



# *the standard*

News from ATSC, Volume Nine, Issue Two, July 2008

## *A Little Bit of ...*

*The increasingly rapid pace of developments has been matched by almost equally rapid consumer acceptance. Most everyone in the United States, and a surprisingly large percentage of the population in other developed countries, has participated to some degree in the revolution of rising consumer expectations in the field of electronic communications.*

-- **William Henry, 1987**

The *Standard* talked to Mr. William Henry, the first chairman of the Advanced Television Systems Committee and former FCC Chairman, to find out what one of the leading visionaries of the ATSC has been up to the last 25 years.

**Mr. Henry, what have you been doing since you left the ATSC?** I left the ATSC in the late 1980s. I stayed in Washington, DC until 1994, continuing to practice law. At that time, I was 65 years old and I wanted to try something different. I returned to my hometown of Memphis to help create a foundation that promoted minority business owners. But after a few years on that project, I realized my true love was writing.

I authored my first book a few years ago, a biography of Edward Whymper, the English mountain climber who was first to scale the Matterhorn, in 1865. I think with the upcoming 145th anniversary of his climb, a publisher who had expressed interest in the past is re-examining this as a potential successful release.

## ATSC HISTORY

I became interested in Whymper after climbing the Matterhorn myself, at age 55. I was at the ITU in Geneva in 1963 when someone first told me that "even old men could climb it." 21 years later, I returned to do just that.

I'm currently looking for an agent for my second book, which I just finished. This book is about Robert Kennedy and the "Get Hoffa" squad. Tennessee was the first state to convict Jimmy Hoffa, and the prosecutor during the trial was a law school classmate of mine.

**Do you have any specific memories of your time at the ATSC you would like to share?** Early days in ATSC were sometimes frustrating, but very rewarding. They were days of experimentation and uncertainty, exploration and development. I have very fond memories of working alongside Dick [Green] and Bob Hopkins.

## *Inside...*

- Catching Up with Bill Henry
- The ATSC 2008 Annual Meeting in Review
- Remembering Carl Eilers
- Profile: Alan Moskowitz, MobiTV
- New Members

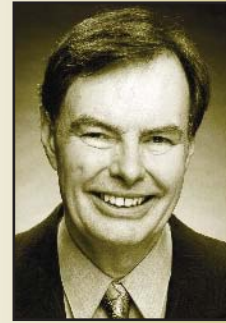
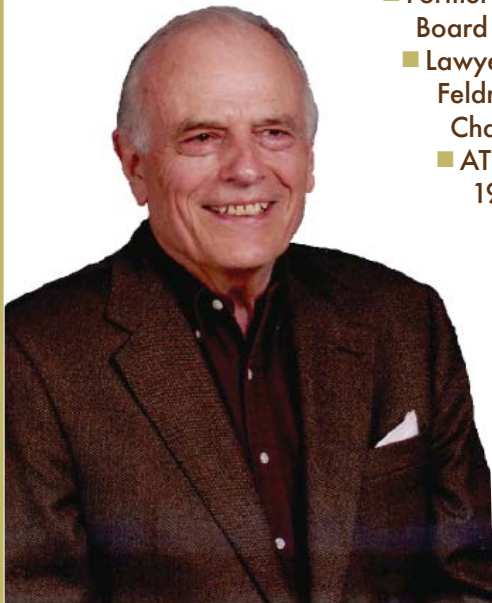
## History... (continued from Page 1)

**Have you been following the DTV Transition?** Only what I've read. I do read anything that is published in the *Wall Street Journal* or *New York Times*, but I don't regularly keep up with the industry. I know enough to know I don't know a lot - how's that for a quote?

The ATSC thanks Mr. Henry for his time in compiling this article. For more about the 25th anniversary of the Advanced Television Systems Committee, please contact Lindsay Shelton-Gross at [lsheltongross@atsc.org](mailto:lsheltongross@atsc.org). ■

### **E. William Henry**

- Undergraduate degree: Yale University
- U.S. Naval Officer during Korean War
- Law degree, 1957: Vanderbilt Law School
- FCC Chairman: June 2, 1963 - May 1, 1966
- President of Management Television Systems, Inc; NYC: 1967-1972
- Former Chairman of the Board of Trustees of Greater Washington Educational Telecommunications Association
- Former member of the Board of Trustees; PBS
- Lawyer with Ginsburg, Feldman and Bress, Chartered
- ATSC Chairman, 1983-1989



*I remember that first meeting [of the ATSC] in May of 1983. Bill Henry chaired, and I sat on the platform next to him.*

*Bill had been Chairman of the FCC during the Kennedy administration. Bill impressed me. He was the first FCC chairman I had ever met. Also, he was the guy who had issued and signed my Ham radio license some twenty years earlier.*

*Anyway, I can't remember much about the agenda of the first meeting, but I do remember parts of Bill's inaugural remarks to the group in the NAB conference room. He recalled that when he first arrived in Washington, in the heady days of Jack Kennedy's presidency, he had noticed the inscription on the entrance to the National Archives. It reads: "The Past is Prolog." His challenge to the group was .... that although there had been many exemplary achievements in television prior to 1983 .... through the ATSC .... the best was yet to come.*

*Looking back, those remarks were quite prophetic in view of how television has advanced since 1983 and the role that the ATSC has played in the digital and high definition revolution.*

**Dr. Richard Green**

**ATSC Executive Director 1983 - 1984  
President & CEO, CableLabs**

# ATSC 2008 Annual Meeting: Wrap-Up

The Advanced Television Systems Committee proudly celebrated the 25th Anniversary of the organization on May 8, 2008. As noted in previous issues of *The Standard*, the very first ATSC meeting was held at the National Association of Broadcasters headquarters in Washington, DC.

The celebration kicked off with a festive cocktail reception on the evening of May 7th at the Pentagon City Ritz-Carlton in Arlington, Va. About 100 people gathered for food, drinks, and conversation; including past ATSC staff members, member representatives, and invited members of the press.

The Honorable Richard E. Wiley, former chairman of the Federal Communications Commission (FCC) and of the FCC's Advisory Committee on Advanced Television Service, was the morning keynote speaker at the event held at the Pentagon City Ritz-Carlton in Arlington, Va. Wiley, recognized as the "Father of HDTV," highlighted the amazing journey by literally thousands of industry participants in the ATSC's quarter-century of technology and marketplace leadership.

Past ATSC Executive Directors Dr. Richard Green, now President and CEO of CableLabs, and Dr. Robert Hopkins spoke to the audience using the organization's favorite medium, HDTV. Hopkins thanked the founders of HDTV for their vision, and Green commended the work of ATSC, emphasizing that "the best is yet to come." Setting the stage for the ATSC celebration was a 20-minute high-definition newscast, developed with the support of Gannett Broadcasting's WUSA-DT, and its anchor-reporter Mike Walter, a documentary newsreel featuring interviews with government leaders and industry luminaries discussing the past, present and future of ATSC DTV in the United States and around the world.

Others offered comments via video as well. Filmed on the show floor of this year's Consumer Electronics show, Mr. Gary Shapiro, president of CEA, said "Twenty-five years ago, CEA realized television was going to be the next generation, and we and our other industry colleagues had a vision. We've realized that vision thanks to the ATSC."



Dr. Robert Hopkins & his motorcycle, via video.

Mr. David Rehr, president of the National Association of Broadcasters, was filmed on the floor of the 2008 NAB trade show. Rehr discussed mobile/

handheld standardization. "Imagine the day when we have 345 million devices with live TV... it's going to be awesome."

Featured speakers included David Donovan, President of the Association for Maximum Service Television (MSTV), who underscored broadcasters' key role in the nation's transition to DTV, and Brandon Burgess, President and CEO of ION Media Networks and Chairman of the Open Mobile Video Coalition (OMVC). Burgess discussed efforts to support ATSC's development of the DTV broadcast standard for mobile and handheld service (ATSC-M/H).

Also in the spotlight was the luncheon keynote speaker, Paula A. Kerger, President and Chief Executive Officer of the Public Broadcasting Service (PBS). Kerger told the audience, "We are taking a strong interest in two ATSC projects – the work you're doing in mobile and handheld and non-real-time platforms. The M/H and NRT standards will allow PBS stations to provide innovative content to viewers when and where they want it. This ability is crucial to the future of broadcast television. We must go where our viewers go."

Speaking to the attendees in HDTV, Bill Jasper, President and CEO of Dolby Laboratories and John Eck, President NBC TV Network and Media Works praised the ATSC for its accomplishments and the importance of its ongoing work. Panel topics will include HDTV, February 2009 preparation and perspectives, the future of broadcasting, and the ATSC strategic plan.

Morning and afternoon panels featured industry experts on a range of topics



## ATSC 2008 Annual Meeting

### Awards



Distinctive honors were bestowed during the annual awards luncheon. **Plaques were presented to the 16 organizations that have been 25-year participating members:** ABC, CBS, CEA, IEEE, MSTV, NAB, NBC, NCTA, Panasonic, Philips, Sarnoff, SMPTE, Sony, Tektronix, Thomson and Zenith.

A highlight of the luncheon awards ceremony was presentation of this year's **Bernard Lechner Outstanding Contributor Award** to **Michael Dolan**. Founder and President of Television Broadcast Technology, Dolan was recognized for his long service to ATSC and his commitment to the development of high quality technical documents. Among other things, Dolan was a key contributor to the development to the ATSC's Data Broadcasting suite of standards, including A/90; and he co-authored the book *Understanding the ATSC Data Broadcasting Standard* (McGraw-Hill, 2001).

**William Miller** of ABC was honored for his three years of service as chairman of the ATSC Technology and Standards Group.

**Joseph Flaherty**, Senior Vice President of Technology for CBS, was recognized his 25 years on the ATSC Executive Committee and Board of Directors. Joe was also awarded the highly coveted 2008 "ATSC Staff Rubber Chicken" award.



of keen interest to digital television stakeholders -- lively discussions commemorating the ATSC's Silver Anniversary, the organization's groundbreaking work over the years, and the ongoing activities focused on the future of DTV.

Peter Fannon, Panasonic Vice President and former head of the Advanced

Television Test Center, chaired the panel, "HDTV, We've Come a Long Way," addressing HDTV's major progress since the 1980s, while CBS Vice President John Orlando chaired the "February 17, 2009 Perspectives" panel, discussing the final phase of the Nation's DTV transition. NBC Universal Vice President and ATSC Chairman Glenn Reitmeier chaired the panel entitled, "ATSC Strategic Plan: Where are We?" looking at the exciting work under way on next-generation standards, including broadcasting to mobile and handheld receivers, file-based content delivery for on-demand consumer viewing and new capabilities for the next generation of large screen HDTV receivers.

"Twenty-five years after our first meeting, we are leading the effort to develop standards essential to the future of broadcasting," said Richer. "We are focused on the development of standards that will enable mobile and handheld service (ATSC-M/H), non-real-time program delivery (ATSC-NRT) and the next generation of services for fixed receivers (ATSC 2.0)."

Under the banner "ATSC at 25: The Digital Foundation for Broadcasting's Future," a fascinating display of historical artifacts included the original prototype Digital HDTV Grand Alliance modulator and demodulator equipment racks on loan from the Smithsonian Institution. The exhibit also showcased early HDTV receivers from ATSC member companies as well as photos and mementos from the Grand Alliance and others.

"This year's Annual Meeting included a fond look back at our accomplishments in the creation of digital television broadcasting and HDTV balanced with the enthusiasm for our ongoing work to enable exciting new digital television possibilities for broadcasters, receiver manufacturers and consumers" said ATSC Board of Directors Chair Glenn Reitmeier of NBC Universal.

Top supporters of the celebration were Silver Sponsor LG Electronics, and Bronze Sponsors IEEE Broadcast Technology Society, Neural Audio, Samsung and VoiceAge. Other sponsors included CBS, Cox Television, Dolby, Gannett, Harris, the OMVC, Panasonic, PBS, Sony, TANDBERG Television and WUSA-9. High-definition displays were provided by ATSC members LG Electronics, Panasonic, Samsung and Sony.

If you have any questions or would like a high resolution copy of any of the photos you see here or online at [www.atsc.org](http://www.atsc.org), please contact Lindsay Shelton-Gross at [lseltongross@atsc.org](mailto:lseltongross@atsc.org). ■

ATSC would like to congratulate the following members for their prestigious industry awards:

ATSC 2008 Bernard  
Lechner Award  
Michael Dolan,  
TBT

Appointed Director  
General, NHK Science  
& Technical Research  
Laboratories  
Keiichi Kubota,  
NHK

## Profile: Alan Moskowitz, MobiTV



Alan Moskowitz, MobiTV

**Alan Moskowitz** is the Director of Strategic Alliances for the Office of the CTO at MobiTV, Inc. where he is responsible for the strategy and execution of the company's transition into next generation network and device technologies.

His education in engineering began at age 12 with what he calls the famous "clock incident."

"My mother proudly brought home a quite fancy analog kitchen timer which had multiple alarms and did some other nifty tricks. I immediately proceeded to take it apart for closer inspection. Upon reassembly I was putting in the master coil spring and wound it too tightly, cracking it. The entire clock exploded in front of my mother's furious gaze. Two weeks of lawn-mowing money later and the clock was replaced."

Alan attended Columbia University to study electrical engineering and economics, receiving a BS and a BA in 1992. In his final summer at Columbia, he was given the opportunity to work in the "TeraNet" all-optical gigabit network lab. "At that point the new HDVS video standard was just being introduced by Sony. They were kind enough to provide us with some HDVS equipment and wanted us to transmit the signal over TeraNet using a dedicated WDM frequency (color). This was my indoctrination with a passion for HDTV," Alan says.

Following a break to travel, Alan returned to Columbia to continue research in video over optical networks focusing this time on digital video. "There was amazing work in signal processing going on at Columbia those days with the MPEG-2 conference and a new research center. I left in 1994 with a Masters in EE."

Alan's first job was at the joint venture between Silicon Graphics, AT&T and Time Warner to develop the next generation of Interactive Television. "Some ATSC members may recall the 'Orlando Project,' developing the first cable VOD system. My function was to productize the video server components for sale to other cable/broadcast environments. It was pretty fun being a kid out of college playing movies over \$1MM super-computers."

After four years with SGI, one of Alan's mentors there told him of his idea for bringing the "Orlando Project" into the consumer electronics space, which led to a group of SGI employees founding TeleWorld, which ultimately became TiVo. "I spent 7 years there doing just about anything and everything. My favorite project was where we purchased weekly infomercial space and send digital data as full-frame closed caption data over the air. This 'snow-cast' was then demodulated on the box and turned into a large bulk of the program guide data. Subscribers never even had a clue that their TiVo's were tuning away and tuning back at 3 AM once a week!"

Alan has been working at MobiTV for almost 4 years. He started as the Director of Product Development, responsible for content ingestion platform and server side components. "The company had about 12 employees when I started, and their designs used off-the-shelf consumer grade components. I helped them interface into the broadcast world using higher quality equipment and fault-tolerant designs." Two years into that effort, Alan moved into his current position as the Director of Strategy and Alliances for the CTO. "I'm basically in charge of trying to figure out what's next for MobiTV. Early in the game I realized that content delivery costs were attacking any margin in the mobile television space, and that to combat this the Europeans were pushing DVB-H very hard. The Japanese provided their solution via the r-Seg model of simulcasting HDTV and mobile over the same spectrum. To me this seemed like a better answer. Soon after, others began thinking the same way and the OMVC and ATSC-M/H was conceived."

Alan is very involved in the S4 Mobile/Handheld efforts, serving as the Vice-Chair of the S4-2 Management Layer. "My career has afforded me the opportunity to dabble in a lot of the areas which are important to the entire S4 effort from general mobile principles to digital video recording to MPEG-2 Transport thus I have a fairly solid understanding of what is going on. The best part of my involvement certainly has been interacting with the true experts: from signal processing to manufacturing to content creation, the world's best and brightest are all present in TSG-S4 and always willing to provide assistance and of course opinions. I really think we're going to get this thing done and done right!"

Alan lives in Oakland Hills, CA, with his wife and three daughters, ages 4, 6 and 8. "Right now the kids are fairly tame, but I am terrified for when they will be 14,16 and 18." ■

the standard

a — t — s c

1750 K Street NW, Suite 1200, Washington DC 20006

The ATSC is an international, non-profit organization developing voluntary standards for digital television. The ATSC has member organizations representing the broadcast, broadcast equipment, motion picture, consumer electronics, computer, cable, satellite, and semiconductor industries.

PRSR STD  
U.S. POSTAGE  
PAID  
 Elizabethtown, PA  
Permit No. 61

Advanced  
Television  
Systems  
Committee,  
Inc.

To join ATSC,  
call us,  
202 872-9160  
fax us,  
202 872-9161  
or log on to  
[www.atsc.org](http://www.atsc.org)

## Welcome Wagon

ATSC would like to welcome it's newest members:

***Association of Public Television Stations (APTS), Atheros Communications, Belo, Mr. Seung Ho Choo (Observer), Ensequence, Expway, Freedom Broadcasting, GoldSpot Media, Gray Television, ICO Global, LIN Television, Media Excel, News Corp, Open Mobile Video Coalition (OMVC), Perfware LLC, Raycom, R. Citta Group LLC, Roundbox, Scripps, Siano Mobile Silicon, TDVision, Titan TV, WRNN-TV, and WGUV.***

These companies have recently become members. We eagerly anticipate their contributions to the DTV standards currently being developed in the ATSC, and we know their participation will have an immeasurable effect on the future of digital television.

ATSC thanks the  
generous sponsors of the  
ATSC Standard Newsletter



## Remembering Carl Eilers

Carl G. Eilers, an active participant in the ATSC and FCC Advisory Committee on Advanced Television Service during HDTV's formative years, passed away June 20. He was 83.

Eilers was considered the "Father of Stereo FM Radio and Stereo Television Sound," for his pioneering work during a 50-year career. He joined Zenith in 1948 as an engineer working on the world's first pay television system, Zenith Phonevision.



Awards for Zenith developments, stereo TV in 1986 and HDTV in 1997.

Eilers was a member of the Institute of Electrical and Electronics Engineers (IEEE), the Society of Motion Pictures and Television Engineers (SMPTE), and the Audio Engineering Society (AES). He served as both a member and chairman for a number of their special committees.

Additionally, he was inducted into the Consumer Hall of Fame in 2000.

The stereo FM standard he co-developed was adopted by the Federal Communications Commission in 1961 and is still in use today around the world.

Through the 1990s, Eilers was a key member of Zenith's high definition television (HDTV) development team that developed the 8-VSB modulation system at the heart of the ATSC DTV Standard.

He served in the United States Navy from 1943 to 1946, graduated from Purdue University with his bachelor's degree in electrical engineering in 1948, and received his master's degree in electrical engineering from Northwestern University in 1956.

Eilers' contributions were honored by two technical Emmy

He is survived by his wife of 34 years, Sandra; son John Eilers; and daughter Janet Ames. ■