

SUMMER 2010
VOLUME 2 ISSUE 3

695 QUARTERLY

THE OFFICIAL PUBLICATION OF IATSE LOCAL 695



Mixing a
Dodger Game

Portable, battery powered digital snake

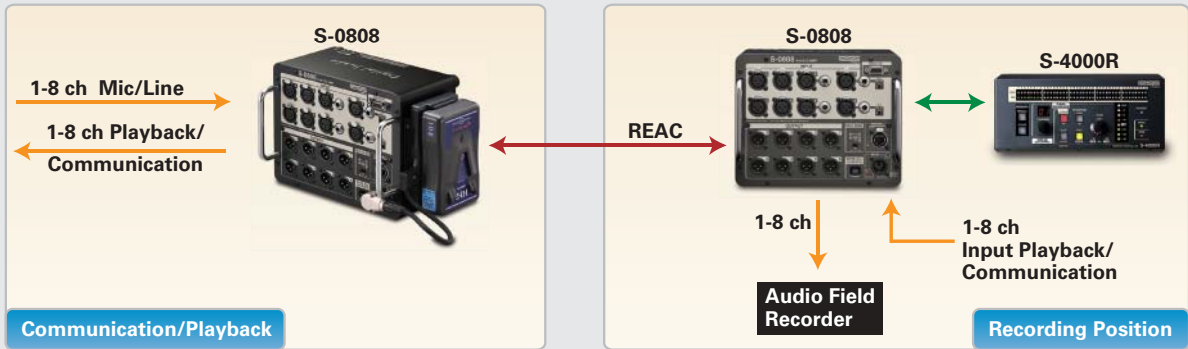
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Location Sound Example



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Space limitations force the postponement of the follow-up test of antenna performance. Look for the evaluation of high gain designs in our next issue.

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Cover: Mixing baseball games at Dodger stadium with Antony Hurd.



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From the Editors



First, we congratulate all of this year's Emmy nominees and winners.

Summer is finally here and with that, television production is in full bloom. The studio lots are buzzing with renewed activity and stage hopping becomes the pastime. It reminds me of what it felt like when I would return to school in September, except now I get paid for it! Feature film starts are also improving as production activity throughout the industry is slowly recovering.

Summer is also the time for baseball and this issue of the *Quarterly* gives us an inside look with the Local 695 members of the Los Angeles Dodgers sports broadcast crew. Scott Smith brings us the sixth installment of "When Sound Was Reel" as we continue to explore the advancements in magnetic recordings.

Jeff Erdmann and Joe Kenworthy explore the use of Fisher microphone booms on set. "Remote Desktop My World" by Ben Betts looks at the use of a remote desktop for your computer. We have more content than we can fit in this issue, so David Waelder's evaluation of high gain wireless antenna will be back in the fall *Quarterly*.

We are getting positive feedback on the articles in the 695 *Quarterly* and it is all due to the excellent content by our contributors. They manage to find the time to research and write, while juggling family and work.

Thank you one and all as everyone appreciates the fine results. We welcome new ideas and articles, so please contact us at mag@695.com.

Fraternally,
Richard Lightstone, Eric Pierce and David Waelder

695 QUARTERLY

I.A.T.S.E. Local 695
Production Sound Technicians,
Television Engineers,
Video Assist Technicians and
Studio Projectionists

Certified & Chartered September 15, 1930
A California Nonprofit Labor Corporation
Incorporated July 31, 1951, State of California
Affiliated with the A.F.L.-C.I.O.,
California State Federation of Labor,
and L.A. Central Labor Council

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From the President

SOME THOUGHTS ON BOOM OPERATING

A certain innate courage is needed to become a Boom Operator. These thoroughbreds function, in full view of all the most demanding personalities and pressures, with no place to hide or cover mistakes; it either is right or not. It is very black and white, instant feedback, negative or positive. Nevermind that a major tent-pole picture may operate at \$1,500 a minute, or the lead actor is making \$300,000 a day just to show up.

It is a Zen exercise, in many ways. A mind/body integration in the moment, the one sword stroke to express the most full implementation of all that has been prepared before. This fluid ease comes from relentless self-preparation, athletic commitment, and passionate interpretation of human behavior for the sake of excellence.

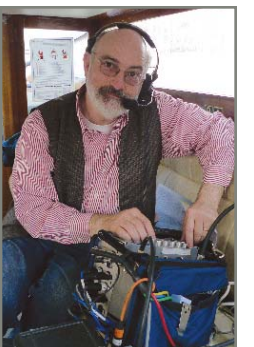
To act, to do, to suspend the intellectual, and respond to the immediate elements in a flow, transcendent of all the encroaching distractions is their specialty. To understand and connect with the actors, the camera, the lighting, movement, is all about streaming in real time with the variables, making them one, coherent whole. This is being in tune and tempo, synchronously with the other performers, helping to create this moment for an audience to experience as invented reality.

Booming can be compared to fencing or dancing or the nonverbal communication so essential between musicians during jazz improvisation. Boom operating is another of the invisible performance arts, so much a part of what our members deliver to the world at the highest levels of their skill set.

These samurai sound warriors relax in their intensity: personification of a Kurosawa slow-motion moment—a hundred times a day.

Give it up for the Boom Operators.

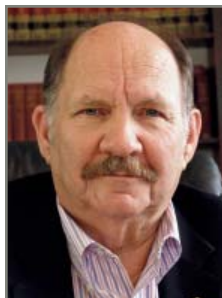
Fraternally, Mark Ulano
President I.A.T.S.E. Local 695



From the Business Representative

Membership Card

Why is the IATSE Local Union No. 695 authorized "Membership Card" so highly regarded by the Producer employers and sought after by audio/video production recording technicians?



The production demands of the motion picture and television industry, where Local 695 members have been employed, provide a substantiation of this question culminating more than eighty (80) years of professional trust, technical expertise and cost efficiency.

On September 15, 1930, then International President William F. Canavan recognized the depth of technical talent audio recording technicians provided in the making of motion pictures and granted an IATSE charter in establishing IATSE—Local Union No. 695.

In 1936 at the IATSE Convention, then International President George E. Brown reconfirmed the Local 695 charter under Article Eighteen, Section 10 (g) of the IATSE Constitution and Bylaws, which reads:

Motion Picture Studio Sound Technicians and Studio Projectionists Charters

Full and direct charter issued to Motion Picture Studio Technicians shall be construed as granting jurisdiction to members of such locals over all persons engaged in or doing work of any nature in or incidental to the transmission of sound and carrier frequencies and recording same in the production of motion pictures; including all sound, recording employees and classifications engaged in all operations, setting up, handling, inspecting, striking, testing, temporary running, repairing, sound servicing, scoring, synchronizing, recording, reproducing, re-recording, dubbing, playbacks, electrical transcriptions, sound public address units, acoustics amplification transmission, transference, sound effects, research, experimental development and all speech and audio frequency work of those electrical devices, excepting those electronic devices used as motion picture projectors or component parts of motion picture projectors of any nature, including the classification of first soundpersons, second soundpersons, third soundpersons, fourth (or assistant) soundpersons, sound film loaders, sound public address operators, sound playback operators, newsreel persons, commercial and industrial soundpersons, and

Moving Picture Machine Operators

Full and direct moving picture machine operators charters shall be

construed as conferring upon the local unions to which they are issued by the Alliance jurisdiction over all employees of operating rooms and operators of apparatus and any connections appertaining thereto in locations where moving pictures are exhibited and also over the operators of all spotlights in conjunction with moving picture exhibitions, when such spotlights are located within the operating room or moving picture exhibitions, and further confers jurisdiction over the operators of all stereopticons, moving picture booths in all cities. This jurisdiction shall not apply to the operating of stereopticons outside a moving picture booth in connection with a show as a stage effect. No member of a moving picture machine operators' local union shall be permitted to operate any stage lights, scenery, or curtains from the front of the theater operated by remote control or otherwise, where operation would displace a stage employee.

Motion Picture Projectionists and Video Technicians shall enjoy the same craft jurisdiction as "Moving Picture Machine Operators" local unions whether film or electronic.

The Alliance of Motion Picture and Television Producers (AMPTP) also recognized the IATSE Local 695 charter and memorialized under same Article I, Scope of Agreement clause of the Producer—IATSE—Local 695 collective bargaining agreement.

Both the International Union and the AMPTP established specific classifications of Local 695 jurisdiction assignments, which include the Production Mixer, Supervising Engineer, Microphone Boom Operator, Operative Engineer (data capture), Maintenance Technician, Service Recordist, Television Engineer, Video Assist Technician, Utility Sound Technician, Audio II, Sound Service Persons and Studio Projectionist, all of which classifications have been memorialized and ratified in the Producer—IATSE—Local 695 collective bargaining agreement.

Recently, International President Matthew D. Loeb in celebration of Local 695's eightieth (80th) birthday, also acknowledges what his predecessor's envisioned that the members of Local 695 "have been met with many challenges over the years" and "proven its ability to succeed through times of difficulty and change, providing vital contributions to the entertainment industry" and "have thereby earned well-deserved respect and prominence."

Over the past eighty (80) years, Local 695 has met the demands required in the ongoing evolution of the electronic recording chain concerning audio, video and projection work.

Local 695 initiated the first technical educational programs aimed at meeting the ever-changing production audio/video recording demands. Local 695's current Education Director, Laurence Abrams, with additional support from Contract Services Administration Training Trust Fund (CSATTF), has continued the legacy instituted by the original executors of the 1930 IATSE charter.

Simply stated, history proves the Producer who employs a Local 695 audio, video or projectionist is employing an established engineer or technician having the technical expertise to meet the production demands cost efficiently. A Local 695 "Membership Card" is a validation for the Producer/employers expectations.

The IATSE Local 695 "Membership Card" is a confirmation of the above-cited reasons of its importance and sought-after validation of our members' technical competence.

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GARY WILKINS, CAS
ON SET OF KILLER ELITE



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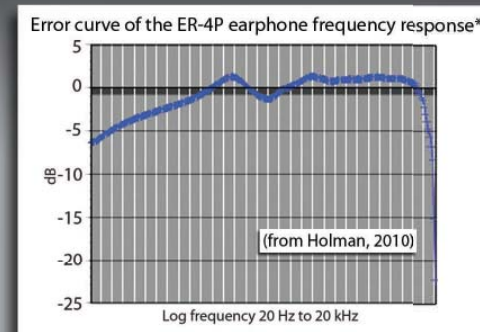
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Tomlinson Holman, CAS Quarterly Spring 2010



*compared to the ear canal response measured on a dubbing stage aligned correctly to SMPTE 202.

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NEWS & ANNOUNCEMENTS

A Plethora of Legal Streaming Video Downloads



The Internet is filled with choices. One choice to be made is where to obtain online videos for streaming or downloading your favorite films and television programs. When making that decision, it's important that you are aware that the theft of digital media and intellectual property, or "video piracy," hurts each and every IATSE member by way of its negative impact on our wages and benefits. You can help reduce digital media theft by letting people know that they can choose to get their videos from a huge selection of entirely legal websites.

Please see <http://iatse-intl.org/dmptheft/theftlegalcontent.html> for a frequently updated list of legal streaming video download sites.

New 695 Online Store

Everyone wants the cool Local 695 gear ... and now you can order online and have it shipped straight to your door. Use your credit card or your PayPal account!

Choose from six sizes of long- or short-sleeved black 100% cotton T-shirts as well as the premium-quality navy blue embroidered Local 695 hat. T-shirts have the Local 695 "bug" on the front and the color "Play-Stop buttons" logo on the back. Hats have the "Play-Stop buttons" logo embroidered on the front and "IATSE Local 695" embroidered on back. All are union-made in the USA.

The Local 695 Online Store is at <http://695.com/html/store.html>

www.695.com



California Tax Credit Program

Gov. Arnold Schwarzenegger announced on July 30 that the California Film & Television Tax Credit Program that was a part of last year's budget agreement has achieved its desired goal of keeping scores of film and television productions in state—creating and retaining tens of thousands of jobs and generating spending in California. In its first year, the California Film Commission, which administers the Program, allocated \$200 million in tax credits to 77 projects. This year, another 30 projects are set to receive an additional \$100 million in tax credit allocations. Together, they are estimated to bring \$2 billion in direct spending to California communities, which includes \$736 million in wages paid to "below-the-line" crew members, according to data compiled by the Film Commission.

The California Film Commission reports that the 77 first-year projects approved for tax credits will hire 18,200 crew members, 4,000 cast members, and more than 100,000 background or "extra" players. These approved projects include 51 feature films, seven television series and 14 made-for-television movies.

As of June 1, 2010, production companies could apply to California's Tax Credit Program for allocations from the Program's second year. Thirty productions have been approved for allocations, which exhausts the fiscal-year funding. The remaining applicants have been added to a wait list. The 30 productions include 19 feature films, eight television series and three made-for-television movies.

President Loeb Awards Jim Osburn With 40-Year Pin

At the IATSE District 2 Convention held in Universal City on May 15–16, 2010, International President Matthew Loeb presented a 40-year service pin to Local 695 Business Representative Jim Osburn, citing how Brother Osburn has "dedicated himself to this industry and to servicing the members in a tenacious, effective way." After a standing ovation, Brother Loeb concluded by saying, "Jim, you earned this. We're proud of you. We appreciate your hard work." This unusual action at a district convention exemplifies the level of appreciation the IATSE has for Brother Osburn and for his more than 40 years of service to the motion picture and television industry and to Local 695. Congratulations, Jim!

Kriky & Seth's BBQ



The Fourth Annual Kriky & Seth's Sound Department BBQ in June was a great success. More than 100 sound people came to the event, hosted this year at Beau Baker's home. Michael (Kriky) Krikorian and Seth Gilbert prepared their signature smoked brisket, smoked jalapeño poppers, pulled pork, and baby back ribs. This year, Kriky & Seth expanded the offerings by hiring Seth's favorite Glassell Park taco stand.

Hosting this event allows the friends to share their love of BBQ and cooking with fellow sound professionals. The first get-together drew only about 40 people but its reach has grown every year. They added T-shirts and a prize raffle in the second year. This year, prizes contributed by Ken Beauchene, Turner Audio, Wolf Seeberg Video, LMC Sound, Action Audio & Visual Inc., Wilcox Sound, Coffey Sound, NeoPax, and Location Sound Services were distributed to 18 lucky winners.



Didn't get an invitation? Kriky & Seth have the event posted on Facebook. Connect with them to be in the loop for the next event. It's a good opportunity to socialize, meet new people and eat.

<http://www.facebook.com/pages/Kriky-Seths-Sound-Department-BBQ/116758531671577>



Top: Kriky (in gloves) & Seth at the grill.
Middle: (L-R) Theresa Radka, R. Steven Evans, Reginald Bryant, Doug Ball, Jim Machowski.
Bottom: Lucky winner Mark Grech shows his enthusiasm.



Manfred Klemme 1939 – 2010

On July 2, we lost a friend and a true audio pioneer as Manfred Klemme succumbed to multiple myeloma in Carlsbad, California.

We knew Manfred in 1980 as the Nagra Hollywood representative. With the help of his friend, Michael Denecke, Manfred introduced the time code Nagra and the industry would never be the same.

In the '80s, Manfred became marketing manager for the successful Steadicam camera stabilization system working for Ed DiGiulio of Cinema Products. Then in 1994, opened his offices on Cahuenga Boulevard, next door to Michael Denecke, to distribute Sonosax mixers and recorders in the USA. He founded M. Klemme Technology in 1996 and brought us the K-Tek microphone boom poles, microphone mounts and windscreens.

Manfred Klemme was honored by the Academy of Motion Picture Arts & Sciences with a Technical Achievement Award in 1998 for the design and development of the K-Tek microphone boom pole and accessories for on-set motion picture sound recording, and in 1999, was awarded a Primetime Emmy for Outstanding Achievement in Engineering Development for his contribution to the DCODE TS-I Time Code Slate. At the CAS Awards on February 27, 2010, Manfred was awarded the CAS President's Award for his great innovations toward the advancement of sound.

Manfred is survived by Ora Lee, his wife of 49 years, daughter Brenda Klemme Parker, president of K-Tek since 2006, as well as two more children and two grandchildren.

Manfred will be greatly missed.

In Memoriam

JOHN W. PRATT
Mixer

Aug. 21, 1926 – June 6, 2010

LESLIE P. ROBLEY
Projectionist

March 5, 1955 – May 10, 2010

JOHN R. ERICKSON
Projectionist

March 16, 1943 – May 24, 2010

ERIC "BUDDY" MARTIN
Boom Operator

Feb. 23, 1920 – May 3, 2010

by LAURENCE B. ABRAMS



Industry Evaluates Health and Safety Issues Related to Extended and Excessive Shooting Takes

Whether on a big shoot or a small shoot, taking measures to protect the health and safety of actors and crew is vitally important. The AMPTP's Industry-Wide Labor-Management Safety Committee is continually focused on this task by bringing together Labor and Management representatives to collaborate on the development of guidelines for safe practices in the motion picture and television industry.

The most recent topic of review by the Safety Committee has been "Extended or Excessive Takes," an issue gaining in importance during the transition from film to high-definition digital video. A film camera with a fairly expensive 1,000-foot load of film is limited to 11 minutes of shooting time, while in contrast, high-def video cameras record on relatively cheap reusable media which, when used in hot-swappable systems, can shoot nonstop with no time limit whatsoever.

Lower media costs and higher running times give a director the freedom to work with actors and shoot scenes in ways not previously possible. Striving to allow directors to achieve their vision with the newest technologies is one of our primary responsibilities. But new

technology produces new challenges for the production sound crew, not least of which is the fact that there are limits to how long a handheld fishpole can be elevated over one's head.

The Safety Committee's investigation began with the premise that extended and excessive shooting takes have the potential to cause injury to the Microphone Boom Operator and to others. At Local 695, we have numerous Microphone Boom Operators who can attest to this with a history of personal injuries ... usually back, knee and shoulder ... that range from moderate to quite severe and sometimes even career-ending.

The conclusions developed by the Safety Committee emphasize awareness, both as a pre-production topic of discussion and as an issue to be reconsidered during production as circumstances change. No single solution emerges, but instead, a range of responses is proposed, depending upon the individual circumstances. For example, one suggested option is the use of radio microphones, whose developing technologies have greatly expanded their quality and reliability ... but as we know, they have multiple limitations as well, and in some cases, may produce inferior audio tracks.

Another solution suggested by the Safety Committee is the Fisher microphone boom. Like radio mikes, it's a tool that may not work well in all situations (think Steadicam shots) but can be an effective option for others. With its long reach and articulating mike mount, a Fisher can

effectively address the safety issues and also extend some capabilities of a fishpole. This is why Local 695 has focused on the "Fisher Boom: One-on-One Intensive" training program that we began in July of 2008 and continue to offer to 695 members. In addition to Microphone Boom Operators and Sound Utility Technicians, we encourage Production Sound Mixers to receive this training, as well. If you are not yet trained on a Fisher, see www.695.com/mbr/edu-ftb.php or contact edu@695.com to find out more and to schedule a session.

The conclusions of the Safety Committee's investigation were published in the May 21, 2010, AMPTP Safety & Health Awareness Sheet on "Extended or Successive Takes" (see opposite page). This document is intended to help prevent future injuries and reflects Labor and Management's shared commitment to production safety. It is important for the production sound crew to take its advice seriously. For a Microphone Boom Operator, you always want to "give it your all" and do everything you possibly can to help the Production Sound Mixer deliver to the production company the very best audio tracks possible. It's what we do. But remember ... when the potential for injury exists, the producer is on your side and is committed to working with you to ensure that the job is performed safely.

This Safety & Health Awareness Sheet and all of the AMPTP safety bulletins are available to view and download at www.csatf.org/bulletintro.shtml.

SAFETY & HEALTH AWARENESS SHEET

EXTENDED OR SUCCESSIVE TAKES

INTRODUCTION

Advances in technology have enabled filmmakers to extend the length of individual takes (including continual resets) and the number of successive takes. In these circumstances, cast and crew may be required to support a weighted load (e.g., hand held sound boom, hand held camera, props, etc.) or maintain an awkward or still position for longer durations. Therefore, consideration should be given to the length of a take and the number of successive takes.

This Awareness Sheet has been developed to provide guidance for safety concerns caused by extended and successive takes. The objective is to increase awareness to enable the producer, director, cast and crew to communicate about and address these concerns before they become problems.

POTENTIAL HEALTH EFFECTS AND SAFETY CONCERNS

Maintaining an awkward position or supporting a weighted load for extended lengths of time can lead to various ailments ranging from body discomfort to muscle fatigue. Resulting safety concerns, such as dropping equipment, and trips and falls may also occur, potentially causing injury to the individual and to others.

Each production is unique and requires different technical and creative set-ups for shooting takes. In addition, each person's physical capabilities are different. These factors call for specific planning and communication in pre-production and throughout the duration of the production.

RECOMMENDED ACTIONS

- At the earliest stages of pre-production, conduct discussions with all affected department heads regarding the possibility of extended and/or successive takes.
- Evaluate when and where equipment and/or personnel options can be utilized to provide relief during the production.

- Special consideration should be given when equipment and/or personnel options are limited or unavailable.
- Throughout production, keep the lines of communication open and free-flowing between all cast, crew and production management.

In addition to the actions suggested, a review of available equipment options that provide support for weighted loads and relief to affected personnel should be included in pre-production meetings.

EQUIPMENT OPTIONS

A wide variety of equipment options are available for consideration during production and can include, but are not limited to:

- Dolly-mounted microphone boom
- Wireless microphone
- Camera dolly
- Tripod
- Stand
- Powered assist device

PERSONNEL OPTIONS

Some personnel options to consider:

- Rotation of operators
- Provide adequate rest intervals
- Spotters assigned to operators
- Encourage warm-up and stretching exercises

SUMMARY

Employees experiencing muscle fatigue or discomfort due to extended or successive takes are encouraged to communicate their situation to appropriate safety personnel and/or production management in a timely manner. Production management is encouraged to consider all options, including the above-outlined equipment and personnel options, to address these concerns.

Issued: May 21, 2010

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SAFETY AND HEALTH AWARENESS SHEETS ARE RECOMMENDED GUIDELINES ONLY; CONSULT ALL APPLICABLE RULES AND REGULATIONS

SAFETY BULLETINS MAY BE VIEWED OR DOWNLOADED FROM THE CSATF WEBSITE AT WWW.CSATF.ORG

Local 695 would like to congratulate all the nominees and winners for **Outstanding Sound Mixing** and their production sound teams

Outstanding Sound Mixing for a Comedy or Drama Series (One Hour)

Dexter “Hello, Dexter Morgan”
James P. Clark, CAS, Elmo Ponsdomenech,
Kevin Roache, Jeremy Balko
Sound Team: **Jeff Williams, Jimmy Gaudio**

Glee “The Power of Madonna” FOX
Phillip W. Palmer, CAS, Doug Andham,
Joseph H. Earle, CAS
Sound Team: **Patrick Martens, Devendra Cleary,**
Mitchell Gebhard, Hanna Collins

House “Epic Fail”
Von Varga, Juan Cisneros, Richard Weingart, CAS,
Gerry Lentz, CAS
Sound Team: **Ken Strain**

Lost “The End”
Bobby Anderson, CAS, Ken King, CAS,
Frank Morrone, CAS, Scott Weber
Sound Team: **Colin Jones, Jon Mumper, Cary Weitz,**
Travis Hoover

24 “3:00 PM - 4:00 PM”
William F. Gocke, CAS, Michael Olman, CAS,
Kenneth Kobett, CAS, Larold Rebhun
Sound Team: **Todd Overton, Eric Naughton,**
Corey Woods

Outstanding Sound Mixing for a Miniseries or a Movie

The Pacific Part Two HBO
Andrew Ramage, Michael Minkler, CAS, Daniel Leahy
Sound Team: Dean Ryan, Glen Townson

The Pacific Part Five
Andrew Ramage, Michael Minkler, CAS, Daniel Leahy
Sound Team: Dean Ryan, Glen Townson

The Pacific Part Eight
Gary Wilkins, CAS, Michael Minkler, CAS, Daniel Leahy,
Marc Fishman
Sound Team: Mark J. Wasiutak, Chris O’Shea

The Pacific Part Nine
Gary Wilkins, CAS,
Michael Minkler, CAS, Daniel Leahy
Sound Team: Mark J. Wasiutak,
Chris O’Shea

Outstanding Sound Mixing for a Comedy or Drama Series (Half-Hour) and Animation

Entourage “One Car, Two Car, Red Car, Blue Car” HBO
Tom Stasinis, CAS, Dennis Kirk, Alec St. John
Sound Team: **Debbie Pinthus, Tom Curley**

Modern Family “En Garde” ABC
Stephen Tibbo, CAS, Brian R. Harman, CAS, Dean Okrand
Sound Team: Preston Conner, **Dan Lipe, Ross Levy,**
Andy Adams

The Office “Niagara”
Ben Patrick, CAS, John W. Cook, Peter J. Nusbaum
Sound Team: **Brain Wittle, Nick Carbone,**
Keith Garcia, Doug Carney

30 Rock “Argus”
Griffin Richardson, Tony Pipitone, Bill Marino
Sound Team: **Chris Fondulas, Bryant Musgrove,**
Lawrence Loewinger, Paul Koronkiewicz, Michael Sanchez

Two and a Half Men “Fart Jokes, Pie and Celeste”
Bruce Peters, Bob La Masney, Kathy Oldham
Sound Team: **Leroy Castelina, Michael Rizzolo,**
Dan Berlin, Terrel Richmond, Ron Arnold

Outstanding Sound Mixing for a Variety or Music Series or Special

The 82nd Annual Academy Awards
Edward J. Greene, CAS, Frank Wolf, Pablo Munguia,
Robert Douglass, CAS, **Patrick Baltzell, CAS,**
Michael Parker, Brian Riordan, CAS, Adrian Ordenez,
Connor Moore, **Toby Foster**
Sound Team: **Debbie Fecteau, Jeffrey Fecteau,**
Ric Teller, Mark Weber, Steve Anderson,
Larry Reed, Tom Pesa, Hugh Healy, Robert Brogden,
Jeff Peterson, David Bellamy, Grant Greene



American Idol Episode #933 “Idol Gives Back”
Edward J. Greene, CAS, Andrew Fletcher, Tim Hatayama,
Michael Parker, Gary Long, Brian Riordan, CAS, Connor Moore,
Adrian Ordenez, Christian Schrader, **Bruce Arledge, Jr.,**
Randy Faustino, Paul Whitman, Alex Guessard
Sound Team: **Debbie Fecteau, Dennis Mays, Pete San Filipo,**
Ric Teller

American Idol Episode #943 “Finale”
Edward J. Greene, CAS, Randy Faustino, Andrew Fletcher,
Michael Parker, Gary Long, Brian Riordan, CAS, Connor Moore,
Adrian Ordenez, Christian Schrader
Sound Team: **Debbie Fecteau, Dennis Mays, Ric Teller,**
Tim Hatayama, Hugh Healy

Dancing With the Stars Episode #907
Evan Adelman, Eric Johnston, John Protzko, Boyd Wheeler
Sound Team: **Paul Chapman, Steven Chin, Judy Frenkel,**
John Gates, Pete Kudas

The 52nd Annual Grammy Awards CBS
Tom Holmes, Eric Johnston, John Harris, Eric Schilling
Sound Team: **Michael Abbott, Rick Bramlette, Jeff Peterson,**
Phil Ramone, Barry Warrick, Andre Arango, Hank
Neuberger, Billy McCarge, Dave Rickmears, JP Velasco,
Pablo Munguia, Steven Anderson, Craig Ravello,
Bill Kappelman, Pete San Filipo, Ric Teller, Damon Andres,
Eddie McKarge, Paul Chapman, Dennis Mays, Bruce Arledge,
Mikael Stewart, Kirk Donovan, Dave Bellamy, Grant Greene,
Ron Reaves, John Arenas, Matt Campisi, Jim Fay,
Thomas Ryden, Hugh Healy, Bob Lamasney, Max Feldman,
Hardi Kamsani, Joel Singer, Charles Campbell, Anthony Catalano,
Gary Epstein, Mike Babbitt

The 25th Anniversary Rock and Roll Hall of Fame Concert HBO
Carl Glanville, Jay Vicari, Al Centrella, Brian Riordan, CAS,
Bob Clearmountain, John Harris
Sound Team: Bryan Leskowicz, Steve Lamphere, **Skip Kent,**
Dave Natale

Outstanding Sound Mixing for Nonfiction Programming

The Amazing Race
“I Think We’re Fighting the Germans, Right?”
Jim Ursulak, Dean Gaveau, CAS, Jerry Chabane, Troy Smith

Deadliest Catch “No Second Chances” Discovery Channel
Bob Bronow, CAS

Life “Challenges of Life”
Graham Wild, John Rigatuso

The National Parks: America’s Best Idea
“The Scripture of Nature”
Dominick Tavella, CAS

Spectacle Elvis Costello With...
“Bruce Springsteen” Parts 1 & 2
Sue Pelino, Jay Vicari, John Harris

Names in **bold** are Local 695 members
Winners are highlighted with gold background



Ask The Man Who Owns One

by Laurence Abrams and David Waelder



Like the camera dollies, Fisher sound booms are only available for rental directly from J.L. Fisher. But it wasn't always so; in decades past, it was possible to purchase a boom just like any other gear. They are so well made that they last forever and a few booms from earlier times do circulate in private hands.

Sound Mixer Joe Kenworthy purchased his, Model 2 boom with a Model 3 base (the 16-footer), from Fox and has been carrying it on jobs since 1992. We thought he could give us a unique perspective on using it in a modern production environment and we asked him to stop by the Local and share his experience.

Joe Kenworthy booming from a crane in Billings, Montana, on *The Missouri Breaks*. Director Arthur Penn (in white) and Jack Nicholson are in the foreground.

How did you get into the business?

I got in the business repairing equipment for my dad. And then I went to work for Hal Landaker at Columbia Pictures. It was just Hal and I in the shop doing all the maintenance. I was there for 5½ years.

And your first encounter with a Fisher boom?

Hal came to me and said, "You've got to rebuild the booms here. We've got a noisy one." I'm game to get in there and get trying. You know, I was an auto mechanic before and it's mechanical. I figured, ahh, it'd be easy. He gave me 50 cents and told me to go across the street to the machine and get us some cups of coffee. While I was over there, he unstrung the boom—the cables, the lines, everything. I came back and he said, "Get started!" I had literally been there for about two or three weeks at that time and I was thinking, "I don't think I'm gonna last very long on this job." Somehow, I took it apart, cleaned all the tubes, greased all the bearings and made it work. I could go through the boom almost blindfolded after that.

And after working with Hal 5½ years, you moved on to production as a Boom Operator, right?

Yes, I went to work for Jack Solomon, who always took the boom with him on location. And that's why he grabbed me, because I knew the boom so well. We took it to Santa Fe, New Mexico, in the desert with cattle! Jack managed to take it wherever he went.

When I moved up to mixer, I continued to bring a Fisher with me whenever I could. I like it because when the actors turn their head around, we're not just "siding" them—we can be directly on them and track them much better. It makes a big difference, especially if we've got the mike a few feet up in the air. You can back away from the camera and keep away from the lights. And for 10-minute takes, it's not a problem, you just go with it. And with HD video cameras, you need it more now than you did 10 years ago. On *NYPD Blue*, in the Squad Room, they'd have 10 people talking from one end to the other. We'd have the boom in the corner—take the corner wall out—and we just arm right across and cover the whole room. And they'd have two cameras shooting back and forth all the time. We never had to say, "we can't get it" or "we can't get a boom in" or "we have to take a ceiling out." We were always able to get it.

How do the Directors of Photography respond to having a Fisher boom on the set?

Most of them didn't like it at first. In fact, on the first day of *Pepper Dennis*, the cameraman walked by while we were setting up the Fisher and said, "That thing will never be on the set." But then at the end of the second week, he came by and said, "That thing works good. Very good!" He came to like it, because we stayed off the set.

Did you use a Fisher boom during the entire run of *NYPD Blue*?

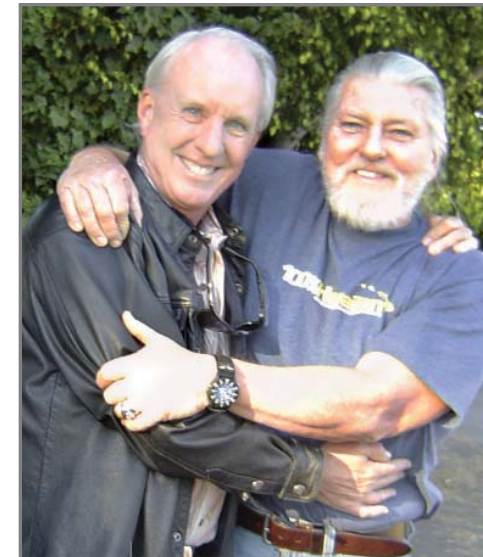
Yes, the entire 10 years. We wheeled it around from stage to stage and we used it every day we were on stage, and we were usually on stage four to five days out of seven. It was the standard tool.

Why don't we see more Boom Operators using a Fisher?

Some boom guys are afraid of it. Several of my guys were intimidated when they first saw it and didn't know what to do with it, but all of them came to love it after they learned how to use it.

Do you think you can find a way to use the Fisher on any production set?

You have to pick your time and place. In some places, there's no way you can use it. We went to Tahiti and we took a Fisher boom arm with us, but we couldn't ship the base. Instead, we put the boom on a high-roller stand. It was a TV movie called *Three in Tahiti* that we did around 1970. The mixer was Les Fresholtz and boom was Chic Borland and they picked me as their 3rd specifically to make sure the boom was working OK out on location. We used that boom a lot ... whenever we could ... in the courtroom, in the mayor's office, and we even used it for a lot of scenes we did out on the beach.



Joe Kenworthy (left) with his longtime Boom Operator, the late Hal Whitby.

Any tips about using a Fisher?

It's always worked so well whenever I use it, but the trick is that once the shot's over, you need to get it out of the set so the rest of the crew can go in and do their stuff. That's the main thing I had to train my Boom Operators to do. Once the shot's over ... get it out and give everybody their room to work.

Any memorable situations where the Fisher allowed you to avoid using radio mikes?

We were doing *The Cowboys* with John Wayne and we were on that crane above the camera. The camera was on the platform of the crane and we were on top on the crane arm reaching out and getting everybody on horseback, getting all their dialog. Jack [Solomon] loved putting the

boom on a crane; we used the same trick on *The Missouri Breaks*. It saves us from using a lot of radio mikes. We avoid the clothes noise and the hits and the hugging. I just try and stay away from radios as much as I can, and when I do, we turn in better tracks.

Joe has won four Emmy Awards and two CAS Awards for Outstanding Sound Mixing; clearly, whatever he's doing is working for him. We appreciate the time he took to share with us.

**Packard automobiles, known for excellence in engineering and construction, began using the slogan, "Ask the man who owns one" in 1901.*

Fisher-ing Trip

(re)Introducing the Fisher Boom to a Single-Camera Show

by Jeff Erdmann with Robert Wald & Jennifer Winslow

They tell me that back in “the old days” there was a Fisher microphone boom dolly on every film and television set but, in my 18 years as a Boom Operator, I have been around a Fisher just one time before now. For various reasons, the Fisher has seen much less use on single-camera shows during the last few decades, having been mostly replaced by a handheld fishpole. But things may be starting to change. Why? HD. Film stock is expensive but videotape is really cheap and that’s why we’re starting to see so many I-o-n-g shooting takes. Not always the best place to use a fishpole.

I work on a show called *The Secret Life of the American Teenager* for ABC Family, which we shoot on the Warner Ranch. Last year during Season One, we shot the show in a fairly traditional manner. We were shooting in HD and the takes would often run long. One scene ran more than 12 minutes and that was only if the actors remembered all of their lines perfectly. This is what first got me thinking about bringing in a Fisher boom for Season Two. We knew we wouldn’t be able to use it for all the shots but even if we only used it part of the time, we thought it could be valuable. Last February before the season began, we discussed this with Lindsley Parsons III, our UPM. He was quite agreeable to letting us give it a try using the 16-foot Model 2 boom on a Model 3 base.

First things first. How do you use this thing? I contacted Laurence Abrams at the Local 695 office and took his fantastic one-on-one training course at the Fisher facility in Burbank. Even if you don’t plan on using a Fisher anytime soon, I would still strongly encourage anyone to take this class; it’s really helpful and it’s FUN! We spent a lot of time together working through all aspects of the boom and then I went back to Fisher on my own just to refresh and be as prepared as I could be. For backup, I also made sure Jennifer Winslow, my Utility Sound Technician, took the training as well. When day one arrived, we were ready.

That New Car Smell

The first time I got the boom onto the set, I received a wary gaze from nearly everyone. Between *Secret Life ...* and *7th Heaven*, much of this crew has been together for more than 13 years. Apparently, they had a bad experience with another Fisher boom operator long ago so I wanted to make a good first impression.

For the first day, I figured we’d keep a low profile and stick to the fishpole but on the second day, I pulled the Fisher into place, swung the platform around, and jumped right up. The problem was, I had made what I am sure is THE classic rookie mistake—I hadn’t extended the right front wheel. So when my full body weight hit the platform, the whole thing started falling over to the right like a skyscraper in a Godzilla movie. Fortunately, I sensed it quickly enough to jump down and catch it with my 6’2” frame. Crisis averted but talk about HUMILIATING! Yes, we covered that

exact issue quite thoroughly during the training session but I guess it’s a mistake you have to make once. Just once. I haven’t neglected to extend the wheel again. And never will.

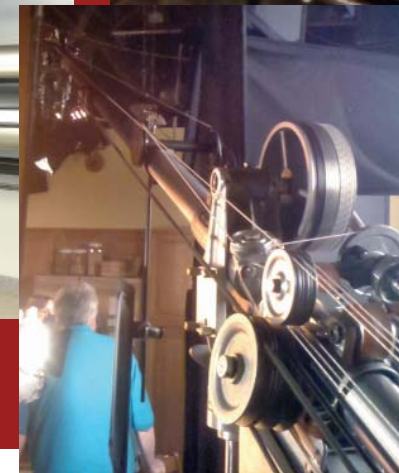
I soon learned that timing is everything when trying to park the machine on the set. The best time to drive in is just after the dance floor has been built but you may have to delay until the larger lighting elements have been established as well. Every setup is different and it’s a game of “Wait ... wait ... wait ... GO NOW!!!!” The window can slam shut in a heartbeat. (“Oh well, back to the ol’ fishpole!”)

Initial Concerns

After using the boom for a few days, I found I was having a problem cuing to the left when I meant to cue to the right. I realized my 18 years of using a fishpole felt like they were in direct opposition to the way the Fisher was set up.



Opposite page: Jeff Erdmann (left), Robert Wald & Jennifer Winslow.



Left: Fisher boom. Above: Jeff at work

So I grabbed some tools and in a very short time, figured out how to flip the lever to cue the way my instincts are hard-wired. I only found out later that the technicians at Fisher can be very helpful in explaining how to make the change from “underhand” to “overhand.”

Ever since I adjusted the boom for my style, I haven’t had a miscue, which surprises ME more than anyone else! In fact, after five months, I don’t even consciously think about it anymore. Just like driving a car, it has become second nature.

Benefits

Initially, we looked at the Fisher as a way to reduce the fatigue that accompanies shooting very long takes with a fishpole. For years, I have had chronic lower back, upper back, shoulder, neck, and hand problems. Since I started using the Fisher, those issues have almost disappeared. My chiropractor hasn’t seen me in months.

As I used it more, I found it could also get me out of some sticky situations. Sometimes the lighting and grip equipment will prevent me from getting close to a certain part of a set, such as a doorway. With the articulating mount, I can pull in an actor from farther away than I could with a fixed fishpole mount. When the lighting is particularly difficult, the Fisher allows me to work on the “wrong” side of the key or fill light, where a fishpole and ladder would be extremely difficult, if not impossible.

Because we shoot so much of this show on stage (usually removing at least one set wall), I’ve been able to utilize the Fisher boom far more than I had originally estimated. Some days I use it exclusively. If I were to guess, I’d say 50% would be the average, perhaps higher.

We also shoot at a secondary stage complex several miles from the Warner lot. I didn’t know if I would be able to transport the boom there without creating too much of a hassle for the Transportation Department but it turns out we have just enough room on the camera truck for the base to roll in behind the camera dolly, and the boom arm mounts nicely above the shelves on two rubberized utility hangers I found at the home improvement store. Traveling with the Fisher is easier than I thought and I love having it with me wherever we go.

Plays Well With Others

My main concern going into Season Two was “How will people respond to the presence of this somewhat large, unfamiliar thing being in their way?” Early on, I have to admit that there were groans of disapproval, but that wore off pretty quickly. Some crew members even enjoy having it around because it gives them somewhere to sit between shots. Anything we can do to win friends. The actors seem to like it too.

Overall, the crew has been great in their acceptance or, more accurately, tolerance of the Fisher. The Key Grip, Adam Sudtell, will work with me when hanging large teasers across the middle of the set or when I need to wedge my way in. The entire Grip and Electric Departments have been very accommodating. Of course, they have also found the Fisher to be a great source of entertainment. They’ve even given it nicknames like the “Dinosaur” or the “Lunar Rover.”

One morning, I arrived early on the stage and grabbed the handle to move the Fisher to the set. In a scene out of a Charlie Chaplin movie, I found myself lurching back toward the machine ... which had been expertly grip-chained to the wood stage floor! It wasn’t going anywhere. Like a trapped coyote, all I could do was consider chewing off my own paw, or in this case, find someone with a screw gun. After some amateur sleuthing, the culprit turned out to be the Best Boy Grip, Jesse Beaird. My revenge? A minor remodel of Jessie’s cool, black, macho bicycle ... with a shocking-pink seat, pedals, and other spare parts I found at a thrift store. Sweet.

Quite frankly, when we got the idea of bringing a Fisher boom onto Season Two of our show, we weren’t really sure that it was going to work out. Would production let us have one? Would it navigate between the tightly constructed set walls? Would the crew accommodate the requirements of the boom? Would we be able to use it enough to make it worthwhile? Would we get audio tracks that were at least as good as what we were looking for? The answer to all those questions has been a resounding “Yes.” In fact, it greatly exceeded all our expectations in every respect. At this point, I am totally HOOKED. What began as an experiment is now something I don’t ever want to work without!

by Ben Betts

Remote Desktop My World

Anyone who has worked with me over the past dozen or so years will tell you that I live and die by “Remote Desktop.”

As our society has become more tech-savvy, computer and video playback for motion pictures has grown into a complicated affair. It is not uncommon for us to have more than 30 computers feeding more than 100 monitors on a set. As you can imagine, managing that many machines with piles of keyboards, mice, monitors, KVM switches, etc., can quickly become a tangled affair. Remote Desktop allows you to control, monitor and distribute files to any number of computers all from one screen.



My control addiction started in the mid-'90s with an application called “Timbuktu,” and then spread to “AppleShare IP,” which became the “Apple Remote Desktop” we use today. In the Windows world, Microsoft also has their own “Remote Desktop,” and there are a number of similar products and services that let you control computers remotely through a local network or the Internet (Logmein, PC Anywhere, Back-to-my-Mac, etc.). Most of these systems use a similar protocol called RFB (remote framebuffer) and are generally referred to as “Virtual Network Computing” or VNC.

The various products that can control computers remotely through a network generally work on the same principles. For today's purposes, I'll be focusing on the “Apple” way of administrating, not because I'm a fan of Steve Jobs, but because that has been a stable and reliable methodology for quite a while now. Since VNC is a cross-platform open-source protocol, you can control just about any type of computer, running most modern operating systems like Mac OS-X, Windows XP/Vista/7 and Linux. This is convenient since we usually find ourselves using a mixture of Macs and PCs on set.

To be a computer control freak, all you need is one computer to act as the controller (Administrator) and some computers to control (Clients). The computers need to be on the same network, either wired or wireless and can even be across the world, as long as they are both connected to the Internet. For production purposes, we generally just wire up our own little private local network so that everyone's YouTube and Skype traffic doesn't bog everything down.

Among the varied jobs the modern Video/Computer Engineer ends up performing on set is the role of IT Manager. In order to remotely control computers, they must be on a network. Setting up a network can be as simple as plugging each computer's Ethernet port into a router/switch/hub with a Cat5 cable. Despite what the name implies, an Ethernet “switch” is really just an intelligent hub that routes traffic rather than blindly sending packets everywhere like a regular hub. Networking can also be quite complex with any number of wired/wireless networks/sub-networks, using things like VPN bridges and tunnels to connect everything together. Generally, we can keep our local

networks for production relatively simple with no more than a wireless base station and a switch, attached to a router connecting our network to the Internet.

Once the Client computers are available on a network, they need to be set up to allow the remote access. On a Mac, this is done within the System Preference “Sharing” panel, where you turn the “Remote Management” service “on” and select what privileges will be allowed to the remote user (you). In Windows, it's a similar process within the System Properties' “Remote” tab. You'll also want to find out the Client computer name or TCP/IP address. This can be found within the Client computer's sharing or network control panels.

An Internet Protocol (IP) address always consists of four numbers, separated by periods (aka “dotted-quad”). Every device connected to a network must have a unique IP address and every user on the public Internet is also assigned a unique IP address. Where this really gets confusing is that since there are only 4.2 billion possible IP addresses in the world, local networks have found it necessary to use their own set of IP addresses, sheltered behind a router that uses a single IP address out on the public Internet. This isn't a problem if you're controlling computers on your local network, but can get really confusing when you're remote controlling computers through the Internet. Unless you're lucky enough to have a static public IP address on your Client computer, you will need to know the full computer name and address.

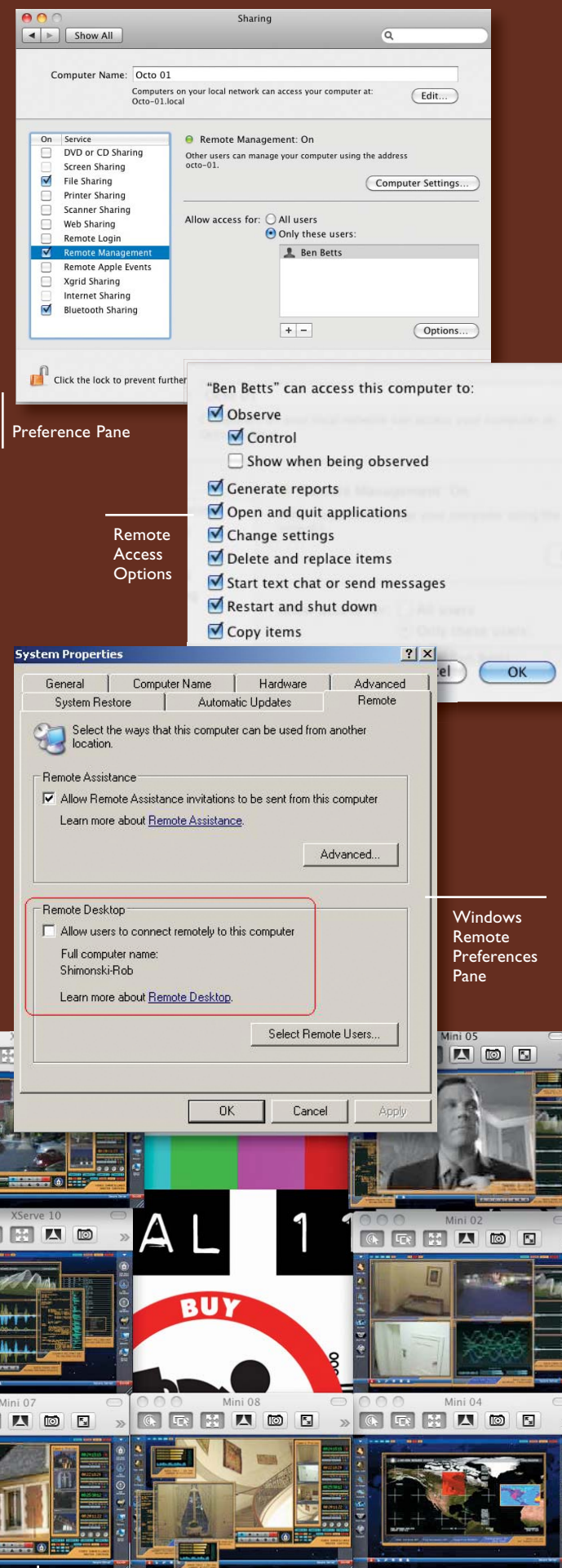
Once your remote Client computers are set up to allow remote control, you'll need a computer to control them from. A single-connection administer application is built in to Mac Leopard (10.5) and Snow Leopard (10.6), called “Screen Sharing.” Shared computers on your local network automatically show up in your sidebar. You just click on them, enter the same username and password you set up on that Client computer and the remote desktop screen will open up in a new window. You can also click “Go/Connect to Server” and enter the computer name or TCP/IP address manually. Within Windows, you click “Start => All Programs => Accessories => Communications => Remote Desktop Connection” and enter the Client computer name or IP address.

If you only need to remotely control one computer, a neat trick is to make the Client computer its own wireless base station. We often do this when we hide a Mac Mini behind a monitor for that last-minute, oh-by-the-way playback. All you have to do is select “Create Network” from the Airport menu on the Client computer and then select that specific wireless network from your Administrator computer's Airport Menu (it will be called the name of the Client computer).

For more sophisticated control of multiple computers, I recommend Apple's “Remote Desktop” application. It allows you to control, observe, copy files to/from any number of computers and organize them into groups. This is very helpful when you're trying to keep track of many machines at many locations. We typically have multiple computers performing playback into multiple sets, so I will usually group them by set name and/or stage number. It's always fun to remotely copy, load the graphics and have them already running on set, in time for rehearsal, before our crew can even finish the stage move into a new set.

In this modern age of filmmaking, we are constantly called upon to be technology-savvy engineers. Having some clever high-tech solutions in our bag of tricks cannot only make our jobs easier in difficult situations but continue to reinforce our image as experts in our field.

Ben has always had a passion for integrating audio, video and computer technology. He holds a bachelor of science degree in telecommunications management, is active in I.A.T.S.E. Local 695, a licensed C10 Electrical Contractor and THX-Certified Engineer. Among his work experience, he built one of the first microcomputer CGI-rendering farms for Amblin Imaging, logged more than 12 years as the Supervising Engineer at Paramount.



Controlling computers on the Castle set of *Chuck*

Mixing a Dodger Baseball Game



by Eric Pierce, CAS

Antony Hurd in pre-production
at the Euphonix Series 5

On August 26, 1939, experimental station W2XBS broadcast a doubleheader from Ebbets Field in Brooklyn between the Dodgers and the Cincinnati Reds. There were very few privately owned television sets then, and the game was broadcast primarily for the 1939 World's Fair in New York, where several manufacturers had television sets on display.

That first game used only two cameras, but it showed what television was capable of. By the 1940s, major league baseball realized their attendance was going way up as fans were now able to follow their teams from their living rooms. The public began to develop more than just a casual interest in the sport and wanted to support their teams at the ballpark. The leagues began to increase their TV broadcast schedules, and baseball was on its way to becoming a multi-billion-dollar business.

Antony Hurd is the primary mixer for the Dodger games on FSN/Prime Ticket and KCAL. In addition to a multitude of basketball, hockey, football, and a variety of other sports broadcasts throughout the year, he will mix close to 90 baseball games this season. Antony showed us around the Mountain Mobile production truck parked out in the Dodger stadium parking lot on one of the broadcast days. Today, more than 70 years after the first simple Dodger telecast, Antony will employ almost 30 microphones, and his mixing console will have more than 100 inputs. A lot has changed in broadcast television since the first major league baseball game was televised in 1939!

The first day of a home-stand broadcast starts at 1 p.m. for setup. At 3:30, pre-production begins, where all the packages you see during the game are built and mixed. At 5, they record the open of the show, then break for dinner. After dinner, the transmission path to master control is checked, QKTs (telephone patches) are established, and they prepare to go on the air.

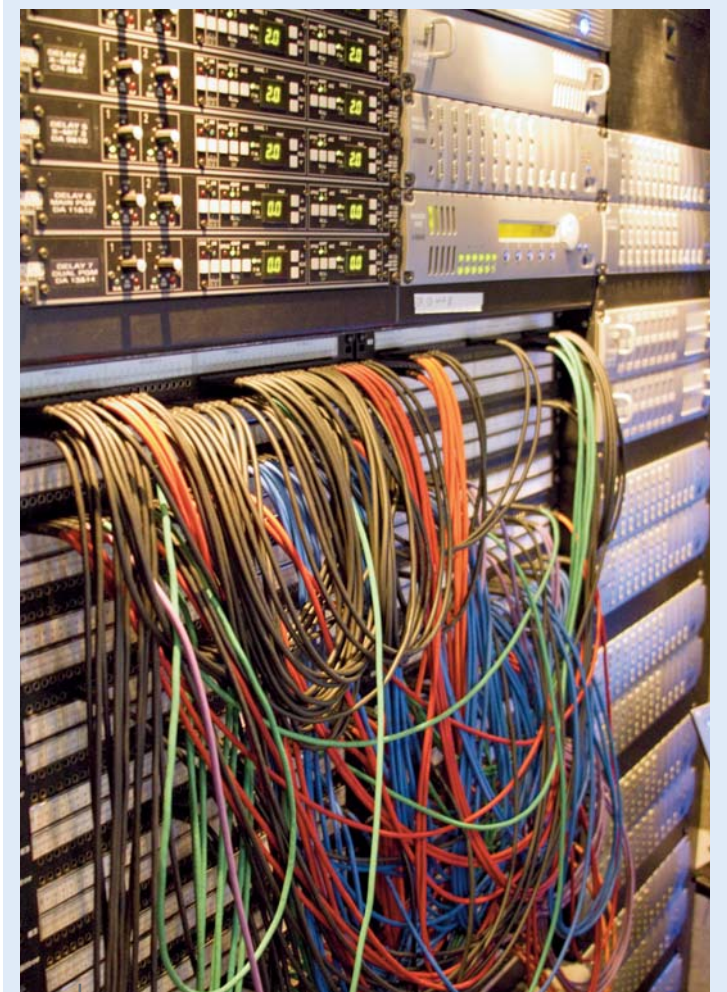
The heart of Antony's room inside the mobile production truck is a Euphonix Series 5 digital console. All of the audio sources, internal or externally fed to the production truck, are converted to MADI (Multichannel Audio Digital Interface), and microphone sources from the field and the announce booth hit the Euphonix microphone preamplifiers and are converted to MADI as well. Once in MADI, all the signals can be routed anywhere in the audio console, and independently as a full audio router for the plant.

Digital audio consoles in broadcast have made complicated shows very easy to build, since the Production Mixer's setups are all stored in the console. What used to be a laborious procedure of hundreds of patches, individually bussing and routing each input, auxiliary mix, EQ, processing, etc., now comes up instantaneously upon recall of the setup file.

If there is a downside to using digital audio consoles in live broadcast, it would be that some of them can take up to four or five minutes to boot up. That's not a problem at the beginning of the day, but since digital consoles are basically computers, sometimes they can get a glitch or lock up, and what if that happens during a live broadcast? Antony recalls a time when he had to reboot a console during a commercial break on a live event: Everyone just waited for the console to finish booting as they told master control to keep running commercials!

Along with the audio console, the room has additional processing and metering, a full patch bay, PL (private line) communications routing and Digicart audio machines for music and voice-over playback.

The Dodger games are broadcast in standard stereo, and a feed of KHJ AM 930 is added to the HD stream as the Spanish-language SAP (secondary audio program). Antony also provides a multitude of mixes and mix minuses. These include a mono fold down, stereo and mono effects only—also called “nats” or “natural sound,” as well as program mix minus effects, mix minus announcers only, and independent talent IFB mixes.



Digital delay units, patch bay and Euphonix modules

Mic'ing a Baseball Game

In sports broadcast, microphones fall into two categories: Announce and Effects. L.A. Dodgers announcer Vin Scully calls the game from a room in the press section overlooking the field above home plate. He uses a Sennheiser HMD-25 headset microphone and the trusty Electro-Voice RE-50 handheld microphone for when he's on camera. Sitting at the game-calling position, he has a flat-screen program video monitor and a Daltech Commentator box in front of him. The Daltech is specifically made for sports announcers, and Vin's announcer headset plugs in the front, while the IFB, microphone and talkback circuits connect in the back. A push button “talkback” switch sends the headset mike to the talkback circuit, which is connected to a speaker near the director and producer for off-air communication.

But the playing field is where the real action is, and the primary microphones for the effects are the “bat crack” mikes that are focused on home plate. Dodger stadium has two Sennheiser MKH-416 shotgun microphones that they permanently fly from the backstop, and as the name implies, they pick up the crack of the bat



Daltech
Commentator
box

Doug "Doc" Ensbury
prepares an announcer
headset in the Dodger
dugout for a coach interview



hitting the ball or the ball smacking into the catcher's mitt. Since the "bat crack" mikes are up in the mix all the time, they are the foundation for the sound on the field and are panned hard left and right for a stereo atmosphere.

For the rest of the infield, shotgun microphones are mounted as close to first and third base as possible. Known as "pick" mikes, their purpose is to capture the sound of the runner being thrown out at first or third.

Action happening directly in front of the cameras at field level can be picked up by mounting a long or short shotgun microphone to their lenses. This is how you hear the hero's welcome in the dugout when a player returns from crossing home plate; the mike from the camera is pulled up in the mix for the high-fives and cheers from the team as it follows the player in.

For the outfield, five MKH-416 shotgun microphones are spaced along the length of the outfield wall. "The crowd is going nuts during a long fly ball, so you can't really hear the catch," Antony explains, "but if the player smacks into the wall trying to make the catch, you can really hear it, and that really brings the television audience into the game."



"Bat crack"
microphone in zepelin



Outfield microphone

When a pitching change is anticipated, the director will often call for a camera operator to take a shot of the bullpen to show the television audience who's warming up. A simple lavalier microphone discreetly placed in the bullpen area will get the sound of the pitcher throwing his warm-up pitches for the shot, which is usually taken from several hundred feet away on a long lens.

Microphone mounted on
field-level camera



Side by Side or "Dual" Feed

There are usually at least two television feeds emanating from a ballpark during a major league game, each having their own game announcers; one for the home-team broadcast and one for the visitor. The visiting team will either hire their own production truck to do their own independent show, or they will use the "Dual" feed production trailer that interfaces with the Mountain Mobile main production truck for a "shared" feed.

"Dual" audio mix trailer



The "Dual" system provides a cost-effective way for smaller broadcast and cable stations to air their local teams while on the road. The trailer houses an independent audio room and other production equipment, and there is a separate video switcher, graphics generator and dedicated camera for the "Dual" feed. This system enables the visiting team to have a completely independent audio mix and graphics while sharing the game coverage video.

Whether the visiting broadcast is done independently or shared, it's up to the home-team broadcast mixer to provide a split of the effects microphones and other audio and communications sources to the visiting broadcast. Cooperation and resource sharing between all of the television, radio and stadium media operations is essential to a successful Dodger broadcast.

The sports production crews in the Los Angeles area have been I.A.T.S.E. members since 1994, when they requested representation from the I.A.T.S.E. Fox Sports Net (FSN)/Prime Ticket, now hires as a signatory in Southern California, along with LDM Worldwide and Pettigrew Crewing, owned by Local 695 member Bill Pettigrew.



When Sound was Reel 6

by Scott D. Smith, CAS

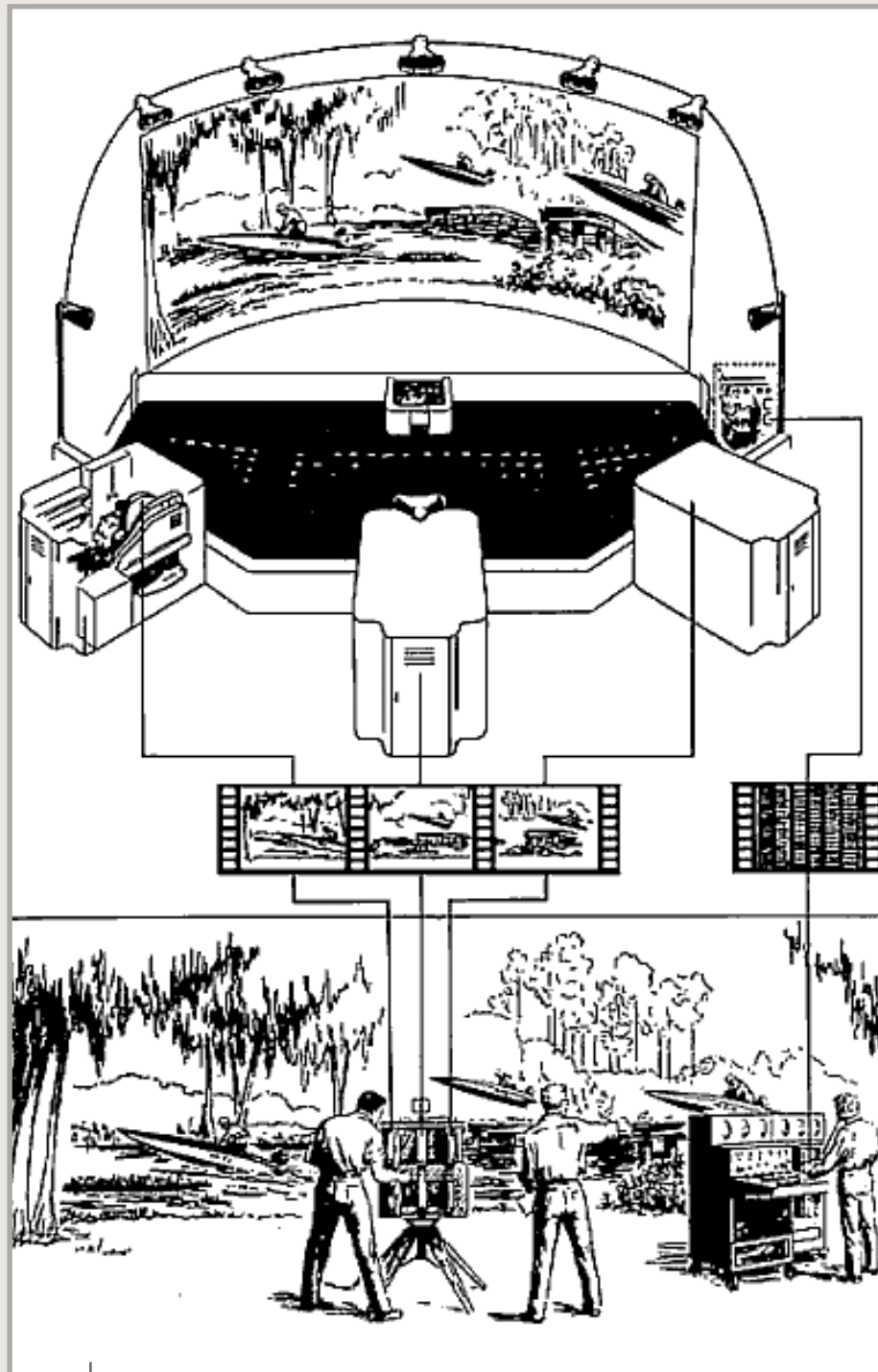
STEREO AND THE POST-WAR YEARS

Part 5 of “When Sound Was Reel” examined the application of magnetic recording technology in relation to motion picture production. This installment examines how magnetic recording was used in conjunction with widescreen images to lure audiences back to the theaters.

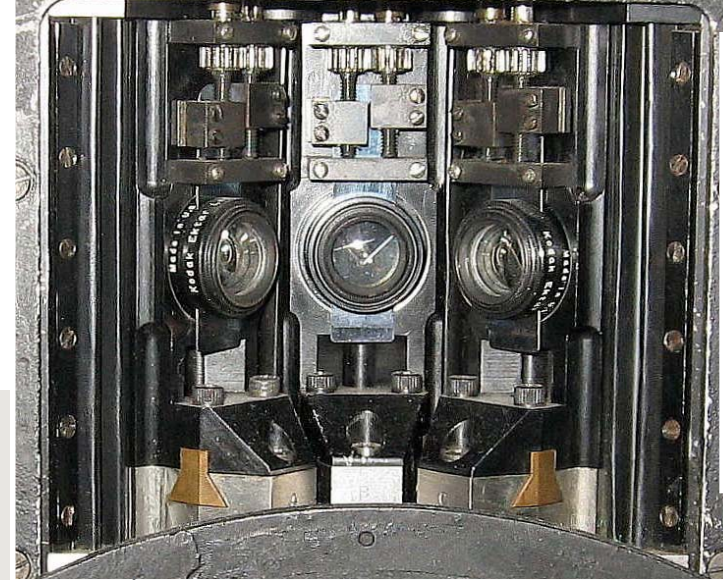
From the 'teens up through the Second World War, the film industry enjoyed a virtually unending period of growth. While theater attendance would vary from year-to-year due to changing consumer trends and the economy, movie theaters were still a prime source of family entertainment up to the end of the 1940s. All that was about to change...

Although it existed beginning in the 1930s and is taken for granted by anyone under the age of 60, the advent of commercial television took time to take gain acceptance. In 1945, there were still fewer than 10,000 sets in the United States, and broadcast schedules were rather limited. Sets were expensive and neighbors would frequently go to the houses of those who were fortunate enough to own such a novelty. In 1951, NBC formed the first major broadcast network and TV began to be an accepted part of the landscape. By 1955, 77% of U.S. households had at least one TV set. Although dismissed by studio bosses as a fad during its infancy, the advent of television could no longer be ignored by the studios.

Desperate to stem the decline in theater attendance in the early 1950s, the studio bosses began looking around for something that would once again capture the imagination of the public. One of those bosses was Darryl F. Zanuck, then head of production at



Artist's illustration of the Cinerama process, showing the camera taking arrangement and subsequent presentation.



Front view of Cinerama three-camera system with 27mm lenses.

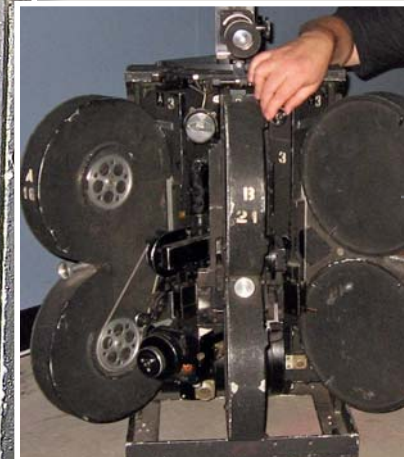
20th Century Fox studios. Zanuck realized that if audiences were to be lured back to the theater, the presentation would need to be something that far exceeded what consumers could get for free at home. Although color film had been around since the introduction of Technicolor in the late 1930s, there was still a significant amount of film output that was done in black & white in the standard Academy (1:33) format. Even with a fairly large screen and good-quality sound, going to the movies was becoming a ho-hum experience for the average consumer.

Ladies and Gentleman, This Is Cinerama!

With these words, uttered by Lowell Thomas, the world received its introduction to Cinerama. The date was September 30, 1952, at the Broadway Theater in Manhattan. In the audience sat a world-famous adventurer, a media pioneer, and a first-time producer. Along with a quietly confident inventor, they watched as the curtain rose on an entirely new medium that would revolutionize motion picture production and exhibition—just when the industry needed it most.

As the astonished first-night audience tore the theater apart with cheers, the inventor sat quietly, the slightest of smiles on his lips. “What are you, a man or a fish?” asked an aghast friend. “How can you just sit there?” “Oh,” the inventor gently replied, “I knew 16 years ago, it would be like this.” Such was the opening salvo of the “Widescreen Wars.”

At the heart of the Cinerama experience was a unique three-camera, three-projector system designed by motion picture engineer Fred Waller. Waller worked at Paramount in the 1930s, doing research on multi-camera systems employing up to 11 cameras and projectors. During the Second World War, Waller designed one of the first “virtual reality” projection systems, used for training Air Force gunnery crews. The system was credited with saving thousands of lives.



Cinerama camera, rear view showing the three 35mm magazines, marked “A,” “B” and “C.”



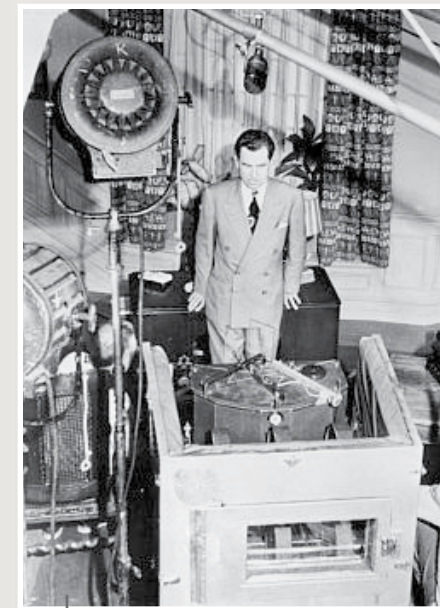
Cinerama mixing console setup as used at Oyster Bay, NY, studios for music recording.

The three cameras, interlocked together and shooting at 26fps, were each equipped with 27mm lenses, designed specifically to work with a deeply curved ribbon screen for subsequent projection. In addition, the image height was increased from the four standard perfs to six perfs, which helped reduce the grain in final presentation.

To match the impact of the picture, Cinerama employed a unique seven-channel sound system, with five-screen channels and both side and rear surrounds. Even with this many channels, the system required a sound-balance engineer, who would control the level and distribution of the seven-mag channels to the various auditorium speakers, based on instructions from a cue sheet prepared specifically for the film.

Cinerama was strictly a roadshow experience and an expensive one at that. Tickets to early Cinerama shows could run as much as \$3.50 (about \$28 today!). While much of the ticket price was due the significant production costs, equipping a cinema for the process was no small task, and could run anywhere from about \$25,000 to \$75,000. This limited Cinerama to a very small number of venues in major cities.

Although *This Is Cinerama* ran only 13 weeks during its initial New York run, it went on to become the highest grossing film of 1952.



Lowell Thomas during the filming of *This Is Cinerama*.

When initially approached by Waller, the major studios had rejected the Cinerama process as being too expensive. However, after witnessing the audience turnout, they realized that they needed to come up with something that could at least approximate the visual scope of the Cinerama process. For those who have viewed Cinerama firsthand (in either its original run or the recent re-release), the experience is not to be forgotten.

While the initial run of *This Is Cinerama* was a crowd pleaser, it remained for more conventional storytelling vehicles such as *How the West Was Won* to prove that Cinerama was more than just an overnight sensation. Despite its flaws, it accomplished this task quite nicely.

Widescreen Movies and the Rise of the Epic

In an effort to compete with both Cinerama and the increasing toll that television was taking on theater attendance, studios began looking at various technologies that would provide a special experience for increasing jaded audiences. Most approaches revolved around making a presentation for a wider screen. Typical of these efforts was Paramount's release of *Shane*, which despite being shot in traditional three-strip Technicolor with an aspect ratio of 1.37:1, was released by the studio with instructions that it be cropped top and bottom to an aspect ratio of 1.66:1, a format that newer theaters could accommodate. While this had nowhere near the visual impact of Cinerama, it did help to further a long overdue move to a wider aspect ratio. This marked a move on the part of many studios to experiment with cropping the Academy frame to achieve a "widescreen" look, which during subsequent years was finally standardized at 1.85:1.



Sound crew for *How the West Was Won*, showing the seven-track magnetic recording setup.



Another angle of sound crew during filming of *How the West Was Won*.



Cinerama camera slate used for aerial photography sequences on *How the West Was Won*.

Simultaneous to the events at Cinerama Inc. and Paramount, other studios and independent producers were experimenting with various processes that they felt would grab the attention of the film-going public. Notable among these were various 3D processes (such as Natural Vision), followed by various widescreen processes such as VistaVision, Superscope, Todd-AO, Technirama, Ultra Panavision and Super Panavision 70.

At Fox, Zanuck and President Spyros Skouras enlisted the aid of optical engineers at Bausch & Lomb to develop a set of lenses based on the principles of the Anamorphoscope, originally developed by Frenchman Henri Chrétien in the late 1920s. This process, still in use today, squeezes the image horizontally at the camera, and stretches it by the same amount during projection, yielding an image which is wider than what would normally be accommodated on a 35mm frame (note that this is a different process than that which is used for "flat" 70mm widescreen films such as Super Panavision, which uses spherical lenses). This process would become known as CinemaScope and was patented by Fox.



Westrex RA1524 mixing console. This three-channel, six-input console was typical of the mixers used during the production of stereo soundtracks during the mid-1950s. Note the provision for talkback to three Boom Operators.

Zanuck and Skouras realized they would need more than just a bigger screen to lure audiences back to the theater though. They would also need superior sound, such as that provided by Cinerama, as well as an epic story. The movie they chose to fulfill this task was *The Robe*.

The Robe

Skouras and Zanuck wasted no time in their pursuit of commercial development of the CinemaScope process. They had already held demonstration screenings in Hollywood during January of 1953, followed by similar demonstrations in New York in June, thereby priming the press and the public for the release of *The Robe* on September 16 of the same year.

The early demonstrations conducted by Fox had used a separate three-track 35mm stereo soundtrack interlocked with the picture, which allowed the full aperture area to be used for image, providing a superior looking presentation.

However, Zanuck, along with the Fox engineers, realized that to be commercially viable they were going to have to come up with a system which would allow both the picture and sound to be carried on a single piece of film. Although stereo was not new to film presentation (having already been used for the roadshow version of *Fantasia* in 1940), it was the development of magnetic recording that made multi-channel sound commercially viable for wide release.

There were a few issues, however. Chief among these was the problem of where to place magnetic tracks on the release prints. Fox engineers did not want to significantly compromise the picture quality by reducing the width of the image, so four magnetic stripes were squeezed in: two between the picture and sprockets, and two between the sprockets and outside edge of the film. Even with a slight reduction of the picture size (to an aspect ratio of 2.55:1), the available area for accommodating the tracks was extremely narrow, so much so that the film required perforations which were narrower than the already established Kodak Standard perforations. These special perforations (commonly known as Foxhole perms), required that release print stocks be punched specially for magnetic striping.

Similarly, projectors, laboratory equipment and related film-handling equipment required modification to accommodate the narrower perforations, as the film and mag stripes would be damaged if run on equipment using Kodak Standard sprockets. (In a somewhat

ironic turn of events, it was Cinerama pioneer Hazard Reeves who would develop the technology for striping the film, as well as designing the early recorders used for "sounding" the prints, all of which had to be done separately, one reel at a time. Reeves subsequently garnered a Technical Academy Award for his efforts.)

Although *The Robe* was chosen by Fox to be the first commercial release using its CinemaScope process, there were in fact, two other films in production at the same time: *How to Marry a Millionaire*, co-starring Betty Gable, Marilyn Monroe and Lauren Bacall, as well as *Beneath the 12-Mile Reef*, with Robert Wagner and Terry Moore. Fox wisely choose *The Robe* as its first release, mostly for its epic nature, followed by *Millionaire* and *Reef*. *Millionaire*, with its breezy romantic storyline, went on to do respectable box office of about \$7.3M, probably due in large part to the popularity of its leading ladies. *Reef* did not fare as well however, grossing only \$3.2M in the face of less than favorable audience and critical reactions.



Ad showing the Westrex console commissioned by Todd-AO for the mixing of *Oklahoma!* 96 inputs was probably a record in those days!

While *The Robe* was in production, Zanuck and Skouras mounted a campaign to convince other studios of the commercial viability of the CinemaScope process, in hopes of regaining some of their investment by charging a licensing fee for its use. Both M-G-M and Disney signed onto the system almost immediately. Warner Bros., Universal and Columbia would later join in. RKO and Republic declined the invite (at least for the time being), and Paramount opted to pursue development of their VistaVision system.

Although CinemaScope (due to its single-strip 35mm format) would eventually win out over other systems in the widescreen sweepstakes, it was Cinerama that really proved the commercial viability of the widescreen process. Though just seven films were released in the 11 years that Cinerama was in business, the power of Fred Waller’s invention captivated the imagination of more than a few individuals, who have made it their mission to keep the process alive. We owe a debt of gratitude for their efforts.

OK, Enough About the Picture—How Does It Sound?

Every variation on the widescreen process came with its own format for the accompanying soundtrack, some of them with more than one (a familiar situation which remains with us to this day!). Although Fox quickly adopted four-track magnetic as the preferred format for print distribution (eliminating the need for a cumbersome separate three-track interlocked mag), even within this rather limited domain there would be variations on how the tracks were implemented.

The sound recording for the Cinerama productions was overseen by Hazard E. “Buzz” Reeves, an intrepid inventor and businessman, and founder of the Reeves-Soundcraft Corporation in New York. With Reeves’ involvement, a unique seven-channel sound system was devised, which ran on separate 35mm fullcoat film, interlocked to the three special Cinerama projectors. Reeves was a purist when it came to the sound recording for Cinerama productions. All of the music recording, as well as much of the dialog and SFX, were captured directly with five- or six-channel mike arrays, recording directly to 35mm fullcoat magnetic film. The resulting release tracks were of stunning quality, completely enveloping the viewer in the scene. All of this long before the advent of 5.1 surround! The only downside (other than the cost) was that it also exacerbated any flaws in the recording, including the location that it was done in.

While many of the 20th Century Fox CinemaScope releases boasted of “*full dimensional high fidelity stereophonic sound*,” this unfortunately, was not the case for many later productions, especially those released by other studios such as M-G-M, Universal and Disney. Although Fox fought hard to maintain discrete four-track magnetic as “the” standard for CinemaScope prints, theater owners (especially those in smaller markets) balked at the cost of installing the full four-channel sound systems and magnetic penthouses. They were also not pleased to have to shell out money for the four-track mag heads, which wore out quickly. Thus, was born yet another compromise, the “mag-optical” print, which jammed a narrow (50 mil.) optical soundtrack into the already crowded space occupied by the four mag tracks and picture. This further reduced the aspect ratio of the picture to 2.35:1.



Production photo for *The Robe*, showing implementation of three mike booms for stereo production tracks.

Likewise, the approach to sound recording taken during the production varied enormously. Early projects, such as *The Robe*, utilized three-channel stereo recording for most of the production tracks, while later lower budget productions were recorded in mono, with the dialog panned across the three-screen channels. Later still, it was decided that panning the dialog was too distracting to the viewer, so it remain anchored in the center channel, which is pretty much where it remains to this day.

The Next Big Thing

As screen sizes grew, problems with grain and other picture imperfections became more apparent. Each of the studios took a different approach to the problem. At Paramount, work continued on the VistaVision format, which the studio advertised with great fanfare.



Comparison of 35mm CinemaScope four-track “Magoptical” print (on left), as compared to standard CinemaScope mono optical track. Notice that the optical track on the “Magoptical” print is half the width of a standard 100 mil mono track.

While the original plans called for films to be both shot and projected using the unique eight-perf horizontal format, in the end, it appears that only two films were ever released in the original horizontal format. What VistaVision did have to offer, however, was an exceptionally large negative area, which resulted in a superior image when printed to 35mm film in either 'Scope or flat formats. Unfortunately, it cost significantly more to shoot a film with the VistaVision process, a point which was driven home endlessly by the studio bean counters. With production costs rising, the process was mostly abandoned for principal photography by the early 1960s. (It is interesting to note, however, that it was resurrected in later years for visual effects plate photography, once again due to the superior image offered by the eight-perf horizontal frame.)

Despite the superior image quality of the Technicolor IB dye prints, Paramount settled for a less than satisfactory approach to the soundtrack for VistaVision, an affair which typically included a mono optical soundtrack that was panned from speaker-to-speaker, controlled by a series of low-frequency control tones recorded as part of the soundtrack. This system, called Perspecta Sound, suffered from a number of inadequacies when compared to true stereo. Most notably, the sound could only be panned from speaker-to-speaker during sections containing effects only, as panning music and dialog across the auditorium was most distracting to the viewer. It also posed problems on certain print runs, probably due to variations on track levels. (The one notable exception to this was the production of *The Story of a Patriot*, a special production made for screenings at Colonial Williamsburg, in a theater equipped specifically for eight-perf horizontal projection and six-channel magnetic sound.) Fortunately, a number of VistaVision productions were done with music scores recorded in *true* stereo, giving today’s audiences the opportunity to hear a better representation of the intended soundtrack.

And Bigger Still...

While 35mm CinemaScope had distinct advantages over the standard cropped 35mm image, development did not stop there. Mostly notably, Fox would go on to develop a second CinemaScope system, using a larger negative, known as “CinemaScope 55.” This format employed a camera negative that was 55mm wide and eight perfs high. It required both special cameras and custom slit and perforated film runs, which limited its use to just two big-budget films, *Carousel* and *The King and I*. These were not shown in 55mm, however, but were optically printed down to standard 35mm 'Scope format with magnetic tracks for general release.

This was certainly not the only system to use wide gauge film with magnetic sound. Up at 1021 N. Seward, show-

man Mike Todd was busy developing a less complicated version of Cinerama, one that utilized a single 65mm negative with a wide-angle lens, intended to duplicate the widescreen effect of Cinerama. As one of the original principals in Cinerama, Todd was cognizant of the box-office potential of widescreen, but wanted a system that worked like Cinerama “but out of one hole.” While the use of 70mm film was not new (having been used as early as 1929 for the ill-fated Fox-Grandeur process), Todd put a new spin on it by shooting in 65mm, and utilizing the 2.5 mil area on either side of the print for six magnetic soundtracks.

While magnetic recording had been around for a few years, in 1952, its use in motion picture production was still in an early stage of development. Seeking to avoid the issues of having to use a separate interlocked mag track for exhibition, in 1952, Todd approached the engineers at the Ampex Corporation in Redwood City, California. They were by this time already firmly established in the magnetic recording business, but applying a magnetic stripe to photographic film was still something relatively new. As a result of his visit (and probably a large check!), Todd convinced them to develop systems for both 70mm striping and heads, as well as recording systems for six-track 35mm.

In 1955, *Oklahoma!* was released, the first feature to use the Todd-AO process. Based on the original 1943 Rodgers & Hammerstein musical, the film was shot in both 65mm Todd-AO and 35mm CinemaScope. Running a lengthy 2½ hours in its roadshow version, the film went on to win two Academy Awards, one for Best Music Score and another to Fred Hynes at Todd-AO for Best Sound.

With the resounding success of *Oklahoma!*, Todd went on to produce *Around the World in Eighty Days*. As with *Oklahoma!*, the film was shot in both 65mm Todd-AO, running at 30fps, as well as standard CinemaScope. After seeing the grosses from these early Todd-AO

releases, 20th Century Fox abandoned work on its CinemaScope 55 process and joined forces with the Magna Corporation (parent to Todd-AO). Although this opened up additional collaborative opportunities for Todd-AO, it also led to the emasculation of the original process, in favor of one that would be more compatible with standard theatrical releases.

The first thing to go was the 30fps film speed, in favor of 24fps. This allowed the 65mm negatives to be used for producing 35mm CinemaScope prints, a significant cost savings. The second change was the abandonment of the “bugeye” lens and the deeply curved screen, which helped emulate the original Cinerama-viewing experience. With these changes, Todd-AO now more closely resembled CinemaScope, but still retained a relatively grain-free image, and superior six-track stereophonic sound.

By the time the production started on *South Pacific* in August of 1957, Mike Todd was no longer involved with either Todd-AO or the Magna Theater Corporation. Produced jointly by Todd-AO, 20th Century Fox and Rodgers & Hammerstein, *South Pacific* did not enjoy the critical success of the first two Todd-AO productions. By 1959, Todd-AO had some serious competition to contend with. Mitchell had released their BFC 65mm camera, and Panavision developed the Super Panavision 70 system, which was virtually identical to the current Todd-AO process, now that the curved screen and 30fps film speed had been abandoned.

Although a few more features were shot in Todd-AO, the last picture to go before the cameras using the original process was the movie *Airport*, released by Universal in 1970. One reason for Todd-AO’s demise was the fact that they demanded a portion of the box-office gross from studios that utilized their process, in addition to the income derived from rental of their cameras and facilities. Panavision made no such demands.

However, Todd-AO did have one thing that no other studio had during this period. As one of the only facilities to have made a significant investment in a full six-channel re-recording stage, they were able to dominate the market for widescreen sound services. Due to the investment required, it would be some years before other studios would re-fit their dubbing stages for six-track.

The Demise of Widescreen

During the late 1950s, studios such as M-G-M went on to develop variants of the early widescreen processes (notably M-G-M Camera 65, forerunner of Ultra Panavision 70, which was used on *Ben-Hur*, *Raintree County* and *Mutiny on the Bounty*). Additionally, formats such as Technirama and Superscope arrived on the scene, causing further confusion in the widescreen landscape. Although improved cameras and optics made the production of widescreen films less

tortuous, by the early 1960s, studios were becoming less willing to shell out the dollars needed to mount the sort of epic productions that justified the use of widescreen systems.

At the same time, further improvements in film stocks and anamorphic lenses had narrowed the differences between 65mm and 35mm. With studio bean counters watching every dollar, the use of 65mm and magnetic release prints (in either 70mm or 35mm) was becoming increasingly rare.

Despite this, there were still some hugely successful widescreen films produced in the early 1960s using various processes (mostly Panavision). Notable among these is David Lean’s production of *Lawrence of Arabia*, photographed by Freddie Young and lovingly restored by Robert Harris in 1989. With Gregg Landaker sitting at the controls of Warner-Hollywood’s larger dub stage, the re-working of Paddy Cunningham’s original mix (recorded at Shepperton Studios) is tastefully re-created. There are few films that can rival David Lean’s use of the Ultra Panavision 70 format, and every film aficionado owes it to themselves to see this film at least once in full Ultra Panavision treatment and magnetic sound.



Sample of CinemaScope 55 presentation frame.
All photos credit of American Widescreen Museum, except as noted.

shouldering the cost for replacement magnetic heads, along with the required maintenance. (It was not unusual for theaters to run heads long past their useful life, which caused significant degradation to the quality of the sound reproduction.)

It would be another seven years before the format would be revived, thanks to the efforts of a young director named George Lucas.

Next installment: Dolby comes to the movies

The author is indebted to those who have made it their mission to preserve the contributions made to cinema by some of the pioneers noted in this article. Without their efforts, the history of the many individuals associated with film titles that open with “Fox-Grandeur,” “A CinemaScope Presentation,” “M-G-M Camera 65,” “Cinerama,” “VistaVision Motion Picture High-Fidelity,” “Filmed in Panavision Ultra 70” and others would be lost forever. For those who wish to delve into these processes further, the author highly recommends the websites of the American Widescreen Museum at www.widescreenmuseum.com and Thomas Hauerslev’s “In 70mm” at www.in70mm.com. The efforts made by these individuals and others in preserving the history of motion pictures deserves to be supported.

