



*62nd Annual*  
**TECHNOLOGY  
& ENGINEERING**  
**EMMY<sup>®</sup>**  
**AWARDS**



Lifetime Achievement Award Presentation To

**SIR HOWARD  
STRINGER**

Chairman, Chief Executive Officer and President  
Sony Corporation



ESPN congratulates our friend **Sir Howard Stringer** on receiving the National Academy of Television Arts & Sciences prestigious Technology & Engineering Lifetime Achievement Award.

**ESPN**

# Welcome



On behalf of everyone at the National Academy of Television Arts & Sciences, I am delighted to welcome each of you to an incredible and hopefully indelible evening. Tonight, we are presenting the prestigious Emmy Award for extraordinary achievement in Technology & Engineering. We deeply appreciate all the hard work that has led to these breakthrough standards that we honor tonight and hope that you will savor and enjoy all of the trappings, as this is your time to be celebrated!

In honoring those who have engineered much of the technology we experience in our households on a daily basis, we are especially happy to be honoring Sir Howard Stringer, Chairman, CEO and President, Sony Inc., with the Lifetime Achievement Award for a career that spans several decades of innovation. In addition to having our distinguished honorees and guests, we are doubly honored to have Becky Worley, technology reporter for ABC's "Good Morning America," as our host for this evening's festivities.

Special thanks to all of you at the National Academy who have worked so hard to make this Emmy event a success. Mal Wienges, our 1st Vice Chair, and Alison Gibson, our Treasurer, apparently never sleep as they are constantly on top of everything. Charlie Jablonski, our longtime Technology Chairman, along with his outstanding committee; Linda Giannecchini and Chuck Dages, our Awards Committee co-chairs, have been incredible as always. Carolyn Grippi, Paul Pillitteri, Lauren Saverine and the rest of our national office staff have worked tirelessly to ensure that we could all come together for this celebration.

*Thanks and Enjoy!*  
*Darryl Cohen*  
*Chairman of the Board*  
*National Academy of Television Arts & Sciences*

It is with great honor and privilege that I welcome you all to the National Academy's Annual Emmy Awards Ceremony for Technology. Our honorees represent the best in technological achievement for the television and media profession.

Numerous landmark technical achievements have been recognized over the years including color television, direct broadcast satellite and personal video recorders. This year's achievements in the areas of home consumer electronics, sports production and broadband television continue that tradition of excellence.



The National Academy's highest recognition for individuals in the technology field, the Lifetime Achievement Emmy, is being awarded to Sir Howard Stringer, who takes his place alongside people such as Ray Dolby (Dolby Labs), the inventors of videotape, and Eddy Hartenstein, the creator of DirecTV.

It has been my pleasure to chair these awards for many years, and I have been blessed with a tremendous amount of expertise, work, knowledge and diligence from the NATAS Engineering Achievement Awards Committee. These professionals dedicate considerable time and effort in seeing that these awardees and technologies are the best in the industry.

The support and work of both the Awards Committee, chaired by Linda Giannecchini and Chuck Dages, and the NATAS Headquarters staff make these awards a pleasure to be a part of. I also want to give special thanks for the support of the NATAS Executive Committee and Board of Trustees.

*Sincerely,*  
*Charles H. Jablonski*  
*Chairman*  
*National Academy of Television Arts & Sciences*  
*Engineering Achievement Committee*

## CONTENTS

- 3** Letters from the Chairmen
- 4** Lifetime Achievement Award  
*Sir Howard Stringer*
- 9** Past Lifetime Achievement Award Winners
- 12** History of the Awards
- 14** THE 62ND ANNUAL TECHNOLOGY & ENGINEERING EMMY AWARDS
  - Development and Production of Portable Tapeless Acquisition  
*Avid Technology Inc., Ikegami Co. LTD*
  - Development of Wireless Intercom  
*HM Electronics Inc., RTS Systems Inc.*
  - The Belt Pack: Distributed Amplifier Systems in Live Production  
*Charlie Butten, Bob Cohen, Stan Hubler, Doug Leighton, Clear-Com (HM Electronics), RTS Systems Inc.*
  - 16** Development of Audio Metadata Process for Conforming Audio to the ATSC Digital TV Standard  
*Dolby Laboratories Inc., Linear Acoustic Inc.*
  - Enabling Standards for the Delivery of Television via Broadband Data Systems  
*CableLabs*
  - HD Super Slo-Motion Systems for Acquisition, Recording and Playback for Broadcast Entertainment and Sports Productions  
*EVS Broadcast Equipment Inc., Grass Valley Group, NAC Image Technology Inc., Sony Corp., Vision Research*
  - 18** Blue Laser Optical Systems for Consumer Playback  
*Panasonic Corp., Royal Philips Electronics, Sony Corp., TDK Corp.*
- 21** This Year's Host: Becky Worley
- 22** Acknowledgments

The National Academy of Television Arts & Sciences thanks the sponsor of the 62nd Annual Technology & Engineering Emmy Awards:



Harmonic offers a wide-ranging portfolio of video infrastructure solutions, spanning content production to multi-screen video delivery. The recent acquisition of Omneon, together with the company's previous acquisition of Rhozet, has resulted in an industry leader with broad expertise in video compression, processing and delivery; in video-optimized storage; in production and playout servers; and in media processing and media management.

Harmonic customers include each of the top 20 Fortune 2000 media companies, as well as content creators, aggregators and service providers around the world. Headquartered in San Jose, Calif., Harmonic has R&D, sales and system integration centers worldwide.



## LIFETIME ACHIEVEMENT AWARD RECIPIENT

# Sir Howard Stringer

**Chairman, Chief Executive Officer and President, Sony Corporation**

The National Academy of Television Arts & Sciences is honoring Sir Howard Stringer, chairman, chief executive officer and president of Sony Corp., with the Lifetime Achievement Emmy Award in Technology & Engineering. This award is presented on the opening night of the International Consumer Electronics Show in Las Vegas.

Sir Howard is being recognized as a leading innovator in the communications industry whose contributions since joining Sony include spearheading the adoption of the Blu-ray format and leading the company's high-profile expansion into digital broadcasting, the Internet and computer technology, including 3D TV.

Sir Howard has been chairman and CEO of Sony Corp. since June 2005. He added the title of president in 2009. He is also a representative corporate executive officer of Sony Corp.

Sir Howard also serves as chairman and chief executive officer of Sony Corporation of America, as well as corporate head of Sony Corp.'s Entertainment Business Group.

He is a member of the Board of Directors of Sony Corp. and a board member of Sony Music Entertainment, and he oversees Sony's other music-related holdings in the U.S. Sir Howard is Chairman of the Board of Sony Ericsson Mobile Communications, a 50/50 joint venture of Sony Corp. and Telefonaktiebolaget LM Ericsson.

He joined Sony Corp. in May 1997. Before joining Sony, Sir Howard had a distinguished 30-year career as a journalist, producer and executive at CBS Inc. As president of CBS from 1988 to 1995, he was responsible for all the broadcast activities of the company including entertainment, news, sports, radio and television stations. Under his leadership, the CBS Television Network became the first network to rise from last to first place in one season. In 1993, in what became one of the most chronicled coups in television history, Sir Howard convinced David Letterman to bring his critically acclaimed late-night show to CBS.

*(continued on page 6)*



# Best Buy congratulates Sir Howard Stringer for a lifetime of building a connected world, one pioneering achievement at a time

Intrepid journalist

Award-winning producer

Tireless humanitarian

Visionary technology executive

Transformational global business leader

National Academy of Television Arts & Sciences

Lifetime Achievement Award Winner



# Lifetime Achievement Award



From 1986 to 1988, Sir Howard served as president of CBS News, where he developed several new programs, including the award-winning “48 Hours,”

which continues as a prime-time hit to this day.

During his tenure as executive producer of “CBS Evening News With Dan Rather” from 1981 to 1984, that program became the dominant network evening newscast of its day. From 1976 to 1981, while he was executive producer of the “CBS Reports” documentary unit, it won virtually every major honor, including 31 Emmys, four Peabody Awards, three Alfred I. duPont-Columbia University Awards, three Christopher Awards, three Overseas Press Club Awards, an ABA Silver Gavel and a Robert F. Kennedy Grand Prize.

Among Sir Howard’s award-winning programs are “The Rockefellers,” “The Palestinians,” “A Tale of Two Irelands,” “The Defense of the United States,” “The Boat People,” “The Boston Goes to China,” “The Fire Next Door” and “The CIA’s Secret Army.”

Sir Howard earned nine individual Emmys as a writer, director and producer from 1974 to 1976.

After leaving CBS, Sir Howard was chairman and CEO of TELE-TV, the media and technology company formed by Bell Atlantic, NYNEX and Pacific Telesis, three of the largest telephone companies in the United States, from February 1995 to April 1997.

Sir Howard is the recipient of numerous media and philanthropic awards. The Paley Center for Media (formerly The Museum of Television and Radio) presented him with its Visionary Award for Innovative Leadership in Media & Entertainment in February 2007. He has also been honored by Lincoln Center, Big Brothers Big Sisters and the New York Hall of Science.

In May 1999 he was honored with the UJA-Federation of New York’s Steven J. Ross Humanitarian Award, and in November 1999 he was inducted into the Royal Television Society’s Welsh Hall of Fame. In 1996 he received the First Amendment Leadership Award from the Radio & Television News Directors Foundation in Washington and was inducted into the Broadcasting and Cable Hall of Fame.

Sir Howard serves as chairman of the American Film Institute Board of Trustees and is on the Board of Trustees of the Paley Center for Media. He is also North American chairman of the British Army Benevolent Fund. He is a board member of the New York-Presbyterian Hospital, the American Theatre Wing, the American Friends of the British Museum, the Corporate Leadership Committee of the Lincoln Center for the Performing Arts, and Carnegie Hall. A native of Cardiff, Wales, Sir Howard received the title of Knight Bachelor in the New Year Honours list of Her Majesty Queen Elizabeth II on Dec. 31, 1999.

He holds a B.A. and an M.A. in modern history from Oxford University. He has honorary fellowships from Merton College, Oxford, and the Welsh College of Music and Drama.



Sir Howard has also received honorary doctorates from the University of Glamorgan in Wales and the London Institute.

He is a recipient of the U.S. Army Commendation Medal for meritorious achievement for service in Vietnam (1965-67). He became a U.S. citizen in 1985.

Sir Howard is married to Dr. Jennifer A.K. Patterson, a dermatologist. They have two children.



“Howard and I go back more than 15 years, to the very beginning of the journey that would put television and telecommunications in the same business.

Howard could see that the marriage of broadband networks, digital content and a new generation of consumer electronics would create something far

different, and far larger, than either the communications or the entertainment business alone and would expand our industries beyond the narrow borders of ‘televisions’ and ‘telephones.’ He sensed that the nature of our business was about to change, in ways that would have a profound effect on society.”

— Ivan Seidenberg  
Chairman & CEO, Verizon Communications

# realD 3D

WE RAISE OUR GLASSES  
IN HONORING  
SIR HOWARD STRINGER



[WWW.REALD.COM](http://WWW.REALD.COM)

# Lifetime Achievement Award

*Excerpts from a news story and an interview by Lesley Stahl for CBS' "60 Minutes" with Sir Howard Stringer. It first aired in January 2006, not long after Sir Howard became chairman and CEO of Sony Corp. Reprinted by permission of "60 Minutes."*

Sir Howard Stringer doesn't have the typical CEO resume and doesn't hold an MBA. Does he view himself as a rare bird?

"Odd, I think, is probably the word," Stringer says, laughing. "And I don't have a financial background. I mean...I used to deliberately say that I never want to be in management. I still don't know how I got into management in the first place."

Born in Wales, he lived in a house with no electricity, then won a scholarship to a fancy boys' school in England, and went on to college at Oxford.

At age 22, Stringer came to New York, got a job, and was then drafted to fight for the United States in Vietnam.

"I would use the word 'fought' loosely," Stringer says. "I served." He wasn't an American citizen at the time. Why did he do it?

"Because I'm too stubborn. I was too stubborn to go back," he explains. "It was my great adventure, coming over to America with \$200 in my pocket and looking for work all on my own."

After Vietnam, the work he found was at CBS News in the 1970s producing documentaries. In the 1980s, he ran the "CBS Evening News" with Dan Rather, which he still says was his favorite job ever.

But perhaps more defining is what happened when he was promoted to president of CBS News. In 1987, he oversaw the first layoffs in the company's history; he had to fire 200 colleagues and friends.

"Yet, this is the amazing thing: I don't know anybody who

blamed you. Now how did you manage that?" Stahl asks.

"By communication. I did it myself. I mean, I didn't send a memo to somebody and say, 'Your job is over.' " he says. "And it was emotionally very draining. And it affected me."

He is in a constant jet lag. "Seven hours' sleep is tantamount to a miracle. I celebrate it," he says.

Stringer sees his wife, Jennifer, a doctor, and their two children just a few days a month.

His family lives in the English countryside, and Stringer said during a factory town hall meeting, "I don't see my family very much. My family is you."

Stringer admits there was a sadness in his voice. "This is a tale repeated around the world with all of these globe-trotting business executives," he says. "You don't know quite what I'm inflicting on my children. And so I overcompensate when I'm around them and I tend to walk in with bundles of Sony devices as a sort of social bribery."

If he's going to pay such an awful personal price, he doesn't want to feel like just another cost-cutting CEO, totally transforming the company to fit the model of American industry.

Sony, he says, deserves better.

"This is not a company on its last legs. This is a company with great traditions," he says. "I have to look after some of those traditions because that's why the company was successful in the first place. And I'm not sure that leaping on board an American business model of ruthlessness and viciousness and counter-attacks all the time is a good thing necessarily for somebody else. And, so, taking care of somebody else's culture is part of the joy and opportunity of this job. I have things to learn from the Japanese. And not just the other way around."

## About the National Academy of Television Arts & Sciences



The National Academy of Television Arts & Sciences (NATAS) is a professional service organization dedicated to the advancement of the arts and sciences of television and media and the promotion of creative leadership for artistic, educational and technical achievements within the television and media industries. It recognizes excellence in television and media with the coveted Emmy® Award for News & Documentary, Sports, Daytime Entertainment, Daytime Creative Arts & Entertainment, Public & Community Service and Technology & Engineering. Regional Emmy® Awards are given in 19 regions across the United States. NATAS also presents the National Academy of Television Arts and Sciences Global Media Awards™ which recognizes excellence in the world-wide intersection of digital entertainment and technology. Emmy® Awards given out for primetime programming are presented by our

sister organization, the Academy of Television Arts & Sciences (ATAS). Beyond awards, NATAS has extensive educational programs including National Student Television and its Student Award for Excellence for outstanding journalistic work by high school students, as well as scholarships, publications, and major activities for both industry professionals and the viewing public. For more information, please visit the website at [www.emmyonline.tv](http://www.emmyonline.tv).



# Past Lifetime Achievement Winners

**Ray Dolby, Charles Ginsburg, Alex Maxey, Charles Anderson, Fred Pfof and Shelby Henderson—the inventors of videotape recording**

When the National Academy of Television Arts & Sciences bestowed the Lifetime Achievement Award in the area of

**2005**

Technology & Engineering for the first time in 2005, it honored one of the true landmark developments in the history of media. Mark Cuban, owner of the Dallas Mavericks and founder of HDnet, was on hand to make the presentation as the award went to the inventors of the videotape recorder, Charles Ginsburg, Ray Dolby, Alex Maxey, Charles Anderson, Fred Pfof and Shelby Henderson. The six men, all then working for Ampex Corp., introduced the VTR-1000, later named the Ampex Mark IV, the first practical videotape recorder, to the world on March 14, 1956, at the National Association of Broadcasters convention in Chicago.



*The original Ampex videotape recorder design team with the Mark IV prototype in 1956, left to right: Fred Pfof, Shelby Henderson, Ray Dolby, Alex Maxey, Charles Ginsburg, Charles Anderson.*

62ND ANNUAL TECHNOLOGY & ENGINEERING EMMY AWARD



2010  
NATIONAL  
ACADEMY OF  
TELEVISION  
ARTS & SCIENCES



VERIZON  
CONGRATULATES  
SIR HOWARD STRINGER  
*for a*  
LIFETIME OF  
ACHIEVEMENTS

# Past Lifetime Achievement Winners

## Eddy Hartenstein, DirecTV

The president of the National Academy of Television Arts & Sciences honored Eddy Hartenstein in 2007, saying, “This Lifetime Achievement Award recognizes Eddy Hartenstein’s distinguished career, building DirecTV from its inception into a world-class provider of

**2007**

digital television entertainment as well as directing Hughes Communications’ expansion in commercial satellites supporting the broadcast and cable industries. Eddy’s extraordinary vision and leadership put him at the forefront of the digital revolution and the direct-to-home entertainment industry, and the National Television Academy is pleased to present him with this Emmy Award at the 2007 CES.”



Prior to Hartenstein’s position as vice chairman of the DirecTV Group, he was chairman and CEO of DirecTV Inc., where he was responsible for the strategic planning of DirecTV, the nation’s leading digital multichannel

television service. Hartenstein, who formerly was president of DirecTV, headed it since its inception in 1990. He assembled the DirecTV management team and guided its strategic efforts to develop the business infrastructure necessary to launch the United States’ premier direct-to-home entertainment distribution service.

From 1987 through 1990, Hartenstein was senior vice president of Hughes Communications Inc. In that capacity, he was responsible for expanding Hughes’ acquisition and deployment of commercial communications satellites. Earlier, Hartenstein served as president of Equatorial Communications Services Company in Mountain View, Calif., providing nationwide telephony and data distribution services for a variety of Fortune 100 companies.

Prior to joining Equatorial, Hartenstein was vice president of Hughes Communications from 1981 to 1984. In that position, he directed the marketing and development of the original Galaxy satellite fleet, serving the broadcast television and cable programming industries. Hartenstein joined Hughes Aircraft Company in 1972. Before transferring to

Hughes Communications in 1981, he held a succession of engineering, operations and program management positions at Hughes Space and Communications Company and NASA’s Jet Propulsion Laboratory.

## Ivan Seidenberg, Verizon

Sony Corporation’s Sir Howard Stringer, who is this year’s Lifetime Achievement honoree, came to the podium to present the 2009 Lifetime Achievement Award to Ivan G. Seidenberg, chairman and chief executive officer of Verizon Communications Inc.

**2009** “I would like to thank the Academy for this great honor,” said Seidenberg. “Gee, I always wanted to say that! But it is a great honor, and I thank the National Academy of Television Arts & Sciences and the Academy’s Engineering Committee for choosing myself and Verizon as this year’s recipient of the Lifetime Achievement Award.”

Under Seidenberg’s leadership, Verizon has become a premier network company, providing customers with the most advanced broadband performance. Seidenberg helped form Verizon through a number of mergers and acquisitions, including Bell Atlantic and NYNEX (1997), GTE (2000) and MCI (2006). He also helped create what is now Verizon Wireless in 1999 by bringing together the assets of Bell Atlantic Mobile, GTE Wireless and the U.S. properties of Vodafone AirTouch.

“Verizon is, above all, a network company,” Seidenberg said. “We’ve staked our future on the power of networks—fiber, wireless and global IP—to expand markets, stimulate innovation and help us compete and grow. The benefits of our investment in innovation can be felt across all sectors of the communications, information and entertainment industry. And the really great news is that we are just at the beginning of this innovation curve.”



# CONGRATULATIONS, HOWARD!

You inspire us, enlighten us  
and always entertain us.

**ACTIVISION** | **BILZARD™**

# History of the Awards

## A Tradition That Goes Back to Television's Earliest Days

By Charles H. Jablonski

Chairman, Engineering Committee

The National Academy of Television Arts and Sciences (NATAS), based in New York, has been recognizing Outstanding Achievements in the area of Technical and Engineering Development in Television and Media with the Technology and Engineering Emmy Award on an annual basis since 1948. This prestigious award and ceremony has been the forum recognized by the industry for peer review and awards for the engineering developments in the television industry.



Over the past 60 years, the Engineering Emmy has been awarded more than 300 times to almost 200 television and media technologies. The submission, review, judging and decision process for each annual cycle of this award involves 50 to 60 industry-recognized technology leaders spending several thousand collective hours in their discussion, process and deliberation. These peer judges are at the pinnacle of the media technology profession.

This year's awardees, much like previous years, are a who's who of major players in the broadcast and media industry.

The 60-year legacy of engineering awards has recognized virtually every major technological advance in the media and television industry. From the first awards to KTSL and Don Lee Television for technology used in remote television production, these awards have always focused on technology

and innovation that impact the viewer and viewing experience. The history of the awards parallels every major innovation and development, from color television in 1954 (NBC/RCA) and videotape in 1956 (Ampex/CBS) to the Early Bird Satellite (1965, by Hughes Aircraft), stereo in 1985, and Surround Sound (2002). All of these developments were chronicled by NATAS through the awards.

What would the viewing of TV sports and Olympics be without the introduction of video special effects (1980), slow motion (1985 and 2005), standards conversion (the devices that make European and Asian television viewable in the U.S.; 1968 and 1992), Skycam and Steadicam (2002), in-car camera technology (1998), the now ever-present telestrator (2004), and the "1st and Ten" systems in every major football game (2000). What would TV news be like without ENG (1975/76), Digital ENG (1998) and Satellite ENG (1993)—and would we ever have heard of Ted Baxter (WJM-TV news) without the teleprompter (1999)?

Award winners include companies such as Sony, Time Warner, Warner Bros., IBM, Canon, every major broadcast network (ABC, CBS, Fox, NBC), Texas Instruments, Kodak, the BBC, Home Box Office, Dolby and Panasonic, to name a few.

When the committee cast its eye on the consumer technologies, awards have ranged from direct broadcast satellite and the DVD to the LCD, Trinitron and plasma displays, videotape, the VCR, consumer camcorders, noise reduction, the remote control and the personal digital video reorder (aka TiVo). Improvements that extended the reach of television to all—closed captioning (2004), descriptive video (1990) and PBS (1978 and 1987), with its improvements in distribution and transmission, have been among the most notable.

As the award for the Apollo Color Television system in 1969 demonstrates, all these technologies and awards recognize developments that represent such extensive improvement on existing methods, or are so innovative in nature, that they have materially affected the transmission, recording or reception



# History of the Awards

of television. In considering any of these technologies their application in real-world products or use by consumers is paramount in meeting the test for acceptance and understanding of impact to the industry. Without seeing those moon pictures many years ago, or seeing how “super slow mo” was used in the coverage of a horse race, the Kentucky Derby, it would have been impossible to judge the impact of these technologies. Nor would the technology community have been able to develop and implement any of these advances with the support, dedication and resources of some very creative and forward-thinking production people and talent.

The Academy has also honored several dozen individuals for their unique contributions. They include the inventors of the videotape recorder and direct broadcast satellite (DirecTV), which received NATAS’ first lifetime achievement awards in the recent past, the inventors of noise reduction (Ray Dolby)

and videotape (Mel Sater), and lifetime achievement honors to Ivan Seidenberg (Verizon) and this year to Sony’s Sir Howard Stringer.

Distribution systems such as cable, satellite and Internet-based distribution—all of which now have wide consumer acceptance and use—have also been included in the Engineering Emmy process.

As the television and media business has evolved, and along with it the technologies used and demanded by consumers, the Technology & Engineering Emmys have embraced, and continue to recognize, each of these technological improvements.

## CARNEGIE HALL

*Bravo!* to Sir Howard Stringer on receiving a Lifetime Achievement Award from the National Television Academy.



Carnegie Hall is proud to give you a standing ovation for this well-deserved honor.

# Honorees

## Development and Production of Portable Tapeless Acquisition

The first of seven category awards presented Jan. 6 by the National Academy of Television Arts & Sciences go to two companies for the Development and Production of Portable Tapeless Acquisition.

Technology & Engineering Emmys are presented to Avid Technology Inc. and Ikegami Co. LTD for their pioneering work in solid-state (non-tape) recording in newsgathering—the technology that enabled non-linear editing and digital work flows.

Avid, a pioneer of digital non-linear editing systems for the broadcasting market, has seen its tapeless media architecture hailed as an advancement of the state of the art in television production that gives the company's customers a more reliable, faster and more cost-efficient way to get their productions on the air.

Ikegami, known as a leading broadcast camera manufacturer, continues to develop its products to keep up with and take advantage of the rapid evolution of digital recording media.



The two companies began work on development of a totally non-linear acquisition in the early 1990s—a time when the standard in broadcast video editing was using linear VTR-based systems. In 1997 Ikegami and Avid introduced the Editcam system, the first broadcast-quality camcorder system recording directly to hard disk drives and built on the concept of a total non-linear platform. The Editcam developed by the Ikegami-Avid partnership was the forerunner of today's tapeless broadcasting systems.

“We are delighted to have been recognized for our contribution to the technical advancement of broadcast equipment,” said Naoki Kashimura, Ikegami's general manager for corporate

strategy and marketing. “Based on the vast experience gained with the development and operation of the Editcam, Ikegami has now selected Flash Memory as a suitable recording media for its latest non-linear product range—the GF Series of products—as Flash Memory has now evolved in technology, capacity and is also at an acceptable price.”

## Development of Wireless Intercom

Two companies, RTS Systems Inc. and HM Electronics Inc. (HME), are being honored with the Technology & Engineering Emmy Award for Development of Wireless Intercom. The two companies share the distinction of inventing a technology that has revolutionized television production.

“We couldn't be prouder of this award,” said Mike Hughes, VP and general manager of HME's Pro Audio Division. “It continues a legacy of innovation that this company was founded on. And it shows that our dedication to continually improve on technology for the benefit of our customers has not gone unnoticed.”

The wireless intercom technology developed by HME and RTS changed television production by adding a new dimension to what camera operators are capable of accomplishing outside the studio. In the past they struggled with limited options on shoots where it was impossible to run the wires needed to support communication through cabled intercom. But the arrival of hands-free wireless intercom gave them the same level of communication and control available in a studio setting.

## The Belt Pack: Distributed Amplifier Systems in Live Production

Four individuals and two companies are receiving the Technology & Engineering Emmy Award for The Belt Pack: Distributed Amplifier Systems in Live Production. The honorees are Stan Hubler, Doug Leighton, Bob Cohen, Charlie Butten, RTS Systems Inc. and HME-owned Clear-Com.

The belt pack is the device that made it possible to apply the new wireless intercom technology developed by RTS and HME in the real-world setting. Each of the individual developers, working for different companies, had a hand in bringing to light the equipment that is now produced by RTS and Clear-Com.

“We are absolutely thrilled to be recognized at this highest level by our industry colleagues,” said Ralph Strader, business line manager for Telex & RTS Intercom. “RTS products have always been designed to meet the specific needs of



## Cue the Applause

Dolby would like to thank The National Academy of Television Arts & Sciences for its Technology & Engineering Emmy® Award and congratulate all of the other nominees and winners.



[dolby.com](http://dolby.com)

Emmy photography by Diana Chen. © SF Digital Studio, Inc. Dolby and the double-D symbol are registered trademarks of Dolby Laboratories. Emmy and the Emmy Statuette are the trademark property of ATAS/NATAS. © 2011 Dolby Laboratories, Inc. All rights reserved. S10/23712

# Honorees

## The Belt Pack: Distributed Amplifier Systems in Live Production (continued)



broadcasting professionals, and we are honored that they have become an integral part of operations at facilities around the world. Our wireless intercom and belt pack technologies continue to be developed in close collaboration with our partners working in the field, and we are very pleased to accept these prestigious awards on behalf of these customers, as well as our dedicated team.”

## Development of Audio Metadata Process for Conforming Audio to the ATSC Digital TV Standard

The National Academy of Television Arts & Sciences is awarding two companies with the Technology & Engineering Emmy for Development of Audio Metadata Process for Conforming Audio to the ATSC Digital TV Standard. The honorees are Dolby Laboratories Inc. and Linear Acoustic Inc.

Each of these companies, working with standards established by the Advanced Television Systems Committee (ATSC), developed a portion of the technology that enabled audio processing for the digital television standard in use in the United States today.

“We are incredibly honored to see our work recognized by the NATAS,” said Linear Acoustic president Tim Carroll. “This award represents not only the trailblazing spirit we’ve built into Linear Acoustic, but countless late nights at the work bench, hours of listening intently to our customers, and turning ‘aha’ moments into real products and features. I’m proud of how far we’ve come in this short time.”

Carroll also acknowledged the development work of fellow Emmy recipient Dolby Laboratories under Sound Platform Group director Jeffrey Riedmiller.

“We are pleased to share this Emmy Award with Dolby Laboratories,” Carroll said. “I have many friends there from my pre-Linear Acoustic years, and I would like to offer a big congratulations to Jeffrey Riedmiller and his team.”



oped a portion of the technology that enabled audio processing for the digital television standard in use in the United States today.



## Enabling Standards for the Delivery of Television via Broadband Data Systems

The National Academy of Television Arts & Sciences is honoring a single organization, Cable Television Laboratories, or CableLabs, for Enabling Standards for the Delivery of Television via Broadband Data Systems.



The cable industry’s research and development laboratory, CableLabs is being recognized for its development work on Data Over Cable Service Interface Specification (DOCSIS) 3.0 and broadband video. The technology developed through the efforts of CableLabs enables cable operators to bond multiple cable channels so that hundreds of megabits per second of data may be delivered to consumers. The technology is now being used by cable operators worldwide.

“This is a great honor bestowed upon CableLabs by the Academy,” said CableLabs president and CEO Dr. Paul Liao. “Beginning with the leadership of [former CEO] Dick Green, CableLabs has worked very hard to help cable operators become broadband leaders by establishing this standards-based, world-class technology.”

Founded in 1988 by members of the cable television industry, Cable Television Laboratories is a non-profit research and development consortium whose goal is to pursue new cable telecommunications technologies and to help its cable operator members integrate those advancements into their business objectives.

## HD Super Slo-Motion Systems for Acquisition, Recording and Playback for Broadcast Entertainment and Sports Productions

Five companies are receiving the Technology & Engineering Emmy Award for their work in developing and producing HD Super Slo-Motion Systems for Acquisition, Recording and Playback for Broadcast Entertainment and Sports Productions.

Being recognized for their slow-motion cameras and playback equipment are NAC Image Technology Inc., Vision Research, Grass Valley Group, EVS Broadcast Equipment Inc. and Sony Corp.

NAC has long been acknowledged as a leading innovator in the production of high-speed camera equipment, with a focus on integrated systems featuring high light sensitivity, top image quality, large memory capacity, fast download times and other attributes. “We’ve been fortunate to be able to work with strong




The image features a golden Emmy Award statue, a winged woman holding a globe, set against a dark blue background. The statue is the central focus, with its wings spread wide and the globe held high. The lighting highlights the metallic texture of the award.

# SOMEONE OUT THERE MUST HAVE BEEN LISTENING.

To be nominated for a Technology and Engineering EMMY® Award is an honor. To actually be selected is off the charts. We are humbled to be recognized by the National Academy of Television Arts & Sciences and placed in their select legacy of distinguished television engineering innovators.

And it's wonderfully fitting that we share this moment with our friends at Dolby® Laboratories. Congratulations.

 **LINEAR ACOUSTIC**  
[www.linearacoustic.com](http://www.linearacoustic.com)

# Honorees

## HD Super Slo-Motion Systems for Acquisition, Recording and Playback for Broadcast Entertainment and Sports Productions (cont.)

partners like NHK, ARRI Media, and Fletcher Chicago,” said Kenichi Ueki, president of NAC Image Technology. “With their help, NAC’s high-speed camera systems have been embraced by broadcasters for live coverage of the World Cup events in Germany and South Africa, the Olympic Games in Beijing and Vancouver, and a variety of prominent professional sporting events.”

Grass Valley has seen wide adoption of its LDK 8300 HD Live Super SloMo camera system since its introduction in 2008, with the system seeing action at the 2008 Summer Olympics in Beijing and the 2010 Winter Olympics in Vancouver, along with its current role on “Monday Night Football” telecasts by ESPN.



“This latest recognition by NATAS is a testament to our engineering team in Breda, The Netherlands, and countless others who have made the LDK 8300 such a resounding success within the global production community,” said Jeff Rosica, senior vice president of Grass Valley.

The award for EVS spotlights the company’s production servers, which can be combined with advanced controllers to provide the sharpest solutions for live slow-motion replay and fast turnaround editing. EVS technology is used by broadcasters worldwide, and EVS servers, based on the unique loop recording technology, allow multiple HD audio/video feeds to be recorded simultaneously and played back instantly.

“The company has expended a great deal of time and effort in designing and developing servers that meet the needs of

the most complex broadcast environments,” said Fred Garroy, general manager of EVS Americas. “This award shows that our work has been recognized and approved by the broadcast and production community worldwide.”

Vision Research’s high-definition, ultra-slow-motion technology has had a wide-ranging impact on the broadcasting industry. The company’s digital high-speed cameras are in use at many high-profile sporting events and are capable of recording at speeds of up to 2,700 frames-per-second at high-definition resolutions, with ultra-slow-motion replay that far exceeds the capability of traditional slow-motion cameras. Vision Research’s high-speed digital imaging systems are also in use in industry and science.

“The Emmy Award recognizes our ability to provide viewers with a memorable, entertaining broadcast experience,” said Andy Jantzen, chief technology officer and co-founder of Vision Research. “Our success starts with our customers. We’ve delivered our traditional technology into broadcast applications for many years. Our customers’ suggestions and valuable feedback assisted our engineering team in creating this new generation of ultra-slow-motion technology.”

## Blue Laser Optical Systems for Consumer Playback

The final category in this year’s Technology & Engineering Emmy Awards honors four companies for their work with Blue



Laser Optical Systems for Consumer Playback.

The development of blue laser optical systems was fundamental for the distribution and recording of full HD content on optical discs

at consumer price levels. The honorees for their work in this area are Sony Corp., Royal Philips Electronics, Panasonic Corp. and TDK Corp.

“Panasonic is proud to have developed so many of the key technologies introduced in the Blu-ray Disc format,” said Shunji O’hara, executive engineer, Corporate R&D, for Panasonic Corp. “These are not only optical disc technologies, such as Dual Layer 50GB discs, but also leading-edge audio-visual technologies such as video compression, authoring and 3D.”

With an eye toward the future adoption of high-definition tele-



vision, Panasonic, Philips and Sony began working on a blue laser optical system as early as 1997. The companies joined forces in setting up Blu-ray Disc Founders in 2002, followed in 2004

# Honorees

by the Blu-ray Disc Association. The latter group brought in all of the key stakeholders in the industry to jointly implement a worldwide standard for high-definition content distribution.

“Sony began development of blue laser optical technology in the late 1990s, realized the world’s first high-definition recording on 20GB optical media by using blue-violet laser, and has contributed greatly to the continuous development of the Blu-ray Disc format and the business by releasing a wide variety of Blu-ray Disc devices,” said Jun Yonemitsu, chief distinguished researcher and deputy senior general manager, Home Entertainment Development Division, Sony Corp. “We would like to thank the Blu-ray Disc Association and everyone who worked together to make the format a success.”

Since the early stages of Blu-ray standardization, all four companies, as optical media manufacturers, have been working on the development of recordable Blu-ray discs. High storage capacity, new replication technology, advanced audio and video codecs, web connectivity and interactivity and new authoring



systems were among the key innovations.

“The Blu-ray recordable disc solution addresses the need for HDTV recording [and] storage for large data,” said Hajime Utsunomiya,

general manager, SQ Research Center, TDK Corp. “With the Blu-ray recordable disc, users leverage the benefits of capacity, speed, instant access and removability.”

Added Chris Buma, senior director, program manager, standardization, for Philips Electronics: “Consumers appreciate the high quality that Blu-ray Disc delivers, so they can finally enjoy the full potential of their HDTV. Now, as the Blu-ray 3D format begins to take off, that potential is even greater.”

## D I G I T A L H I G H - S P E E D C A M E R A S

### Emmy® Award Winner



When it's **too fast** to see, and **too important** not to.

The employees of **Vision Research** are extremely proud to be honored by the **National Academy of Television Arts & Sciences** for the technology embedded in our digital high-speed cameras.

We thank the Academy for this award.

And, **our greatest thanks goes to the customers** who were early adopters of the technology and helped us understand the needs and requirements for **ultra-high-speed broadcast solutions.**

Learn more today,  
[www.visionresearch.com](http://www.visionresearch.com)

100 Dey Road, Wayne, NJ 07470, USA  
P: 1.973.696.4500 TF: 1.866.450.PHANTOM

E: [phantom@visionresearch.com](mailto:phantom@visionresearch.com)

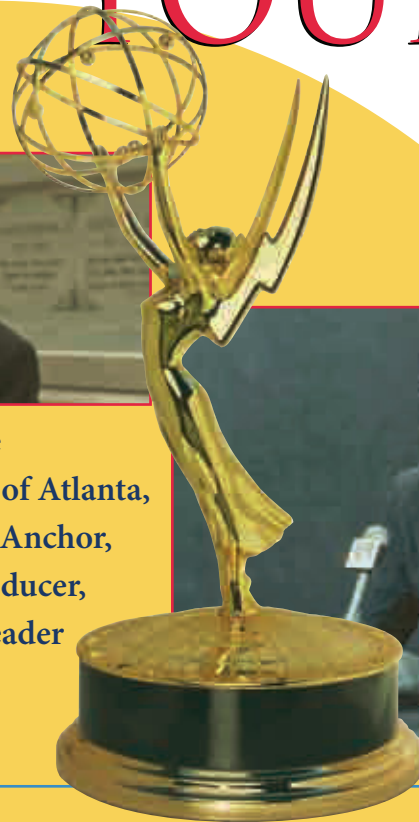
**VISION**  
**RESEARCH**  
An **AMETEK** Company

THE NATIONAL ACADEMY OF TELEVISION ARTS & SCIENCES  
2011 TRUSTEES AWARD  
A SPECIAL EMMY HONORING

AMBASSADOR  
ANDREW YOUNG



U.S. Ambassador to the  
United Nations, Mayor of Atlanta,  
U.S. Congressman, TV Anchor,  
Documentary Film Producer,  
Civil Rights Icon and leader  
in the fight for equality.



**Join Us to Honor Ambassador Young**

**Black-Tie reception and dinner , February 25, 2011  
Sheraton New York Hotel & Towers, New York City**

**LIMITED SEATING**

**To Reserve Tickets in Advance:**

Lauren Saverine, 212.484.9440

lsaverine@emmyonline.tv

**For Sponsorship and  
Advertising Inquiries:**

Lauren Saverine, lsaverine@emmyonline.tv

Ann Titelman, atitelman@emmyonline.tv

NATIONAL  
ACADEMY OF  
TELEVISION  
ARTS & SCIENCES





# This Year's Host: Becky Worley

The National Academy of Television Arts & Sciences is proud to have Becky Worley, on-air technology reporter for ABC News and “Good Morning America,” as our host for tonight’s 62nd Annual Technology & Engineering Emmy Awards.

“We are happy to have Becky Worley of ‘Good Morning America’ as host for this year’s awards ceremony,” said Chuck Dages, NATAS Awards Co-Chair and Executive VP, Emerging Technology, Warner Bros. Entertainment. “She is someone who can cut through all the high-tech chatter of the ever-changing digital revolution and show how it can make all our lives better, and that’s a real talent.”

Worley has been a technology reporter and producer since 1998. In addition to her duties as the technology contributor for ABC News and “Good Morning America,” she is co-host of the “Tech News Today” podcast with Tom Merritt,

and executive producer of Leo Laporte’s This Week in Tech network.

“Technology is a lifestyle issue,” said Worley. “It’s more than gadgets, more than computer viruses; it’s a part of our everyday lives. Making tech information intelligible for families on TV or video is a challenge.”



**MOTION PICTURE IMAGING**

Offering Post Production Services for over 13 years

- Television
- Dailies
- Digital Intermediate
- Digital Cinema
- Restoration
- Duplication

Servicing the Television and Motion Picture Entertainment Industry

Contact: (818) 954-2464  
[www.motionpictureimaging.com](http://www.motionpictureimaging.com)  
[Evans.Butterworth@warnerbros.com](mailto:Evans.Butterworth@warnerbros.com)

# Acknowledgments

## The National Academy of Television Arts & Sciences

*A Non-profit Association Dedicated to the Advancement of Television and Media*

### EXECUTIVE COMMITTEE

**Darryl Cohen**  
Chairman of the Board

**Norman Felsenthal**  
Secretary

**Malachy Wienges**  
1st Vice Chairman

**Harold Crump**  
Chairman's Representative

**Barbara Williams Perry**  
2nd Vice Chairman

**Terry D. Peterson**  
Chairman's Representative

**Alison Gibson**  
Treasurer

**Mike Trager**  
Chairman's Representative

**Herb Granath**  
Chairman Emeritus

### BOARD OF TRUSTEES

Jason Anderson  
Bob Behrens  
Phillip L. Bell  
Carl Bilek  
Mike Cephas  
Harold Crump  
George Cummings  
Timothy Egan

Roy Flynn  
Alberto Garcia  
Paul Gluck  
John Hammond  
Jamie Jensen  
Donn Johnson  
Martha C. Kattan  
Lydia Loizides

Julie Lucas  
Brian McGruder  
Evelyn Mims  
Doug Mummert  
John Odell  
Shelly Palmer  
Terry D. Peterson  
Chris Pizzurro

Gene Policinski  
David Ratzlaff  
Marcus Riley  
Karen Scott  
Jim Turner  
Javier Valencia  
Barbara Williams Perry  
Joy Allison Zucker-Tiemann

## VERY SPECIAL THANKS TO:

### The Staff of the National Academy of Television Arts & Sciences

*Carolyn Grippi*, Chief Operating Officer and  
Chief Financial Officer  
*Paul Pillitteri*, Chief Administrative Officer  
*Brent Stanton*, Executive Director, Daytime Emmy Awards  
*David Winn*, Director, News and Documentary Emmy Awards  
*Steve Ulrich*, Executive Director, Sports Emmy Awards  
*Steve Head*, Associate Director, Sports Emmy Awards;  
Manager, News & Documentary Emmy Awards  
*Robert Lazo*, Director, IT Services and Distribution  
*Delroy Binger*, Manager, IT Services  
*Lauren Saverine*, Manager, Special Events  
*Don Demaio*, Graphics  
*Barbara Baker*, Manager, Administration

### The National Awards Committee

*Linda Giannecchini*, Co-Chairman  
*Chuck Dages*, Co-Chairman

### Production Staff

*Steve Ulrich*, Producer  
*Paul Pillitteri*, Producer  
*Steve Head*, Assistant Producer

### Engineering Achievement Committee

*Charles H. Jablonski*, Chairman  
*Robert Ain*, *Bill Allen*, *Hanno Basse*, *Michael Bergeron*,  
*Steve Blumenschein*, *Ray Blumenthal*, *Dave Brack*, *Mike Conway*,  
*Craig Cuttner*, *Chuck Dages*, *David Dever*, *Pete Dilorio*, *Phil Dubs*,  
*John Footon*, *Adam Goldberg*, *Matt Goldman*, *Seth Haberman*,  
*Tom Hindle*, *Karl Huhn*, *Bill Jarr*, *John Luff*, *Jeff Moore*,  
*Stan Moote*, *Steve Pumple*, *Glenn Reitmeir*, *Bud Rigley*,  
*Mauricio Roldan*, *Jeremy Rosenberg*, *Bruce Ross*, *Larry Sayer*,  
*Mark Schubert*, *Warren Singer*, *Mark Stein*, *Marty Stein*,  
*Peter Symes*, *Mike Tsingberg*, *Paul Turner*, *Robin Wilson*

### NewsPro

*David Klein*, *Jeff Reisman*, *Danny Schreiber*, *Dennis R. Liff*,  
*Kurt D. Gardner*

### Consumer Electronics Association

*Gary Shapiro*, CEO  
*Karen Chupka*, SVP, Events and Conferences  
*Cindy Hoag*, Senior Director, CES Projects

### A/V Sponsor

The National Academy of Television Arts &  
Sciences thanks the sponsor of the 62nd  
Annual Technology & Engineering Emmy Awards





# Aspire To Be Brilliant.

The Complete Canon Capture-To-Output Solutions Provide the Tools.

Canon digital imaging effectively demonstrates the synergy of cutting-edge professional tools, highly efficient integrated workflows, and top-flight service and support. From acquisition to delivery, Canon empowers and inspires imaging professionals every step along the way. Learn more at [usa.canon.com/cusa/professional/products](http://usa.canon.com/cusa/professional/products)



**Canon**  
*image*ANYWARE



Wedding photograph by Bob Davis, Canon Explorer of Light. © 2011 Bob Davis All rights reserved.  
© 2011 Canon U.S.A., Inc. Canon, EOS, PowerShot, imagePROGRAF, PIXMA and REALiS are registered trademarks of Canon Inc. in the United States, and may also be registered trademarks or trademarks in other countries. IMAGEANYWARE is a trademark of Canon. All rights reserved. Images and effects simulated.

Congratulations,  
**Sir Howard Stringer**

Even without 3D glasses,  
your achievements stand out.

From your friends and partners  
at Discovery Communications



The world's #1 nonfiction media company

