THE NATIONAL ACADEMY OF TELEVISION ARTS & SCIENCES

The 64th Annual

Technology & Engineering EMMY® AWARDS

LIFETIME ACHIEVEMENT HONOREE

MANOLO ROMERO

Managing Director of Olympic Broadcasting Services (OBS)

WELCOME

A Message from the Board Chair, Malachy Wienges

On behalf of everyone at the National Academy of Television Arts & Sciences, I am delighted to welcome each of you to the 64th Annual Technology & Engineering Emmy® Awards!

Tonight, we present the prestigious Emmy® Award to individuals and companies for their innovative contributions and achievements to the advancement of the television industry.

We are also happy to bestow our prestigious Lifetime Achievement Award to Manolo Romero, Managing Director of Olympic Broadcasting Services (OBS). Romero has been involved with the television coverage of all Olympic Games, since the 1968 Summer Games in Mexico City. He has consistently raised the bar of the viewer experience over the years, and the National Academy is proud to honor him with this Award.

In addition to having our distinguished honorees and guests, the National Academy of Television Arts & Sciences is proud to have David Pogue, the Emmy Award winning tech columnist for "The New York Times" and "CBS Sunday Morning" correspondent, as the host for tonight's 64th Annual Technology & Engineering Emmy Awards.

Special thanks to our Engineering Achievement Committee Chair, Robert P. Seidel, and to his committee, for their hard work and dedication. Additional thanks to Linda Giannecchini and Chuck Dages, our Awards Committee Co-Chairs and of course to our staff at the National Academy who worked tirelessly to make this Emmy event a success.

Congratulations and Enjoy!

Malachy

Welcome to the National Academy's Annual Emmy® Awards Ceremony for Technology and Engineering. Our honorees represent the best in Technological Achievement for the Television and Media profession and we recognize them in eleven different categories that continue to push the envelope of what's possible for both viewer and provider alike.

The Academy's highest recognition for individuals in the technology field, the Lifetime Achievement Emmy, is being awarded tonight to Manolo Romero, the current Managing Director and CEO for Olympic Broadcasting Services, for his outstanding work on internationally televised sporting events. Manolo takes his place alongside such previous winners as David Hill, Sir Howard Stringer, Ray Dolby and Eddy Hartenstein.

As Chairman of the Engineering Achievement Committee, I am very fortunate to have the assistance of many dedicated and knowledgeable committee members, whose tireless efforts ensure that these awardees and technologies are the best in the industry. Special thanks to my Co-Chair, Seth Haberman, for his ongoing assistance. My thanks also to the Awards Committee, Chaired by Linda Giannecchini and Chuck Dages, as well as the NATAS Headquarters staff who make these awards a pleasure to be a part of and special thanks to the NATAS Executive Committee and Board of Trustees for their support.

Sincerely

Robert P. Seidel, Chair
The National Academy of Television Arts and Sciences
Engineering Achievement Committee

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THE NATIONAL ACADEMY OF TELEVISION ARTS & SCIENCES

ABOUT THE ACADEMY

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 the promotion of creative leadership for artistic, educational and technical achievements within the television industry. It recognizes excellence in television 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 chapters across the United States in most major cities. NATAS has extensive educational programs including Regional Student Television Awards 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.

We all admire high performance. Tonight, we celebrate it.

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Accenture congratulates the 2013 Technology & Engineering Emmy® Award winners. We salute your commitment to advancing the entertainment industry.

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Technology & Engineering Emmy Awards HONOREES

Since its launch in 1948, the Technology & Engineering Emmy Awards have honored development and innovation in broadcast technology and recognizes companies, organizations and individuals for breakthroughs in technology that have a significant effect on television engineering.

"The National Academy's Technology and Engineering Achievement Committee is pleased to honor these technology companies and individuals whose innovation and vision have materially affected the way the audience views television and have set the standard for technological excellence in the industry," said committee Chairman, Robert P. Seidel, Vice President of CBS Engineering and Advanced Technology.

Here are the 64th Annual Technology & Engineering Emmy Award honorees:

Pioneering Development of Multi-Room DVR

As the digital video recorder (DVR) became more widely used by the consumer, the units began to increase their presence throughout the home. This presented a challenge to the consumer when they wanted to watch programming in more than one room. This Technology & Engineering Emmy Award honors Time Warner Cable and Cisco's Scientific Atlanta, for the development of the multi-room DVR concept, which enabled the consumer to schedule the program for recording once and then be able to watch it anywhere in the home.

"Consumers today have more than one TV in more than one room in their homes. The challenge was to find a way to make content available throughout the household — rather than just the living room," according to Beth Warner, Director, Corporate Communications, Time Warner Cable. "This necessitated the creation of a coax-friendly standard for home networking…transforming the way that DVR service is now enjoyed by millions of people."

According to Cisco's Jeff Seebeck, "Cisco was looking for a way to help consumers access television programs they recorded on their DVR set-top box in one room, and watch them on other televisions in their home."

Pioneering On-Screen Interactive Program Guides

Insight, now Rovi Corporation, is being honored for developing on-screen interactive program guides, a staple for today's viewers. In the early days of television with only three networks, it was relatively easy to determine what to watch. However, with the proliferation of cable and satellite channels, navigating the choices became much more complex.

To address this demand, Insight was instrumental in developing an interactive program guide for assisting the

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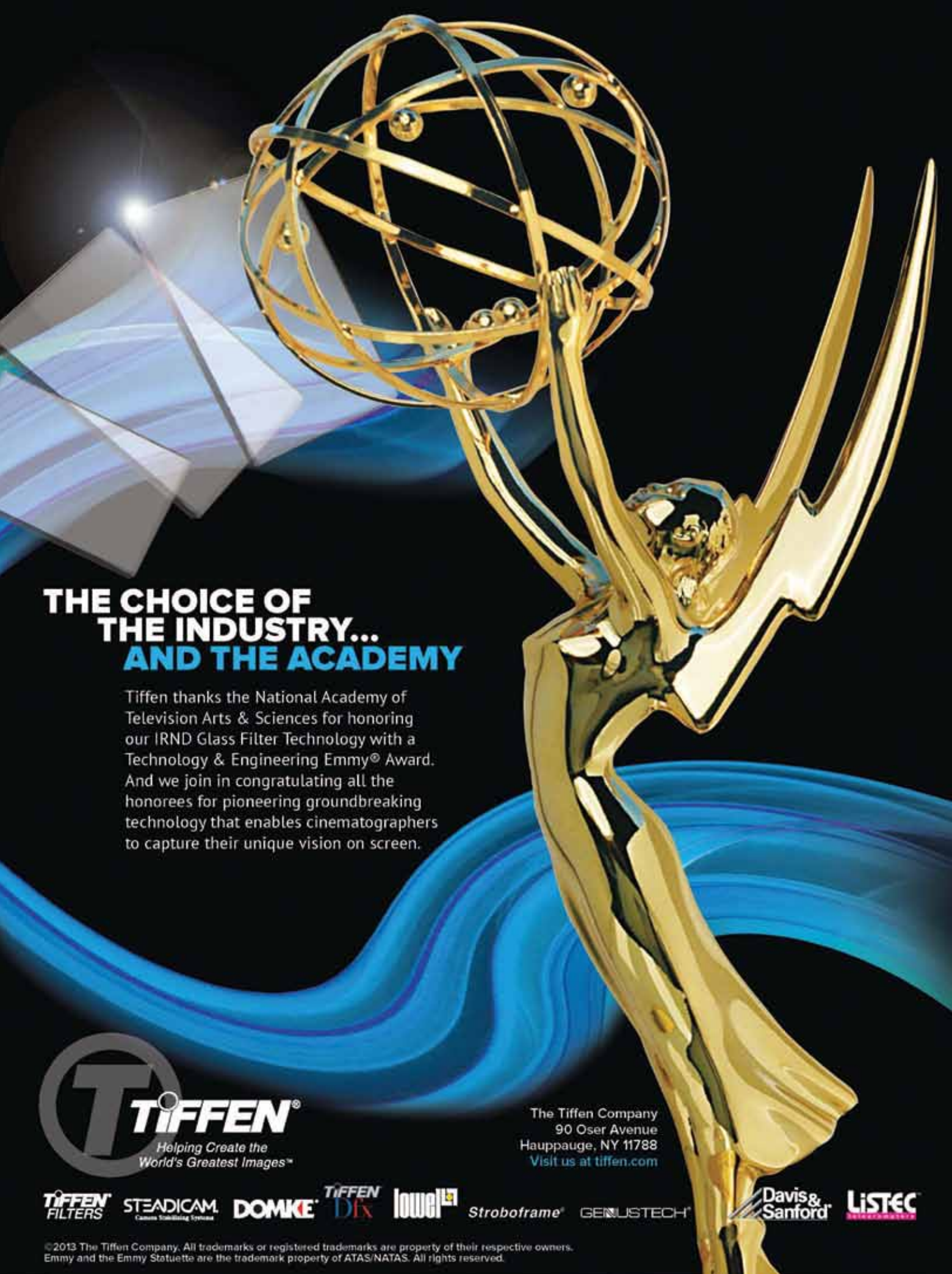
THE CHOICE OF
THE INDUSTRY...
AND THE ACADEMY
Tiffen thanks the National Academy of Television Arts & Sciences for honoring our IRND Glass Filter Technology with a Technology & Engineering Emmy® Award. And we join in congratulating all the honorees for pioneering groundbreaking technology that enables cinematographers to capture their unique vision on screen.
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viewer in rapidly locating their desired program. Rovi's interactive program guides enable equipment and service providers to deliver an interactive, on-screen media guide for TV program listings that help consumers navigate, find and discover TV content.

IRND Filter Technology for Digital Motion Picture Cameras

As the motion picture and television industries transitioned from acquiring their programming from 35mm film to electronic acquisition on high definition electronic cameras, the need arose to manage the depth of field and exposure of the digital image sensor without impairing the color rendition of the scene. The Tiffen Company and Schneider Optics Inc. pioneered the development of this optical infrared neutral density (IRND) filter, which ensured that the director of photography was able to capture the vision of the director and program producer.

Steven Tiffen, President/CEO, The Tiffen Company, explained his company's input as follows: "Unlike photographic film, the imaging device of a digital camera is inherently susceptible to infrared contamination, when using conventional neutral density filters, especially denser grades, this issue is multiplied by the filter factor. To address this issue, Tiffen developed the IRND filter series, a full range of neutral density filters that continue to absorb light at a uniform rate throughout the visual spectrum and well into the infrared spectrum. These filters allow the cinematographer the control they need over exposure and depth of field in their images while rendering true color."

CABLEVISION

The Development and Commercialization of Analog Local Cable Video Ad Insertion

The following companies -- Cablevision Systems, Channelmatic (Petry), HBO, MTV Networks -Viacom, Starnet, Texscan MSI, and Wegener – were all recognized for contributing to developing and commercializing analog local cable video advertising. As a result of this initial development work, the local cable advertising business has evolved into a business that exceeds $2 billion per year.

Three decades ago, Cablevision pioneered local advertising on analog television. The company established an analog video feed from Nassau Coliseum during New York Islanders hockey games. Trucks were stationed outside the arena to switch between this feed and a local ad video fed from the truck upon receiving a cue. This was the first instance of local ads placed on cable television, sparking industry interest that resulted in standardization of an automated switching process. As a result, the automated process became the cable industry standard for managing local cable advertising in an analog environment.

Channelmatic's Tom Walsh, CEO/ Marketing Director, Media Control Systems explained that Channelmatic pioneered the development of ad insertion technologies, spending 22 years and working on six generations of Ad Insertion Systems. "These technologies included control of the first ¾ inch VCRs, the use of the first integrated circuits and microprocessors for machine control and switching, the first PC technologies for system management and traffic and billing software

STARNET interface, and the integration of the first MPEG file encoding and decoding technologies," he said.

According to Christopher Noe, former President of Starnet: "The benefits of the Starnet inserter included the ability to distribute ads over satellite or WAN connections and the elimination of tape decks. All this made for a dramatic reduction in costs. The Starnet inserter also aired commercials more accurately and with higher quality than any other device of its time."

Joe Fabiano of Texscan MSI's parent company eMediaTrade explained the company's role: "Texscan MSI's work on Analog Local Cable Video Ad Insertion started in 1983. A team of engineers and marketing folks, including Bill Robertson, Mike Waters, Dick Warnock and Earl Hansen, put together the first product with fully random access tape control and advertising insertion. Prior to that time, the tapes were controlled sequentially and the ads were inserted in a run of schedule fashion, and if an ad had to be aired more often it had to be copied on the tape more times. The random access technology allowed each spot on the tape to be individually addressable and could then be aired in any order. It was a very successful innovation at the time and helped bring about great growth in the local cable advertising industry during the 1980s and early 1990s."

"Wegener's contribution was the development of 'addressable' technology that allowed the tones to be generated at each cable TV headend on command from the network," explained Wegener's VP Worldwide Sales, Ken Leffingwell. "This allowed a network to control the distribution of commercial avails and offer different levels of insertion opportunities to different groups."

The Development and Commercialization of Cable Interconnects for Local Video Ad Insertion

The Technology & Engineering Emmy Awards committee recognized Adlink, now a part of Time Warner Cable, and National Cable Advertising (NCA), now known as NCC Media (a joint venture of Comcast, Cox and Time Warner Cable), for developing this advancement that permitted cable systems to be interconnected. This technology created a central location that sent a signal to areas for ad insertion.

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Cable systems at one time all had their own ads. One of the key elements of this development in cable advertising was to enable an advertiser to purchase an ad across multiple system operators (MSO's) and distribute that ad at the same time among competing cable systems.

"A big hurdle for cable operators to overcome was the lack of ability for TV advertising buyers to place easy single buys for a DMA [designated market area], much less multiple DMAs," according to Beth Warner, Time Warner Cable, Director, Corporate Communications. "This fundamentally hindered the local cable advertising business. Through the early 1990s, the billing systems, physical interconnects and coordination of insertion across operators within the same market was developed. Most notable of these efforts was the AdLink partnership in L.A. Further, AdLink developed AdTag and AdCopy, enabling targeted neighborhoods within L.A. to have distinct variations." AdLink's capability was taken nationally, allowing the local insertion on a cable channel to have a coordinated national buy and insertion.

SeaChange®

The Development and Commercialization for Digital Infrastructure for Local Cable Ad Insertion

As the cable industry migrated from analog to digital transmission, a requirement for a digital infrastructure for distributing digital local cable advertising arose. To address this need, six different companies played a part in the creation of this new technology. It was Digital Equipment Corporation (DEC), now part of Hewlett-Packard; Harmonic; iMedia - Motorola, now both part of Google; Scientific Atlanta, now part of Cisco; SkyConnect now part of ARRIS; and SeaChange. They all were instrumental in developing the digital version of local cable ad insertion.

Digital Infrastructure for Local Cable Ad Insertion technology is inter-related to the two previously mentioned ad insertion advancements, as they're all dependent on each

other. As a group, these technologies have been designed to present commercials to the correct locations and provide the fine details that advertisers and consumers desire.

Development of Electronic Mastering System for Large Scale Content Customization, Transcoding and Distribution

NATAS recognizes the achievements of Warner Bros. and CBS Worldwide Distribution for the development of the electronic mastering system for large-scale content customization, transcoding and distribution.

"When portable devices came along, there was a different standard for transmitting to every one of them. Warner Bros. and CBS worked together to address the issue," said Chuck Dages, EVP, Emerging Technology, Warner Bros.

As the distribution of television program content has expanded from the traditional network model to dissemination of content in multiple formats both domestically and internationally, Warner Bros. and CBS developed the automated distribution of television content to multiple sources in multiple formats. This process involves customizing, transcoding and distributing the material to thousands of television stations worldwide.

grass valley

Pioneering Development of Event Driven Control Room Automation Systems for Production of Live Television Shows, which Encompasses Full Control of Robotic Cameras, Audio, Graphics and Video Sources

Since a major revenue source for a local television station is the local newscast, the need for high quality, consistent news production drove the development of an event driven automation control room system that could control a host of equipment including robotically controlled cameras, audio consoles, graphics and video sources in the news control room. ParkerVision, which is now a division of Grass Valley, led the way in developing

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this technology and is being honored with a Technology & Engineering Emmy.

"The ParkerVision PVTV systems achieved notoriety after its debut in 1997 due to its ability to manage an automated presentation of both scripted and non-scripted television shows with a production staff of one or two operators," according to Denise Williams, Grass Valley, Director, Corporate Public Relations: "It became very popular in news applications making expanded news coverage and additional shows possible with little or no increase in costs."

Pioneering Development and Deployment of Aspect Ratio Control Technologies and Systems For Letterbox Images within Consumer Devices

For years the motion picture industry and the television industry have employed differing picture dimensions. This Technology & Engineering Emmy goes to Warner Bros. and Runco International founder, Sam Runco, for their pioneering efforts in the development and deployment of the technology to standardize the letterboxing of images automatically in a uniform way.

"The ARC IV Aspect Ratio Controller was created to allow for the correct presentation of widescreen movies projected onto wide aspect ratio screens in the home," said Sam Runco. "The ARC IV with its 4:3, letterbox, 16:9 anamorphic, and custom aspect ratios brought, for the first time, multiple aspect ratio control to the TV in the home, a feature we take for granted today, but was unheard of then, outside of commercial movie theaters. The ARC IV could be adjusted to do additional custom aspect ratios as well, and also included picture controls (contrast, brightness, color, tint, and sharpness) for each of the four stock aspect ratios."

Eco-system for Real Time Presentation of TV Content to Mobile Devices Without the Use of Specialized Television Hardware

Apple is being honored for its Eco-system for Real Time Presentation of TV Content to Mobile Devices without the use of Specialized Television Hardware. Apple developed a complete mobile television origination system for streaming content to wireless devices, fundamentally changing the television marketplace by enabling never before available quality, reliability, and a platform for monetization of the video content. Today, tens of millions of users make use of the HTTP Live Streaming (HLS) specification for viewing high quality premium content, thanks to Apple's innovation.

< Rovi Corporation's interactive on-screen program guide.

Improvements to Large Format CMOS Imagers for Use in High Definition Broadcast Video Cameras

One of the major goals of high definition image capture was to replicate the performance of 35mm film acquisition in motion picture and television production. Four companies -- Arnold & Richter, Cine Technik (ARRI), Canon, RED Studios Hollywood, and Sony – are being recognized by the Technology & Engineering Emmys for improvements in large format image sensors used in capturing high definition content.

According to Canon's Larry Thorpe, "Over the past decade Canon has heavily invested in both the R&D and the manufacturing processes for large format CMOS imagers that can be used for broadcast HDTV production and other motion imaging applications. In 2008, we brought to the worldwide market the hybrid DSLR EOS 5D Mk II that utilizes a 35mm full frame CMOS imager. This camera has greatly expanded production creativity in motion imaging for broadcast television, television commercial production, and moviemaking. In 2011, Canon introduced its new Cinema EOS product line employing a Super 35mm CMOS imager specially developed for very high-end digital cinematography. These cameras are today widely used in HD television drama, documentary, commercial and movie production, and are especially noted for the high picture sharpness and exceptional sensitivity produced by this CMOS image sensor. More recently, this same image sensor is being deployed in a 4K digital camera that meets UHDTV specifications."

A spokesperson for RED Studios added this: "RED's first product raised the bar by recording with a 4K CMOS sensor (4K is 5 times the number of pixels compared to 1080P HD). The RED ONE was smaller and lighter than any other professional cinema camera and less expensive than other top of the line cameras. This RED ONE package allowed many aspiring cinematographers to own and use feature-worthy equipment. Now, every other camera company has released, announced or is working on a 4K camera." ■

Lifetime Achievement Award Recipient

MANOLO ROMERO

Managing Director of Olympic Broadcasting Services (OBS)

By Allison J. Waldman

The National Academy of Television Arts & Sciences (NATAS) is honoring Manolo Romero, Managing Director of Olympic Broadcasting Services (OBS), with the Lifetime Achievement Award at the 64th Annual Technology & Engineering Emmys.

Manolo Romero's illustrious career in sports broadcasting has encompassed more than four decades of pioneering work, highlighted by his notable contributions to the broadcast of ten Olympic Games, from Mexico City in 1968 to London in 2012. Dick Ebersol, the former Chairman of NBC Sports, once compared Manolo Romero's achievements as an engineer and broadcaster to the accomplishments of one of the world's greatest athletes. "Manolo is the Michael Jordan of Olympic host broadcasting. He's the best who ever lived at what he does."

Malachy Wienges, NATAS Chairman, in announcing the Technology & Engineering Lifetime Achievement Award said, "We are especially happy to bestow our prestigious Lifetime Achievement Award to Manolo Romero. [He] has been involved with the television coverage of both Summer and Winter Olympic Games since 1968." Romero will be consulting on the host broadcast operation for the upcoming Winter Games in Sochi. His colleagues say Romero has consistently raised the bar and heightened the viewer experience over the years which is "why the National Academy is proud to honor him," said Malachy Wienges, Chairman, NATAS.

With characteristic humility, Manolo Romero took it in stride when asked about being selected for this honor. "This recognition for me is great, but not only for me but for all the people I've worked with in the past to get things to where they are now," he said. "I take great pride in receiving it. I have received other Emmys, but this one for a lifetime of work is very special. I have worked very hard to make sure that we keep up with technology."

Romero, a native of Seville, Spain, began his career in 1965 working in the engineering department for TVE, a Spanish television network. In a very short time, he was put in charge of that division and his responsibilities expanded. In 1968, ABC recruited him to work on the Summer Games in Mexico City.

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CONGRATULATIONS

MANOLO ROMERO

Lifetime Achievement Award

From your friends and colleagues at NBC. We recognize and appreciate your years of dedication to excellence in Olympic Broadcasting.

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TECHNICALLY, WE'RE HONORED.

Canon would like to thank The National Academy of Television Arts & Sciences for recognizing our advancements in large format CMOS imagers.

We are grateful to receive the Technology and Engineering Emmy Award and congratulate those we share this achievement with.

CINEMA EOS

LEAVE NO STORY UNTOLD

Canon

Lifetime Achievement *continued from page 14*

"I was exposed to fantastic work with the Olympics," he recalls. "I had the great honor of meeting people like the late Roone Arledge (former President, ABC Sports) and the late Julius Barnathan (former President of Broadcast Operations and Engineering, ABC). They were my elders in sports broadcasting." Later, Romero was put in charge of the host broadcast operations for the 1982 World Cup.

Arledge and Barnathan appreciated Romero's unique skills and named him head of International Operations for ABC's broadcast of the 1984 Olympic Games in Los Angeles. His duties included overseeing the host broadcast coverage supplied to the world.

Ted Van Weeren, former ABC Television Network executive, vividly remembers that Romero rose to the challenge and excelled at the job. "Manolo had to start from scratch, only 16 months before the Opening Ceremony. When he arrived, many ABC executives wondered what this guy from Spain could do that we couldn't. We soon found out his knowledge of multinational production and broadcasting, and organizational skills, were without precedent."

The 1984 Olympics were one of Romero's proudest achievements. "Those Games were very memorable and introduced a lot of new things. People like Peter Ueberroth (President, Los Angeles Olympic Organizing Committee) changed how the Games would be broadcast in the future."

According to Van Weeren, Romero made invaluable contributions to the success of those Olympics. "I recall a meeting I attended, in which someone told Manolo there were many, many problems, some insurmountable," said Van Weeren. "Manolo listened, and reflected quietly for a moment.

He then told the individual, 'Big problems have big solutions.' This phrase to me speaks to Manolo's belief that anything can be attained, and that there is a solution to any problem that presents itself."

Romero is quick to share his success with the individuals whom he considers his mentors. "Julius Barnathan in the engineering field was my first boss when I worked for ABC. He was a wonderful person who not only pushed me to get ahead, but also tried to innovate and do new things. He was a guy for all of us, like Roone was. Because of them I was able to thrive. I owe them a lot."

Romero has been involved in ten Winter and Summer Olympics, and with each event he has had the opportunity to innovate and advance broadcast techniques. "I have been following the technical developments to get us where we are now," said Romero. "We started with satellites and then fiber, all the new things that we have now, were things that we could

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CONGRATULATIONS
MANOLO
ON YOUR LIFETIME ACHIEVEMENT AWARD

Very best wishes and continued success from Aggreko, the global leader in temporary power and temperature control systems

Dear Manolo
It was my pleasure as well as privilege to have known you for years, especially the unforgettable experience from Beijing 2008
Debrajit Das

Manolo
Congratulations on your award.
Well done on a great London Games.
Best Wishes [illegible]

Manolo,
From the mountains of Salt Lake City to the "Sea and Sky" of Vancouver, your high level of professionalism and integrity continues to be an inspiration to all in the Olympic World!
All the Best!
Paul Hines

Dear Manolo,
It has been great working with you and we all respect enormously your achievements. Have a GREAT evening
[illegible]

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Lifetime Achievement *continued from page 18*

barely see in the future."

Romero has crossed the millenium in terms of technological developments. "Today we can do a lot of things we could only dream of in 1968. When we started, only a few events were in color and there was some stationary satellite that allowed us to do a little live coverage," he said.

By the time of the Lake Placid Winter Games, fiber-optic technology was introduced, and camera technology was vastly improved. As Manolo remembers, "It took 20 years to get to full coverage in high definition of the Olympics. We started digital recording in 1992, also half-inch tape that year in cassettes. And now the next Games will be tapeless."

When terrorists murdered the Israeli athletes at the 1972 Munich Games, Manolo Romero was on the job. "I was with Univision at the time. It was a horrible experience to see that the hard work by all the broadcasters covering the Games was suddenly finished because of such a terrible tragedy. But at the same time, you could see how the news coverage started using the new technologies," said Romero. "Those technologies allowed many people around the world to follow the incident almost as if it were live."

Alex Gilady, member of the International Olympic Committee's (IOC) Radio and Television Commission since 1984 has been a colleague of Romero's for years. "It is time to recognize the most respected broadcaster in the world," he said. "He led the 2004 Games, broadcasting in the same manner he did for 1992, 1996 and 2000. When the new president of the IOC, Dr. Jacques Rogge, visited the United States in 2001, Dick Ebersol, then Chairman of NBC Sports and the Olympics, told him, Manolo forever."

While Romero will no longer be running the day-to-day operations of the Olympic Broadcasting Services, he is consulting on future Olympic events, including the 2014 Winter Games in Sochi, Russia, and the 2016 Summer Games in Rio de Janeiro, Brazil.

Although he is stepping back, Romero has made certain that future generations will be prepared to do the work that he has done all these years. In 1984, he established the Broadcast Training Program to

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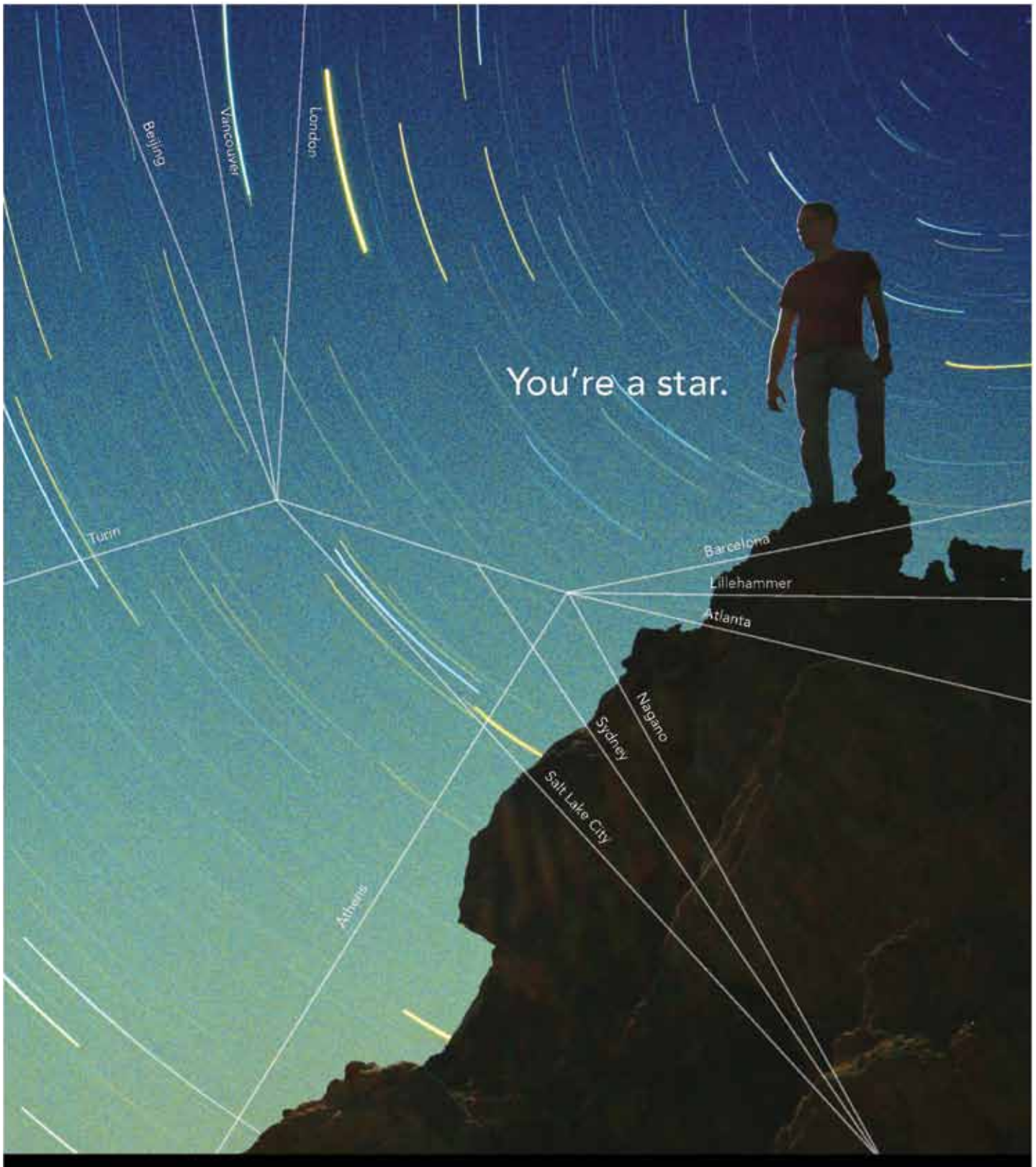

We congratulate Manolo Romero on being recognized by the Academy of Television Arts & Sciences with a Lifetime Achievement Award.

Your success has been a guiding light for many.

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Lifetime Achievement *continued from page 20*

prepare university students to work on the Olympic telecasts. The goal of the program has been to give students the skills to become broadcast professionals.

According to Jim Owens, Dean, School of Communications at Kentucky's Asbury University, "Manolo Romero has invested his life and company into the broadcast education of over 9,000 university students. This program is a combination of lectures and hands-on training. The students who successfully completed the program have been hired to work in entry level paid broadcast positions at the Olympics. Romero's influence is being felt around the world as these young broadcasters follow in his footsteps."

"This is the most important thing we have accomplished and I have a lot of pride in the program," said Romero. "There are many, many people who have gone through the program, and I am very happy that many of them are now working in our industry."

With all his accomplishments and the opportunities he has received, Romero considers himself an extremely fortunate man. "I have had the tremendous luck to be involved in all the major sports events. I must be one of the few that was involved all five events that took place in the States -- Lake Placid, Los Angeles, Atlanta and Salt Lake City, as well as the World Cup. Each one of them brought new advances in technology."

Looking forward, Romero is grateful for all he has been able to achieve, as well as those who have supported him through the years. "I cannot see myself not being involved in the Games, but quite a bit I owe to my family. The patience they have had with me when I had to travel to all these distant places, having to organize things on all these different continents, it takes a lot. My family support has been unbelievable, as has the support of many colleagues working in this wonderful business." ■

Tributes to
Manolo Romero

In honor of Manolo Romero, Managing Director, Olympic Broadcasting Services receiving the National Academy of Television Arts & Sciences (NATAS) Lifetime Achievement Award, many of his peers and co-workers have shared their thoughts about their experiences with him over the years.

Steven E. Fox, *Attorney at Law, ROGERS & HARDIN LLP*

"I have had the good fortune of representing many of the biggest companies in the United States during my many years of practice and have never seen a more accomplished or a more capable CEO than Manolo. His expertise and command of the subject matters are breathtaking. Needless to say, I have enormous respect for Manolo and cannot imagine a more worthy honoree."

Jim Owens, *Dean, School of Communication Arts, Asbury University*

"Manolo Romero's incredible impact on Olympic broadcasting is only matched by his longstanding contribution to education. Over 9,000 university students have completed the Broadcast Training Program that he began at the Los Angeles Olympics. From 1984, and continuing through today, these students have participated in an in-depth training experience that has culminated in working at an Olympics. The training program has prepared students to be future sports broadcast personnel in the United States, Australia, Italy, Greece, China, Spain, Canada, and the United Kingdom."

Ma Guoli, *Former COO of Beijing Olympic Broadcasting, current CEO & Managing Director of Infront China*

"Manolo Romero is the master of sports broadcasting and deserves the Technology & Engineering Lifetime Achievement Emmy Award for sure. I used [to] be his deputy during Beijing Olympics for four years. He was always thinking something, creating something and achieving something. During the London Games, he brought something new to the coverage. The project 'Olympics on Sky' provided all signals to every corner, so that all TV stations in developing countries had the same opportunity to watch as if they were in London; 'Olympic News Channel' helped all networks in the world to tell all the stories about London."

Jonathan Martin,
Order of the British Empire (OBE). Former Head of Sport, BBC TV

"Millions of sports fans around the world, sports federations, and sportsmen and women past and present – most notably Olympians -- may not know his name but they owe him a deep debt of gratitude for the way sport was brought into viewers' homes. Manolo has been the mastermind behind the international TV coverage of all recent Olympic Games, Winter and Summer, as well as World Soccer Cups in Spain and the United States. Always determined to be on top of technical and production innovations, his coverage of these events has improved on each and every occasion. He is a demanding leader, but his team always responds enthusiastically to his drive, energy, and stamina. He has endured beyond most of his contemporaries, and for certain he's a broadcasting legend in his lifetime. Manolo deserves thanks and acclamation from the sports world, as well as from sports broadcasters worldwide."

Peter Diamond, *SVP, Programs, NBC Olympics & NBC Sports*

"Manolo is a pioneer and a genius in the telecasting of Olympic Games. He was there at the beginning, and has successfully led Olympics host broadcasting through decades of development, culminating in the hugely successful presentation of the 2012 London Games. His operation now encompasses broadcasting, and all of the most complicated forms of 'new media.' He has been a friend to all broadcasters, and a tireless advocate for their interests with every organizing committee. He not only understands the technical side, but also production, operations, and logistics. His knowledge of all facets of Olympic television is, simply, unique. There is no one like him."

Charles Jablonski,
COO & acting CEO, OnLive

"Manolo has been the centerpiece of international sports broadcasting for decades. As the Olympics move from city to city every two years, the organization that he has built has provided one of the few consistent, and thereby least risky, parts of an Olympic production. The coverage innovations he's helped pioneer are too numerous to name, but include rail cams, sky cams and point of view cams. [They] have helped provide the worldwide viewer with a fully encompassing and immersive experience. Also, he has not only created the environment with the IOC for complete trust and execution,

Lifetime Achievement Award Presenter

DICK EBERSOL

At this year's National Academy of Television Arts & Sciences 64th Annual Technology & Engineering Emmy Awards, NBC Universal Sports & Olympics former Chairman, Dick Ebersol, will take the stage to present the Lifetime Achievement Award to Manolo Romero, Managing Director of Olympic Broadcasting Services (OBS).

Dick Ebersol is one of the most accomplished executives in all of television. According to Fortune Magazine, "[He] has practically done it all in a storied TV career." Ebersol has received the two highest National Academy honor: a Trustees Award in 2006 and a Lifetime Achievement Award in 2009.

In 1975, in conjunction with Lorne Michaels -- whom he hired – "Saturday Night Live" was conceived and launched. It became an NBC mainstay and was named by Time Magazine as one of "The 100 Best Shows of All-Time." As an independent producer, Ebersol created award-winning programs like "Friday Night Videos" and "Later with Bob Costas."

Ebersol's broadcasting career has been marked by innovation and diversity. In addition to his efforts in expanding NBC's legacy in sports broadcasting, Ebersol also served as Senior Vice President of NBC News.

Under Ebersol's leadership, NBC Sports became synonymous with superior production that elevates the event, broad promotion and mutually-beneficial partnerships. Over the past few years, he has produced three milestone television events: the Beijing Olympic Games in 2008 became, at the time, the most-watched event in U.S. television history with a record 215 million viewers; the Vancouver Olympic Winter Games in 2010 were the second-most watched Winter Olympics in history with 190 million viewers; and Super Bowl XLIII in February 2009 produced, at the time, the largest-single audience in U.S. television history with a record 152 million viewers. ■

Tributes

but has the trust and support of every sport federation involved in international competition."

Henry L. Levine,
EVP & CFO, International Sports Broadcasting, LLC

"Mr. Romero is undoubtedly one of the most brilliant people that you will ever meet and his quest for working at a high level of professionalism is contagious. If you are fortunate, he is undeniably the most competent person you will ever encounter. He surrounds himself with the best and the brightest and pushes everyone to achieve their potential. Mr. Romero has the uncanny ability in one moment to have the inventiveness and passion of an entrepreneur, but in the next to have the discipline and focus of an experienced CEO. The latter, in combination with his high level of physical and mental energy, has made him one of the most influential people in the Olympic movement." ■

Lifetime Achievement Award **Past Winners**

David Hill

Former Chairman & CEO, FOX Sports Media Group

Last year at the 63rd Annual Technology & Engineering Emmy awards, the National Academy of Television Arts & Sciences (NATAS) honored David Hill, former chairman & CEO of the FOX Sports Media Group, with the Lifetime Achievement Award.

David Hill has had a distinguished career in television, especially in his years of service at FOX. He joined the network in 1993, charged with creating a sports division. His success has been called unprecedented, and by 1997, FOX Sports was America's top-rated network for sports, according to Nielsen. Chase Carey, deputy chairman, president and COO of News Corp., described David Hill as a pioneer, saying, "David has changed sports television across three continents by being unafraid to break existing rules and bring truly new experiences to consumers."

The host of the 2012 Technology & Engineering Emmys, CBS reporter Lesley Visser — the first woman to be recognized by the Pro Football Hall of Fame as the 2006 recipient of the Pete Rozelle Radio-Television award — offered her impressions of Hill, saying, "I first met David through a cloud of cigarette smoke in his office back in 1993. He'd lived in Australia and London, loved tennis and sailing and soccer and admitted he knew nothing about the NFL. In just five minutes, I knew this man would become a legend; he was scathing and hilarious and innovative."

In his tenure with FOX, David Hill advocated for technological innovations that revolutionized sports broadcasting. Thanks to Hill, FOX acquired the National Football League's N.F.C. broadcast package, wrestling it away from CBS, which had held the rights for four decades. He then facilitated the debut of the FOXBox, an on-screen score and time-remaining clock that soon became standard in the business.

Some innovations, like the glowing puck, intended to make it easier to follow National Hockey League games, didn't quite work out, but many others did. Today's Major League Baseball viewers are able to track the ball as it makes its way from the pitcher's mound via the "FOX TRACK." NASCAR viewers get a "live" vantage point from inside the car at 200 miles-an-hour from three onboard cameras.

In recognition of the award and looking forward, Hill said, "The future is limitless. The inexorable march of the computer and its spawn makes innovation much simpler than it has ever been. All that's involved is looking at the picture, figuring out what's not there and fixing it."

Sir Howard Stringer

Former President and CEO, Sony Corp.

In 2011, the National Academy of Television Arts & Sciences presented the Lifetime Achievement Technology & Engineering Emmy award to Sir Howard Stringer, former chairman, CEO & president, Sony Corp. Stringer's contributions while at Sony included 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 had been chairman and CEO of Sony Corp. since June 2005, and in 2009 added the title of president. He had also been chairman and chief executive officer of Sony Corp. of America, as well as corporate head of Sony Corp.'s Entertainment Business Group. He has served on the Sony Corp. Board of Directors, and has been a board member of Sony Music Entertainment, overseeing Sony's and other music-related holdings in the U.S. He has been chairman of the board of Sony Ericsson Mobile Communications, the joint venture between Sony Corp. and Telefonaktiebolaget LM Ericsson.

Ivan Seidenberg, who at the time was chairman & CEO, Verizon Communications, as well as a former Technology & Engineering Emmy Lifetime Achievement award recipient, said of Sir Howard when presenting the honor: "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."

Before joining Sony Corp. in 1997, Sir Howard spent 30 years in business as a journalist, producer and executive at CBS Inc. He was president of CBS from 1988-1995, handling the broadcast activities including news, sports, entertainment, radio and television stations. CBS Television Network, under

his stewardship, was the first network to rise from last to first place in one season. Among his noteworthy achievements during that tenure was landing David Letterman to create a late-night show for CBS. As president of CBS News, he oversaw the creation of "48 Hours."

Ivan Seidenberg

Former Chairman & CEO, Verizon Communications

When Ivan G. Seidenberg, former chairman and CEO of Verizon Communications Inc. collected the 2009 Technology & Engineering Emmy Lifetime Achievement award, he said, "I would like to thank the Academy for this great honor, and I thank the National Academy of Television Arts & Sciences and the Academy's Engineering Committee for choosing myself and Verizon."

Under Seidenberg's leadership, Verizon became the premier network company, providing customers with the most advanced broadband performance. Seidenberg oversaw Verizon through a number of mergers and acquisitions, including Bell Atlantic and NYNEX in 1997, GTE in 2000 and MCI in 2006. He was integral in the creation of Verizon Wireless in 1999, bringing together the best of Bell Atlantic Mobile, GTE Wireless and the U.S. properties of Vodafone AirTouch.

When receiving the award, Seidenberg said of his company, "Verizon is, above all, a network company. 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. We are just at the beginning of this innovation curve."

Eddy Hartenstein

Former Chairman & CEO, DirecTV

"This award recognizes Eddy Hartenstein's distinguished career, building DirecTV from its inception into a world-class provider of digital television entertainment as well as directing Hughes Communications' expansion in commercial satellites supporting the broadcast and cable industries."

Those were the words used to introduce Eddy Hartenstein, former DirecTV vice chairman, the 2007 Technology & Engineering Lifetime Achievement Emmy award recipient. The presenter added, "Eddy's extraordinary vision and leadership put him at the forefront of the digital revolution and the direct-to-home entertainment industry."

Prior to being DirecTV Group's vice chairman, Hartenstein had been 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 had also been president of DirecTV since its inception in 1990, and it was Hartenstein who recruited the company's management team. Hartenstein guided DirecTV's strategic efforts to develop the business infrastructure necessary to launch America's premier direct-to-home entertainment distribution service.

From 1987-1990, Hartenstein was senior vice president of Hughes Communications, Inc. where he was responsible for expanding Hughes' acquisition and deployment of commercial communications satellites.

Hartenstein also served as president of Equatorial Communications Services Company, providing nationwide telephony and data distribution services for a variety of Fortune 100 companies, and prior to that, he was vice president of Hughes Communications from 1981-1984.

Ray Dolby, Charles Ginsburg, Alex Maxey, Charles Anderson, Fred Pfost and Shelby Henderson

Ampex

In 2005, the National Academy of Television Arts & Sciences bestowed the Technology & Engineering Lifetime Achievement Emmy award for the very first time. A team of six men — Ray Dolby, Charles Ginsburg, Alex Maxey, Charles Anderson, Fred Pfost and Shelby Henderson — who had all worked together at Ampex Corp. and played a part in inventing videotape recording, were the recipients.

Founder of HDnet and owner of the Dallas Mavericks NBA team, Mark Cuban, presented the Emmy to these distinguished men, noting their pioneering efforts in the television industry.

It was on March 14, 1956, at the National Association of Broadcasters convention in Chicago, that the VTR-1000 was introduced, later named the Ampex Mark IV, which was the first practical videotape recorder. ■

This Year's Host: DAVID POGUE

The National Academy of Television Arts & Sciences is proud to have David Pogue, the Emmy Award winning tech columnist for "The New York Times" and "CBS Sunday Morning" correspondent, as the host for tonight's 64th annual Technology & Engineering Emmy Awards.

When asked about his reaction to being chosen as host, Pogue said enthusiastically, "I was thrilled! These are important awards, going to people who don't get enough recognition. It's a thrill to be a part of it." Then, revealing the distinctive wit found in his work, he added, "When you're a nominee, you have only a 20% or 25% chance of handling that trophy. When you're the presenter, it's 100% sure that you're going to get the joy of making people happy."

Pogue has a deep regard for the technology and engineering side of television. "It baffles me that the engineers behind the scenes aren't just as famous as the actors. You get famous as a TV star through an accident of birth and genetics; you reach success as a programmer or engineer through brains, hard work, and skills that take years to cultivate," according to Pogue.

With a chuckle, he added, "As I see it, teenagers should have posters on their bedroom walls of the guy who makes Hulu stream without stuttering, the woman who orchestrates the broadcast audio for the Olympics, and whoever came up with the 30-second skip button on the TiVo remote."

Being a science guy has helped Pogue to succeed. After college, Pogue toiled on the fringes of Broadway where he found that his computer-teaching skills were of greater value than his musicianship. He created the Missing Manual book series: a line of printed manuals for computer products that don't come with any. In other words, "the book that should have been in the box," as he explained it.

In November 2000, "The New York Times" hired Pogue to write a personal-technology column. It quickly became a must-read for anyone and everyone with a computer. Every Thursday, Pogue's column -- "State of the Art" -- is on the front page of the Business section. He branched out and created a series of award-winning New York Times Web videos, which were aired on CNBC.

In addition to his work with "The New York Times" and tech segments for "CBS Sunday Morning," Pogue was named the host of a spinoff series from "NOVA," the long-running PBS science show. "NOVA ScienceNow with David Pogue" premiered in October.

Looking ahead, Pogue contends that the next wave of innovation in broadcasting will not replace the old, but build on it. "They splinter. TV didn't kill radio, the DVD didn't kill going to the theater," said Pogue. "In the same way, we can look forward to more fragmentation, more options. 3D TV will continue to simmer away at a low boil; more people will watch more things on non-TV screens; traditional TV networks will coexist with homegrown video sources and Internet 'broadcasts.' The only thing you can predict for sure is that you can't predict anything for sure." ■

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