There is little question that the two companies do compliment each other with one rounding out the lines of the other.

My major concern is the number of jobs what will be lost in this amalgamation. The high-priced help at both companies generally pay lip service to how wonderful things will be after the deed is done, but history sure has proved differently. One can only hope for the best.



The other concern bothering me is the cut that some companies get with the sale of each and every TV or Radio device. Case in point: any equipment involving 8VSB will give Korean based LG Electronics a few shekels in their bank account. I can hear the cash registers ringing even now.



In these same genera is the "so-called" HD radio. iBiquity (a word that drives my spell checker nuts) Digital is in the same category. Every radio transmitter and receiver that is "HD" capable will put coins in iBiquity's bank account as well.

I'm not saying that companies who spend hundreds of thousands, if not millions of dollars on research and development of a technology shouldn't be compensated for their efforts. They should, but for how long? I believe it should be until they recover their expenditures and make some reasonable profits, but to go on in perpetuity, isn't right and for the government to mandate these technologies only adds to the dilemma. I haven't mentioned corporate greed and their implacable appetites. I have no answer; just stirring the pot.

So what do you think about all of this?

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