695 QUARTERLY

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695 QUARTERLY

Volume 3 Issue 2

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Features

Cover: An EVS slow-motion controller, just one part of tapeless production.
(Courtesy of EVS Broadcast Equipment)

Departments

From the Editors

It is often said that California does not have seasons. We disagree.

Pilot season has just ended. Film-going audiences everywhere are eagerly awaiting the start of the summer blockbuster season. That will quickly be followed by the television season and then the awards season. These are the events that mark the tempo of our professional lives. These 'seasons' continue to build upon the traditions fought for throughout the 80-year history of Local 695.

You can read all of our endeavors, right here. Lee Orloff tells us about his experiences recording the dialog for the animated feature *Rango*. Scott Smith gives us part three of the incredible history of this Local. Jim Tanenbaum digs into the more technical aspects of wireless microphones and Eric Pierce explains how data servers have been replacing videotape in the fast-paced world of live and live to tape television production.

You can now find every issue of the *695 Quarterly* online at our new stand alone website http://695quarterly.com/. As they say, "Bookmark it."

We also encourage you to distribute copies of this magazine among fellow crewmembers, producers and production managers. Let them see all the disciplines we do so professionally as members of Local 695.

You may request additional copies by calling the Local's office, and you can reach us directly at **mag@659.com**.

Fraternally,
David Waelder, Eric Pierce
and Richard Lightstone

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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

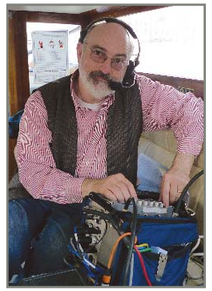
HELPING YOUR NEIGHBOR AND FCC LICENSING

Dateline: New Orleans, La.

My team and I are working in the provinces—long hours and under one of the "creative" tiered contracts, but glad for the work in these tough times. Like most of us, we are freelancers and essentially "leaves in the wind" when it comes to work. Good years and bad years meld together as the work cycles turn. Our survival strategy is to make the best of resources when we are working, keeping debt as low as possible and putting something away for the dry spells if possible. Not all of us have the option to spread it that way so, if you see the opportunity to steer some work or benefit hours to fellow members in need, please try to help out. Some guidance on how to do this properly is on our Web page: http://www.695.com/mbr/hours.php

That being said, I am hopeful. It seems that there is an up tick in the workflow both locally and nationally so we may see a more normalized work year ahead of us. I pray this is true for all of our members.

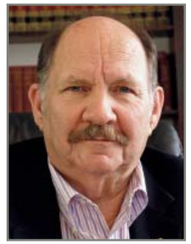
In the meantime, I think it is wise to be your own best guardian of your work-related preparation. Licensing with the FCC certainly falls into this category. We were very fortunate to have our Vice President, Jay Patterson, put together an FCC licensing program for the General Membership meeting this quarter. The landscape of spectrum allocation is changing constantly and being properly licensed may improve your options in the future. Detailed information is available at http://www.695.com/html/rf-info.html



Check it out. If it makes sense for your situation in either wireless audio or video transmission, submit your application.

Warm regards,
Mark Ulano
President, IATSE Local 695

From the Business Representative



It is with profound regret that I share with you the sad news of the passing of Harold W. Varney—"Bill," a 31-year member of IATSE Local 695. Bill distinguished himself unequivocally as an Academy Award–winning sound mixer, having received Oscars for best sound recording on *The Empire Strikes Back* (1980) and *Raiders of the Lost Ark* (1981).

Bill also received Oscar nominations for *Dune* (1984) and *Back to the Future* (1985), as well as an Emmy Award nomination for the TV series *Roots* (1977). Bill's sound recording credits are extensive.

In addition to his significant Industry awards, Bill also served as President of the Cinema Audio Society in 1977 and Vice President of Sound Operations for Universal Studios Pictures.

Bill also led the sound restoration efforts on the Orson Welles 1958 film movie classic *Touch of Evil*, relying on state-of-the-art digital recording to enhance the clarity of the original 40-year-old production recordings.

Bill's professional advocacy for direct lines of communication between the production mixer and the post-production mixer had a profound effect and resulted in procedures that yielded cost savings for all involved.

Bill Varney, CAS 1934 – 2011

Those of us who were fortunate to have worked with Bill during his 14 years employed at Samuel Goldwyn Studios Sound Operations, knew Bill as a professional in every sense of the word and a person having profound compassion both for his support recording team and his family. In simple terms, Bill was without question a wonderful person and shall always be remembered for his presence, compassion and contributions.

NEWS & ANNOUNCEMENTS

Highlights From 1st Quarter Membership Meeting

Todd Lindgren of Film L.A. Inc., the organization that coordinates and processes film permits in Los Angeles, spoke to the membership about their media campaign, Film Works. Partnering with studios, supply companies, entertainment unions, and anyone else affected by runaway production, Film Works **www.filmworksla.com** is getting the message out that local film production is good for the whole community.

Todd Lindgren addressing the membership.

Todd presented the Film Works campaign, an ongoing advertising effort to acquaint people with the many technicians involved in production and their contributions to their local communities. He handed out bumper and window stickers, and also highlighted donated media, such as billboards and a PSA that will run before each feature at the Mann Theater chain. They are also compiling videos of film and television workers telling their own stories, which can be viewed at **www.youtube.com/filmworksla**. They encourage film and video workers to upload their own videos to provide material for additional ads so the site may show a wide diversity of affected people.

Seth & Kriky's Sound BBQ

Seth Gilbert and Michael "Kriky" Krikorian's Fifth Annual Sound Department BBQ is being planned for June. Great food, BYOB, and a great networking opportunity with fellow Soundies! To get on their mailing list, send an email to **soundbbq@kriky.com** or visit Kriky & Seth's Sound Department BBQ on Facebook.

FCC Licensing Project

Jay Patterson, CAS and Tim Holly made a presentation on FCC Low Power Broadcast Auxiliary Licensing for Audio and Video Production. Jay and Tim went through the process involved in obtaining a license, and described the advantages that the production sound and video community would have as licensed operators. As Jay tells it, "With sound and video operators licensed in the frequency bands that they operate in, they will fully understand the responsibilities and regulations that come with obtaining a license, and consequently have FCC protection against infringing non-licensed operators, such as white space devices. Importantly, as licensed operators, they will now have a voice with the FCC in the use of these frequencies."

For more information, go to **695.com/html/rf-info.html**

J.L. Fisher BBQ

The spring/summer season started off with sizzle at the J.L. Fisher annual BBQ on Saturday, May 14. There were tours of the facilities, panel discussions by ASC members, demonstrations of all sorts of camera support gear and lots of good food. And there was a chance to try one's hand at cueing a Fisher boom under the supervision of Local 695 members Laurence Abrams and Andy Rovins.

AB1069

Assemblyman Felipe Fuentes has authored bill AB1069, which is being introduced to the California State Assembly. This bill seeks to extend the California Film & Television Tax Credit through 2019, giving film and television producers a long-term incentive to shoot in California.

www.695.com

Jeff Wexler Receives CAS Career Achievement Award

Jeffrey S. Wexler, CAS was presented with the Career Achievement Award at the 47th Annual CAS Awards, February 19, 2011, at the Millennium Biltmore Hotel.

Jeff was a pioneer in the early days of digital audio tape and then file-based recording. He has been active in many organizations, is currently a Trustee on the Board of Directors for Local 695, and is an active speaker at seminars and discussion groups, including his own at **www.jwsound.net**. Jeff's impressive body of work spans four decades of feature film production.

When Jeff was selected for this award, CAS President Edward Moskowitz told us, "The Cinema Audio Society's credo is 'dedicated to the Advancement of Sound.' We search for an individual who exemplifies this spirit, and Jeff has certainly met and surpassed this goal."

In Memoriam

BERNIE CELEK
Maintenance Engineer
April 2, 1948 – April 5, 2011

DENNIS L. MAITLAND
Y-1 Mixer
March 31, 1931 – April 1, 2011

EDWARD E. RUE
Mixer
Feb. 13, 1945 – Feb. 19, 2011

DARRYL G. LINKOW
Mixer
Aug. 30, 1945 – Feb. 12, 2011

JAMES W. MACHOWSKI
Mixer
Sept. 3, 1962 – Feb. 9, 2011

Darryl Linkow 1945 – 2011

Brother Darryl Linkow, CAS passed away on February 12, 2011.

In 2009, Darryl went through treatment for esophageal cancer and beat the disease. However, the lingering weakness from the old radiation treatments robbed his ability to fight off an infection he caught during a recent unrelated surgery.

Darryl was a longtime member of the Local as a production sound mixer. He was an enthusiast for electronica music, especially rock & roll, and a ham radio operator. As an amateur radio operator, Darryl, KE6IHA, was an important part of the L.A. County Disaster Communications Service for the Los Angeles Sheriff's Department, Lost Hills Division, for more than 20 years.

Darryl joined Local 695 in 1980, working in features, sports, episodic and commercials in his early years. He transitioned primarily into ENG as that field opened up in the '80s and spent most of the last 20 years in news, documentaries and magazine shows. He was a familiar face for *Entertainment Tonight* and *The Insider* on red carpet lines at all the major award shows. He also worked for CBS, NBC and ABC.

Those who knew Darryl remember him as friendly, knowledgeable, loyal, and opinionated as hell.

He was a good friend—available, helpful, and almost always ready to render advice. Darryl was always there for his friends, and he made a lot of friends. He loved a good discussion—or argument—about the correct ways of recording, mixing, mic'ing, or setting up radios.

I think he enjoyed the discussions as much as doing the work, but above all, Darryl was a damn good sound guy.

Darryl leaves behind Karen, his wife of 32 years.

–Andy Rovins, CAS & Bill Bass

EDUCATION & TRAINING

by LAURENCE B. ABRAMS

We hope you continue to take full advantage of the various education and training resources made available to you through Local 695.

More than 900 comprehensive online software tutorials are still being provided free to the membership. These continually updated online classes provide an excellent opportunity for self-paced training that covers an enormous variety of topics, including Avid Pro Tools, Apple Logic, FL Studio, Steinberg WaveLab, Adobe Audition, Adobe Soundbooth, Apple Soundtrack Pro, Cubase, Sony Sound Forge, Adobe Premiere, Apple Final Cut Pro, Adobe After Effects, Sony Vegas, NewTek LightWave, Adobe Flash, Adobe Director, Adobe Dreamweaver, Adobe Photoshop, Apple Shake, Cleaner Pro, Adobe Fireworks and literally hundreds more. See **www.695.com/mbr/edu-vtc.php** for further details and for information about how to sign up for free access to this training.

Microphone Boom Operators, Utility Sound Technicians and Production Sound Mixers are encouraged to attend our ongoing program, **Fisher Microphone Boom Training: One-on-One Intensive**, which provides personalized hands-on instruction for the Model 2 and Model 7 Fisher microphone boom arms and the Model 3 and Model 6E Fisher boom bases. This unique and important training opportunity is exclusive for Local 695 members and cannot be found anywhere else.

HD cameras and long shooting takes have changed the way we do our work and have given you good reason to be fully trained on the use of a Fisher. The AMPTP's "Safety Bulletin on Extended and Successive Shooting Takes" makes it clear that the producers are aware of the significant health and safety issues that are associated with long shooting takes and that they are on your side, ready to provide a Fisher boom when you need one. If you haven't read about this yet, please visit **www.695.com/html/long-takes.php**. For details on how to schedule one of these appointment-only Fisher boom training sessions, visit **www.695.com/mbr/edu-fbt.php**

In addition to training provided entirely by the Local, some of the training we offer to members is funded in part by a training grant from the Contract Services Administration Training Trust Fund (CSATTF). As specified in the "Basic Agreement" between the IATSE and the AMPTP, this training money is derived from contributions made by signatory producers as a negotiated benefit for every hour that you work under that contract. In other words, you've earned this training money ... so use it.

The list of classes available through this year's CSATTF training grant, which can be seen at **www.695.com/mbr/edu-csatfrmb.php**, includes Pro Tools, Final Cut Pro, After Effects, Red Camera and REDucation, Avid Media Composer, Flash, Illustrator, Maya, Nuke, Photoshop, Rhino, SketchUp and more. The eligibility requirements for partial reimbursement of classes covered by this training grant are as follows.

Chris Ledesma, music editor for *The Simpsons*, conducts a CSATTF-funded Pro Tools class at the IDEAS Lab for members of Local 695. Dates for the 2011 Pro Tools and Final Cut Pro classes will be announced very soon.

- You must be on the Industry Experience Roster and…
- You must have a current I-9 on file at Contract Services and…
- You must have completed all of your required classes for the Safety Pass Program.

To assist members who need to update their I-9s, Contract Services is open on Saturdays from 7 a.m. to 3 p.m., as well as during the week from 7 a.m. to 5 p.m. If you have any questions about I-9 renewals or about requirements and scheduling for the Safety Pass Program, you can call Contract Services at 818.565.0550 ext. 1100.

For members who are not on the Industry Experience Roster, and thus not eligible for some CSATTF-funded training, you may want to find out if you do, in fact, qualify for Roster placement.

Many of our members find themselves working under contracts that are not covered by the Basic Agreement and Local Agreement and therefore, those members are not required to be on the Industry Experience Roster. This would include, for example, members who work at KTLA, KCET and on certain sports broadcast productions. But if you've worked at least 100 days in your job classification over the past three years, you probably do meet the requirements for Roster placement. If that's the case, you may want to consider pursuing Roster placement in order to become eligible for some of these training programs, as well as to possibly expand your work opportunities outside of the area in which you are currently employed. See **www.csatf.org** for complete details regarding Roster placement. If you have questions regarding documentation, contact Kim Pryor at Contract Services at **Roster.Specialist2@csatf.org** or at 818.565.0550 ext. 1112.

For members who aren't already registered on the Local 695 website with a current email address, you may want to do that now.

The most effective way for you to stay informed about educational resources, upcoming training announcements and updates is via email and the Local 695 website. Please log on to the website at **www.695.com** to make sure that your email address is correct.

Color Science for Projectionists and Video Engineers

This past April, Local 695 Studio Projectionists and Video Engineers participated in two days of comprehensive training on color science and color management conducted at the well-equipped training facility at Videotape Products, Inc. (VTP) in Burbank. The training was conducted by Cine-tal engineer Michael Chenery, a leading expert in color science for the digital cinema and video industries. During the all-day sessions, Local 695 members received an in-depth and extremely detailed presentation covering the topics of color science, color theory and color models including XYZ, RGB and YCbCr, XvYcc, as well as gamma, logarithmic and linear encoding including Rec709, RedLog, Panalog, ArriLog, FilmStream and sLog, with opportunity for hands-on participation transforming data between color models, profiling display technology including digital projection, building look up tables (LUTs), and implementing color management practices. All that, plus lunch!

Local 695 members attend Michael Chenery's in-depth two-day training on color science and color management.

LOCAL 695 And the Winners Are...

The 47th Annual CAS Awards were held on Saturday, February 19, 2011, at the Millennium Biltmore Hotel in Downtown Los Angeles.

Inception **took home both the Oscar for Sound Mixing, as well as the BAFTA Award for Best Sound at the Orange British Academy Film Awards. Congratulations to Ed Novick (pictured), Lora Hirschberg (pictured), Gary A. Rizzo (pictured), Richard King, Steve Nelson CAS, Christopher Atkinson, Tawakalitu Durowoju, Mike Markiew, William Munroe, Sterling Moore, David Raymond, Brian Robinson, Rin Takada, Nourdine Zaoui.**

Outstanding Achievement in Sound Mixing for Motion Pictures

True Grit
Peter F. Kurland CAS, Skip Lievsay CAS, Craig Berkey CAS, Greg Orloff CAS, **Douglas Axtell, Randy Johnson, Kay Colvin**

Outstanding Achievement in Sound Mixing for a Television Movie and Mini-Series

Temple Grandin
Ethan Andrus, Rick Ash, Tom Sturgis, Michael Swanner

Outstanding Achievement in Sound Mixing for a Television Series

Boardwalk Empire
"A Return to Normalcy" Episode 12
Franklin D. Stettner CAS (pictured), Tom Fleischman CAS (pictured), Larry Provost, Sam Perry, Toussaint Kotright, Egor Panchenko, Tim Elder, Michelle Mader

Oustanding Achievement in Sound Mixing for Television Non-Fiction, Variety or Music – Series or Specials

Deadliest Catch
"Redemption Day"
Bob Bronow CAS

Outstanding Achievement in Sound Mixing for DVD Original Programming

30 Days of Night: Dark Days
Michael T. Williamson CAS, Eric Lalicata CAS, Martin LaCroix, William A. Unrau

Names in **bold** are Local 695 members

THE ROAD TO

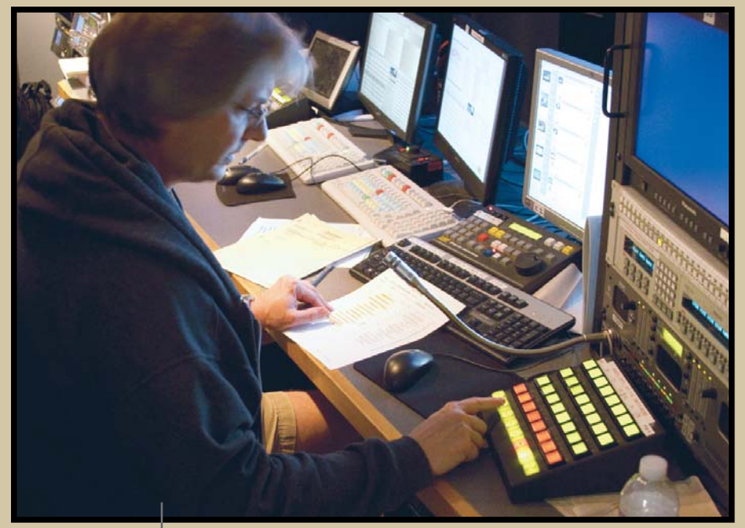
Tapeless Production:

How EVS and Grass Valley Have Changed Broadcast Television

by Eric Pierce, CAS

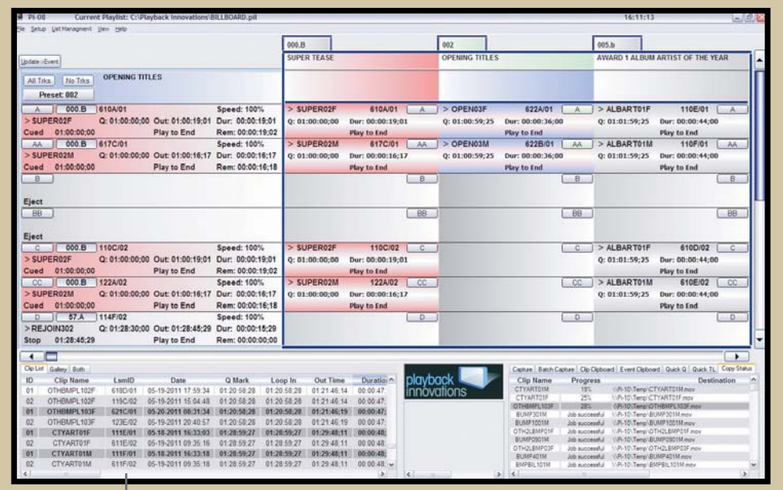
Remember the scene in the 1987 film *Broadcast News*, with Joan Cusack in a mad panic, risking life and limb as she runs frantically through the broadcast studio with a videotape in hand? With seconds ticking, that was the only way to get a videotape clip to the tape room in time for the live broadcast. Thankfully, "sneaker net" has now been replaced with high-speed networks, capable of delivering huge quantities of data where it's needed and when it's needed. In the fast-paced world of live and live to tape television production, speed is the key to success. Producers have turned to high-definition media servers, such as EVS and the Grass Valley K2, to maintain the pace.

Joan Cusack rushes a video clip from editing to the tape room in this classic scene from the 1987 film *Broadcast News*.



Mitch Bryan loading cues into the "Spot" Server Management system on *Dr. Phil*.

Local 695 video engineers and operators have been at the forefront of this technology, developing software and hardware interfaces to meet this need. Rick Edwards developed the ProQue system to control the import and export of clips, and to organize playbacks, including multiple playbacks in sync. Another media management system is Pi, **www.playbackinnovations.com**, developed by Local 695 member Jon Aroesty. The Pi system boasts that it can display an alert to the operator when files have been pushed, and generate multiple email updates to keep the post supervisor informed or even alert an on-set producer that a clip has been delivered and is ready to roll



The Pi Media Management System

Network servers are typically configured with multiple channels of high-definition video, each with four channels of 24 bit, 48k audio. An operator has immediate access to multiple sources that can be sent to a variety of destinations, such as multiple onset monitors, video set dressing and switcher feeds for integrating playbacks into the show.

Large-scale awards productions like the Oscars, Grammys and Emmys, rely heavily on servers for set dressing and onset monitors, while also utilizing them for the instantaneous playback of multiple cued playbacks upon announcement of the winners. Previous to server playback, this was done with banks of individual tape machines all lined up and sitting at a cue. Originally, the correct tape machine would have to be rolled, and then later, when tape machines had RS-422 protocol, they would roll all tape machines, allowing enough time for them to get up to speed. The correct machine would then be selected at the switcher and pulled up at the sound board for mixing into the program. Imagine that with 10 nominees!

Data servers have the significant benefit of being able to connect to a high-speed Ethernet or fiber network for file transfers. This allows the operators to push elements from the stage to post-production, where Avid and Final Cut workstations have instant access to the files. And then post-production can push files right back to the stage from picture editorial or final mix. This is a clear advantage for live television, where very often packages are being edited right up to air time.

Topical shows like *Conan, Dr. Phil, The Doctors, Lopez Tonight, The Talk*, etc., take advantage of networked servers to keep up with the pace these shows run. Clips and packages can be shipped from editorial and placed into a playback cue at the same time the show is being taped. In the case of *Dr. Phil*, the operator can record the program and save clips and, when Dr. Phil catches one of his subjects changing their story, he can say: "But earlier in the show, this is what you said!" and the clip is instantly played for all to see.

Using servers to ingest live feeds from the stage, then exporting them via network to the post-production servers, yields a huge time and cost savings. This gives editorial instant access to all the show elements which allows them to start cutting right away, making it possible to work on extraordinarily tight schedules that can sometimes allow only a matter of a few days from acquisition to delivery. Local 695 member Al Adams, one of the recordists working on *Dr.Phil* and *The Doctors*, tells us that once they complete the transition to full server acquisition, the show will save $20,000 to $30,000 each month in tape stock alone, not to mention the time saved and the creative choices made possible by using these advanced technologies.

And Joan Cusack? With high-speed servers delivering the content for her, that video clip would have made it to air and she'd still probably have time for a latte.

Rango:

A Production Mixer's Dream Job or Be Careful What You Wish for, It Might Come True

by Lee Orloff, CAS

Director Gore Verbinski takes in Johnny Depp's performance as the chameleon, Rango.

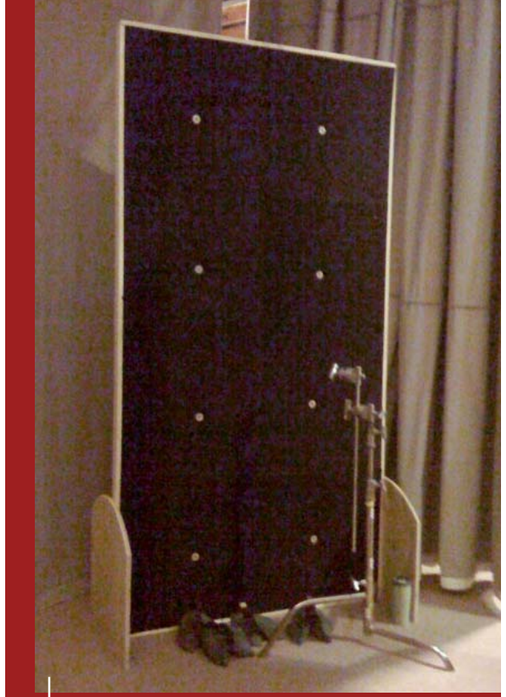
I've heard it said that the two happiest days in a film person's life are the day when we hear that we got the job and the day we hear the final "wrap" called. *Rango* was the exception; it was deeply satisfying to be working within a medium that had been only familiar to me from afar, yet applying a novel and unique approach to the process. While we were making it, we were all hoping to hear that a sequel was in the works.

I remember the first day the filmmakers invited me and a few other department heads over to their office to discuss the project and toss around some ideas. Gore Verbinski, the director with whom I had collaborated on six previous films, among them the first three in the *Pirates of the Caribbean* series, had been working on an animated feature for quite some time and was now ready to go into production. He wanted me to mix it. I immediately thought of cracking out a vintage big-diaphragm Neumann, as in the past for Nic Cage's inner monolog on *The Weather Man* or other voice-overs. My instincts told me to double track the actors on a trusty U87 (or the like) along with my favorite choice of boom mike. However, as the meeting progressed, the project was gradually brought into sharper focus. Wait a second … they said this was an animated feature. What exactly did going into production mean?

We were to comprise an Emotion Capture Unit, a relatively lean unit of 85 or so of us, brought together for 22 days on Universal's Stage 42 to record all of the cast performances as an ensemble in a comfortable and flexible setting. This would facilitate more spontaneous and natural performances than would have otherwise been possible if the production had been done using more traditional methods. It was to be shot as live action, though more akin to a motion-capture production. However, since nearly all the characters were to be rendered in non-human form, there was no need to utilize all of the motion-capture technology that we had used on past productions. One of the unique benefits of covering the action with three high-def cameras on an expansive soundstage was that it provided the animators not only with the actors' facial expressions as reference, but all of the spatial relationship and blocking as well. The sets were largely "virtual" in nature, but there were significant elements such as a long oak bar, saloon doors, a wagon, or the mayor's desk and wheelchair that the cast needed to play the scene. The set was neutral and evenly lit to provide consistent visual reference. The production's expectation from the Sound Department was a tad more stringent, but also crystal clear: deliver the highest quality production track as the basis of the entire dialog recording for the film.

In pre-production, Mike Anderson, my longtime utility person, and I did some tests on the soundstage to assist in formulating a plan. Stage 42 is a fine example of what we have come to appreciate about shooting pictures on proper Hollywood soundstages. We were located at Universal and, in spite of our location immediately adjacent to the stages of the perennially popular series, *Desperate Housewives*, the tourist-filled trams passed rather quickly and our wait times were negligible. Our foremost challenge of the "Voice-over recording with reference video" was to control the acoustics in the large empty space. We're accustomed to doing the majority of our stage work in built sets. So, with the exception of the occasional scene involving visual effects elements against screens and other similar setups, stage acoustics are not generally problematic. Fortunately, as the visuals were to be used solely as reference material, the production sought collaboratively to come up with solutions that worked for all concerned parties. The shooting area was contained within a space delineated by neutral gray solids suspended most of the way from the perms to the floor. To achieve flat, even lighting throughout, coops were evenly spaced above. To eliminate footfalls we carpeted the entire area. We installed baffles

Top: *Rango* and the townspeople sort things out during a street scene in "Dirt."
Middle: Rango joins in with the townspeople's ritualistic water dance.
Bottom: Sound baffles suspended from the perms.



One of the specially constructed portable baffles.

in the perms between the lighting instruments to dampen sound reflections that might otherwise spill over the grey solids. The construction department built us portable baffles and boxed out and vented the transformers on the rear end of the stage to lower the ambient noise floor.

Finally, the last project was to create a smaller, more intimate space where we could shoot additional "coverage" of larger scenes or shoot smaller scenes in their entirety. We wanted the smaller space to be equally flexible but a more controllable environment. I found that Universal had portable sound walls in storage that they had utilized to block the sound of outdoor events. These heavy baffles, covered by "Insul-Quilt"-type material, were suspended from the perms to create three sides of the space, with the fourth being left open for versatility. Normally, we would simply draw the rest of the solids across the opening and close off the space. For wider shots, the open side could be used to place cameras. In these instances, we would place our baffles behind the cameras as a fourth wall.

Boom microphones were used exclusively to capture the ensemble cast performance with the fullest, richest quality. You heard that right. Leave the wireless mikes back at the shop; an entire production accomplished without tagging a single actor. Due to the size of the cast and the impromptu nature of the blocking, three boom operators were needed. Jeffrey Humphreys, Brian Robinson and Mike Anderson handled the responsibilities with creativity, the utmost professionalism, and most importantly, great attitudes. Initially, I considered bringing the Sennheiser boom mikes directly into the Aaton Cantar and mixing with the Cantarem remote faders. The added flexibility of a Sonosax SX cart-based setup won out. I paired this to a Sound Devices unit doing backup duties onto CF cards that we shuttled to editorial. We used Sony F900s, synched to Lockit boxes and quieted down with barneys. The Prop Department worked with us to silence their objects as required. Video Village contained a specially constructed desk on wheels, more along the lines of a portable lectern, which contained an iMac, small Yamaha mixer, headphone distro amp, a passel of Sony MDRs and my Dynaudio near-field monitors for referencing playback as well as the video storyboard and other edited material. Our supervising sound editor, Peter Miller, made available some elements Gore wanted for playback to enhance the onset experience for the cast. On *The Ring*, there was an effect called "whisper keening" that we used repeatedly as a cue with the TV set. This time around we had church bells and assorted other sounds, as well as music cues, which were handled with my Steinberg Cubase–equipped laptop through a Sound Devices USBPre into a Crown amp and a pair of Technomad cabinets.

Now, it was time to assemble the concerned parties on the dub stage to listen to tracks and see whether we were all on the same page. With the gracious participation of Jon Taylor at Universal who opened up the stage to the director, producers, editor, and the studio post-production folks, we auditioned material from both the shooting areas. All agreed that we had acceptably knocked down the reflections of the empty stage, and that the quality of the recorded vocal tracks would nicely do the trick.

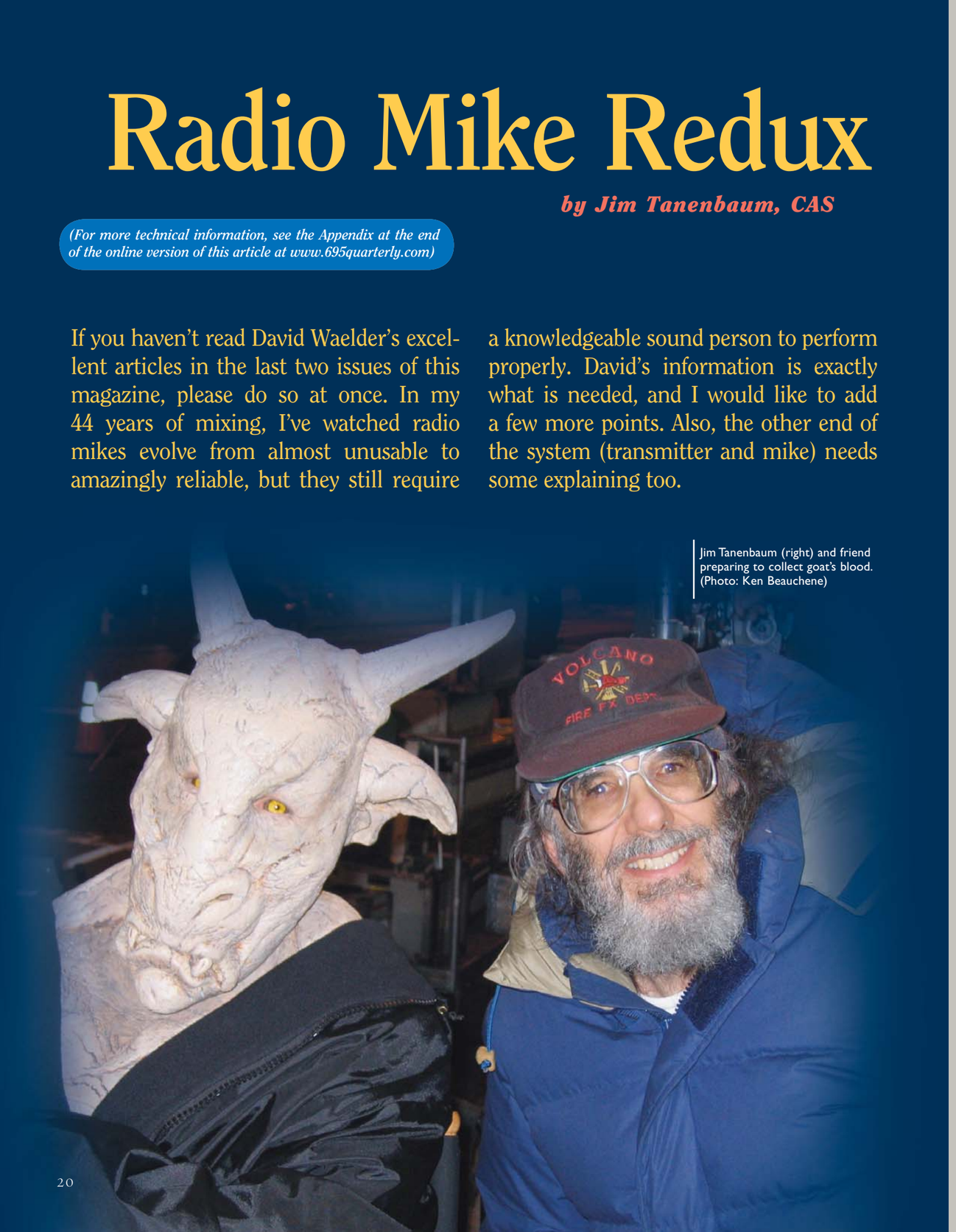
Imagine going to work on Day One and finding that customary walkie chatter was not about getting the cast off the stage after rehearsal and through the works, final touches and so on, but rather when they'd arrive at stage. Period. When they arrived they might don a hat, slip on an article of clothing, or prop themselves up to further get into character, but that was about it before we'd hit the lights and bell and off we'd go. Then doing far more 20-minute takes than not. Five weeks with the cross hairs aimed precisely at the same point. There were no little breaks like leisurely trips to graze at crafty or walking off stage for better cell reception during re-sets. One day I'm across in the men's room and the PA comes running in, "They're all waiting for you to roll." I was mixing a show where, once the director had the take he was looking for, his only technical consideration was, "Was everything good for Sound?" One of the great things about working with Gore Verbinski, who happens to be a gifted musician among his other strengths, is that he happens to have an excellent "ear." He is tuned in to the slightest details. Conversations about enunciation, separation, head turns and chin downs, a level that might have gotten "spicy" in his words, have been commonplace over the years. This time, that focus was probably multiplied five or tenfold which was a good thing for all of us in the department. It brought out the best in all of us, and it was a nice boost to the department's pride, knowing that the attention to detail we all strive to provide on any show was truly understood and appreciated on *Rango*.

Radio Mike Redux

by Jim Tanenbaum, CAS

(For more technical information, see the Appendix at the end of the online version of this article at www.695quarterly.com)

If you haven't read David Waelder's excellent articles in the last two issues of this magazine, please do so at once. In my 44 years of mixing, I've watched radio mikes evolve from almost unusable to amazingly reliable, but they still require a knowledgeable sound person to perform properly. David's information is exactly what is needed, and I would like to add a few more points. Also, the other end of the system (transmitter and mike) needs some explaining too.



Jim Tanenbaum (right) and friend preparing to collect goat's blood. (Photo: Ken Beauchene)

RECEIVERS

The directional characteristics of log-periodic (sometimes erroneously called "Yagi") antennas are different in the vertical and horizontal planes. (Log-periodic antennas are wideband; Yagis are fixed frequency—see Sections 3.1 and 3.2 in the online Appendix.) They are more directional in the plane of the elements, thus, when the antenna is mounted with the elements vertical (as it usually is), the gain falls off more rapidly at about 30 degrees to 45 degrees above and below the horizontal. This is desirable because the actors are not often located high above the ground. The horizontal pattern is much broader, sometimes down only 5-6 dB at ± 90 degrees. As a result, it is not necessary to "track" the actors with the antenna if they move slightly, as I have seen some people do. (Note that TV antennas are oriented horizontally, because of the need to precisely aim them at the TV station's transmitting antenna, and to reduce reflected signals from other directions—"ghosting," although that is no longer so much of a problem with digital TV.)

If you have an interfering signal, you can swing the receiver's antenna and try to null it out. Chances are, the actor will still be within the front lobe of the antenna's pattern. If not, you can relocate the antenna to get the actor "in front" of it while keeping the interference in the lowest gain direction. This works better than reorienting the antenna horizontally because the null is no deeper, and now the actor may have to be tracked. Important: the greatest null direction is not directly to the sides or rear of the antenna—the pattern is more like a hyper-cardioid or short shotgun mike's, at about 135 degrees rearward to the left and right. When you have some free time, set up a transmitter in a fixed position and then rotate the receiver antenna while watching the receiver's signal strength meter. This will give you a feeling for your particular antenna's pattern. Be sure to do this outside in an open area, so reflections won't confuse the results. And, if you have more time, move the transmitter to another location and repeat the procedure. Check for the front acceptance angle as well as the location of the rearward nulls on both sides.

Circularly-polarized antennas are indeed good at receiving signals that have had their polarization angle changed by reflection(s), but there is a low-cost alternative. If you are using two 1/4-wave whip antennas, simply orient one 45 degrees to the left and the other 45 degrees to the right, instead of both vertically. Right-angle BNC or SMA adapters are the easiest way to do this if the antennas do not have right-angle connectors themselves. For a pair of sharkfins, modify their mounting brackets to angle their upper edges outward by the same amount. This puts the antennas at a right angle to each other, so at least one will pick up the signal strongly no matter what its polarization angle.

Regardless of what type of antenna you use, keep the cable connecting it to the receiver as short as possible because most coaxial cable has a greater loss than sending the radio signal an equal distance through the air. See Section 4.2 in the Appendix.

TRANSMITTERS

As to transmitters, there are a number of things you can do to improve the signal that arrives at the receiver antenna:

1. Most intervening objects block the direct signal path, and, since UHF waves are small (about one foot), it doesn't take a very large object. This includes people, especially the actor wearing the mike. If the actor will be facing you throughout the scene (i.e. facing the receiver antenna on your sound cart), mount the transmitter or at least the antenna (see 3. below) on the front of the actor's body.

2. Another improvement comes from spacing the bodypack's antenna as far from the actor's body as possible. In addition to mounting the transmitter under the outer layer of wardrobe if possible, slipping a length of rubber or plastic tubing over its antenna will increase the radiated power considerably. Automotive supply stores sell tubing for windshield washer fluid that is the correct size: about 1/4-inch O.D. x 1/8-inch I.D. (See Illustration on page 22.)

3. As David mentioned, raising the receiver's antenna helps. This is also true of the transmitter's antenna. If you have to mount the transmitter on the actor's ankle, use an extension to get the antenna higher on the body.

A simple extension antenna can be made from a length of miniature coaxial cable: RG-174 type, with a braided shield and a stranded center conductor. (See Illustration on page 22.)

Start by stripping off several inches of the outer jacket at the end of the coax, being careful not to cut or even nick any of the shield braid wire strands. The length removed should be about an inch and a half more than the length of the whip antenna for the frequency block you are using. Don't include the length of the connector's metal shell. (Or you can use the antenna-length Table in the online Appendix. Pick the center frequency of your block.)

Next, carefully push the cut end of the braided shield back to expand it, and continue pushing the shield until it inverts over the remaining outer jacket. Smooth the inverted shield braid out—it should now be the correct length (or slightly longer, in which case trim it back).

Cut the now-exposed insulated inner conductor to the correct length, then cover the shield braid and inner conductor with a length of shrink tubing.

After you have successfully completed these steps, cut the coax to a length of five to six feet (to reach from an ankle-mounted transmitter to the shoulder-mounted antenna), and attach the appropriate transmitter-antenna connector to the other end.

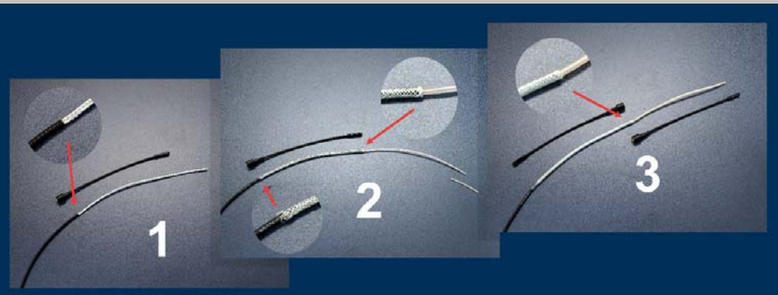
4. It also helps to raise the boom operator's transmitter antenna if using a wireless link. Butt plugs are one solution. If a bodypack transmitter is being used, the extension antenna described above can be mounted on the boom operator's headphones. I use this method and often get a solid 1,000-foot range. (Zaxcom makes a filtered remote antenna for specific blocks, which also helps to reduce interference with receivers used in a bag.) It is also possible to mount the transmitter as well as its whip antenna to the headphones, although this adds more weight and bulk.

Interference from other transmitters can cause several types of problems.

1. Mike mounting position: Basically there are two choices: torso or head.

Torso: Usually, the lavalier is mounted on the chest, located over the sternum (breastbone). This position is a good compromise—any lower and there is too much ambient sound; any higher and the upper voice frequencies are reduced by the "chin shadow," and there is also an excessive drop in level if the head is turned to the side.

Head: Extra-small lavs like the Countryman B-6 can be hidden in the hair above the forehead. This keeps them "on mike" regardless of any head turns. If the actor wears glasses, concealing the tiny mike at the hinge point is another possibility. If a baseball cap is part of the actor's wardrobe, the mike can be mounted under the visor. A plastic hard hat is even better because the transmitter can be secured inside the hat, just above the suspension. With both hats, the mike can be concealed under a sheet of felt (see 5. next page) that is glued under the visor or brim. If the bump from the mike is visible (be sure to remove any EQ sleeves from the B-6), use two layers of felt, with the inner layer cut out to accommodate the mike and cable.



1: Strip outer jacket to antenna length plus 1.5 inches—do not strip center conductor

2: Carefully invert braided shield and then trim shield and center conductor to exact antenna length

3: Cover exposed shield and insulated center conductor with shrink tubing

A length of rubber tubing over the antenna spaces it away from the actor's body and increases radiated RF power

By matching felt color to wardrobe it is possible to have wind protection that is both effective and inconspicuous

5. One more caution: Recently, large (12' x 12') metalized cloth scrims (silver or gold) have come into widespread use. Although coated with metal, they *absorb* radio signals rather than reflect them. Not only will they completely block the signal from an actor behind them, but actors standing in front of one (with transmitters mounted on their backs) will have almost all of the radiated signals absorbed, with resultant R.F. dropouts. This caused me no end of trouble until I figured things out. (For the technically inclined, the characteristic impedance of the metalized fabric is about 50 ohms—see Section 4.3 in the Appendix.)

MICROPHONES

Once the transmission and reception of the radio signal has been optimized, there are also techniques to improve the quality of the audio:

2. Cable strain relief: A taut cable can pull on the lav and cause it to rub against the clothing. Even if it doesn't, mechanical noise introduced anywhere along the stretched cable will travel to the mike where it will be heard. A full 360-degree loop in the cable, secured with strips of tape both below and above it will break this transmission path.

Sennheiser makes a line of lavaliers, such as the MKE-2, that uses stainless steel wire instead of copper in the cable. While this construction is extremely rugged and reliable, the stiff steel conductors can carry mechanical noise down the entire length of the cable. Even two loops sometimes does not prevent it from reaching the mike. Using these mikes on studio news anchors usually presents no problems, since they speak up and are relatively motionless. Actors in a dramatic scene, with lowered voices and extensive body motion, often cannot be recorded successfully with these lavs.

3. Mounting lavs directly on the actor's skin: Individually-packed alcohol swabs are useful in removing skin oils before taping down the mike. There are three types of medical tape available that work well for different situations. The one I use most often is "3M Micropore," a plastic tape perforated with many tiny holes. These serve to allow perspiration to escape rather than lift the tape by hydraulic pressure. They also make the tape easy to tear cleanly. While all three types are hypoallergenic, for actors who express a concern about their "sensitive skin," a version of tape made from paper with a less aggressive adhesive may be used, but will require a greater area of contact to remain in place. It is porous but not as much as Micropore. For applications involving abrupt and vigorous body motions, or where the transmitter must be taped to the body, there is a cloth tape that has a much greater tensile strength and a much stronger adhesive. (Avoid body hair if at all possible with this tape.)

Most men have a depression in the center of their chest that is a good spot for the lav. For women, between the breasts (unless they're pushed together) is ideal, possibly attaching the lav to the center of the bra. If the clothing rubs against the mike, there are two choices: double-sided tape between the cloth and the skin, or attaching one or more "bumpers" to the skin near the mike to keep the cloth away from it. A piece of makeup foam works well for this purpose. Trim the foam to a smoothly-rounded contour on the side where the fabric will contact it and use "TopStick" double-sided adhesive toupee tape on the flat side to attach the bumper to the skin.

4. Chest hair: Some men have a thick mat of chest hair with the consistency of steel wool that rubs on the back of the lav. (Robert Urich was extremely cooperative and shaved a patch of his pelt down to the bare skin every day for me, but you are unlikely to encounter such generosity.) The best solution is to have the actor wear a cotton T-shirt or tank top, but if that is not possible, tape a 6" square of felt (see 5. below) to the body hair behind the mike, using the paper tape mentioned (see 3. previous page). You will need lots of tape and use the alcohol swabs liberally. If the actor won't go along with this, taping two or more layers of felt to the wardrobe so that they cover the back of the mike will help to a certain degree.

5. Windscreens: Foam windscreen material is not very effective when used in thin layers next to the mike. The mesh "ball" windscreen provided with some lavaliers (e.g. Sanken COS-11) is better, but is too large to hide under most wardrobe. I have found that a layer of wool felt provides considerable protection without attenuating high frequencies excessively. Important: you must use 100% wool felt; wool-polyester blends or 100% polyester felt is very noisy. (See Illustration on page 22.)

For most installations, cut the felt into strips about 3/8" x 1" for B-6s and 5/8" x 1-1/2" for Sankens and Trams/Sonotrims.

Keep the cable connecting the antenna to the receiver as short as possible.

Next, cover exactly one-half of the strip with a piece of TopStick double-sided tape, notched to clear the business end of the lav. Place the mike on top of the tape, with its end just shy of the middle of the felt strip and the cable running down the center of the strip.

Finally, fold the strip over the mike and press the edges together along its length. This will space the fold in the felt slightly away from the end of the mike to improve the windscreen's performance.

Buy as many different colors of felt as you can—this will help in concealing the mike, especially when a leather jacket (or other sound-muffling material) is involved. If you can match the color of the jacket's lining, it is often possible to position the mike very near the opening. The various shades of felt are also useful for windscreening and/or concealing planted mikes.

Tram, Sonotrim, and other flat lavs that mount with "vampire clips," have a grill on one side that can be mounted facing the clip so the solid back of the mike faces forward and helps block the wind. The gap between the grill and the clip can be filled with a thin sheet of foam windscreen material, or felt for even more protection.

6. Clothing noises: If you have any input in preproduction as to wardrobe materials, natural fibers such as cotton, linen, wool, and even silk, are preferable to synthetics like polyester. These plastic fibers are much more rigid and will carry sound through the fabric much more readily. Unfortunately, wardrobe people like synthetics because they are wrinkle-resistant and easier to clean. If you encounter this problem on the set, isolating the lav with a piece of makeup foam will help. Latex works best but has recently been replaced by a synthetic to avoid allergic reactions. There are also commercially-produced cylindrical mike sleeves available in black or white foam.

TopStick works well to tack rubbing layers of clothing together. A supply of various sizes of safety pins is also useful. Neckties have multiple layers that can rub together and be picked up by a lav mounted underneath. To complicate matters, the backs of most ties are sewn shut, so you cannot get inside to tape the layers together. You can use a safety pin to immobilize all but the front layer, and sometimes the tie's pattern will allow you to snag the front layer as well. There is a "silk" safety pin available from dressmakers' supply stores that is very small and has a flat-black coating, which is ideal for this purpose. (White, pink, and other painted colors are also available for use with sheer wardrobe.)

For completely intractable clothing noise, it is sometimes possible to stick a B-6 out through a button hole and support it on its cable, half an inch away from the fabric. This technique works especially well if you have B-6s in all the available colors. You can also use colored markers on a white mike to match various colors. "Dry-erase" markers are the easiest to remove, but be careful that the color does not rub off before the shot is over.

Two often-neglected sources of noise are flapping zipper tags and the circular springs inside the female part of snaps that rattle when the snap is unfastened. These can be amazingly loud when the lav is nearby. A small piece of double-sided tape will secure the zipper tag to the body of the zipper, and another piece can be wadded up and stuck inside the snap opening. Warning: be sure to remove all the tape from wardrobe items when the shot is over.

7. "Soundproof" wardrobe: Zipped-up leather jackets (when under the collar is not an option) and down-filled parkas are two of the most difficult items to deal with. It is sometimes possible to locate the lav behind the zipper, so the sound can reach it through the gaps in the zipper teeth. If the teeth rub against each other audibly, a small amount of Krazy Glue applied to the teeth immediately in front of the mike will stop that. Another possibility, if the wardrobe person will permit it, is to cut a short section of the stitching that fastens the zipper to the jacket and bring a B-6 out through the gap, leaving the end of the mike flush with the edge of the leather bordering the zipper.

Down-filled parkas (or other insulation) are almost impossible to mike successfully, especially nylon ones. The audible noise made by the sleeves rubbing against the torso is so loud that even using a boom mike it is often impossible to get an acceptable track. The muffling effect of the insulation adds to the problem because any part of it that gets between the mike and the actor's mouth will absorb most of the high-and-upper-midrange frequencies. The only saving grace is that most scenes involving such heavily-insulated clothes usually have the actor also wearing some kind of headgear, with the possibility of hiding the mike there.

MYSTERY NOISES

1. If metal objects in the vicinity of the transmitter antenna happen to rub against each other, they can produce static in the audio signal. This occurs because they act like antennas and pick up some of the RF energy from the transmitter. This produces microscopic sparks between them where they touch, and this in turn produces a static radio signal over a wide range of frequencies, including the audio band. This signal can enter the transmitter's audio circuits where it will be combined with the audio from the mike. Lavs and transmitters with plastic cases are particularly susceptible to this problem. Either separate the offending objects or insulate them where the meet with a piece of tape. (You could also solder or clamp them firmly together.) Some car seats have internal metal springs that rub together. Moving the transmitter from the actor's back to the front of the body usually solves the problem. A bag transmitter can cause this problem too, unless its antenna is located far away from the other items in the bag, such as on your headphones.

2. Modern automobiles and trucks are equipped with special resistive spark plug wire to suppress ignition interference. But many hot rodders replace it with solid copper ignition wire to improve performance, and this causes the vehicle to radiate a considerable amount of radio interference. Unfortunately, I have encountered this on some camera cars. Motorcycles with magneto ignition systems also produce this type of interference, unless they're upscale models with a built-in radio. Auto stores sell plug-in suppressor resistors that you can temporarily install between the spark plugs and the cables that attach to them. (Unfortunately, some recent vehicles have the spark plugs hidden under plastic shrouds, or worse, buried under miles of smog control or other plumbing.)

3. A single AC- or battery-power supply can transfer interference between multiple units connected to it unless the individual outputs are isolated with EMI filters. Most commercial power distribution systems incorporate filters but not all. The audio input cable to a transmitter used for a camera hop can carry RF energy down its length to whatever is feeding it. (So can Comtek transmitters.) A cylindrical ferrite RF choke snapped over the cable will block most of this, and should be located as close to the transmitter end as possible. Keep it in place with a nylon cable tie, and cover it with shrink tubing.

4. Be sure that the mounting hardware for all transmitter mike input connectors is tightened securely. A loose collet nut on the mike plug can also cause problems. Broken shield wires anywhere along the cable are another point of entry for interference. Periodically check your lavs by listening as you wiggle the cables down their entire length, from mike to plug, while they are connected to the transmitter.

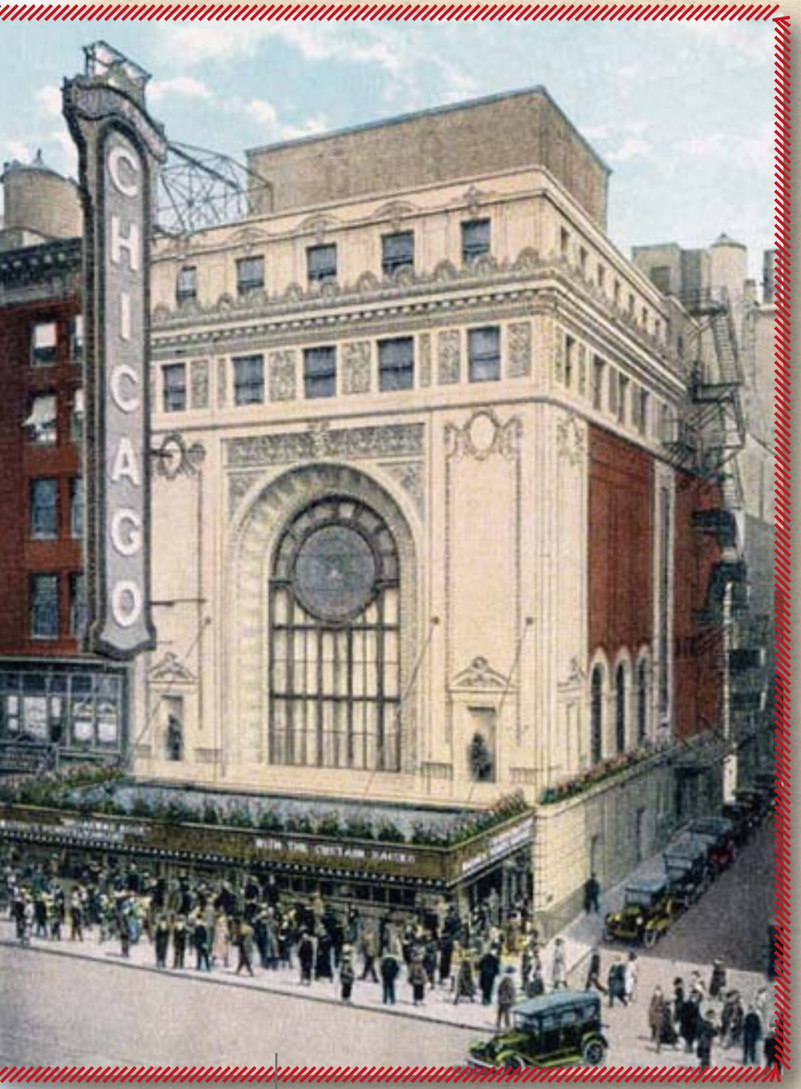
5. Interference from other transmitters (taxicabs, local paging systems, walkie-talkies, etc.) can cause several types of problems. Audible noise, either whistles or the actual program material, affects analog radio mikes. Muting (audio dropouts) occurs in digital systems, both hybrid (Lectrosonics) and full digital (Zaxcom). Both analog and digital systems can suffer R.F. dropouts if the interfering signal is powerful enough to swamp your receiver's front end, and analog radio mikes can also have distortion introduced in their audio if they don't lose your transmitter's signal entirely.

I have found it very useful to carry a small handheld analog scanner receiver to help identify the source of the interference when using digital radios.

In closing, let me tell you a secret: radio mikes work partially by magic, and I have found that a few drops of goat blood applied to the receiver antennas at midnight under a full moon improves their performance by at least 20%. The color, sex, and age of the goat don't seem to matter, but the animal must be alive when you obtain the blood.

Beginnings of Local 695 Part 3

by Scott D. Smith, CAS

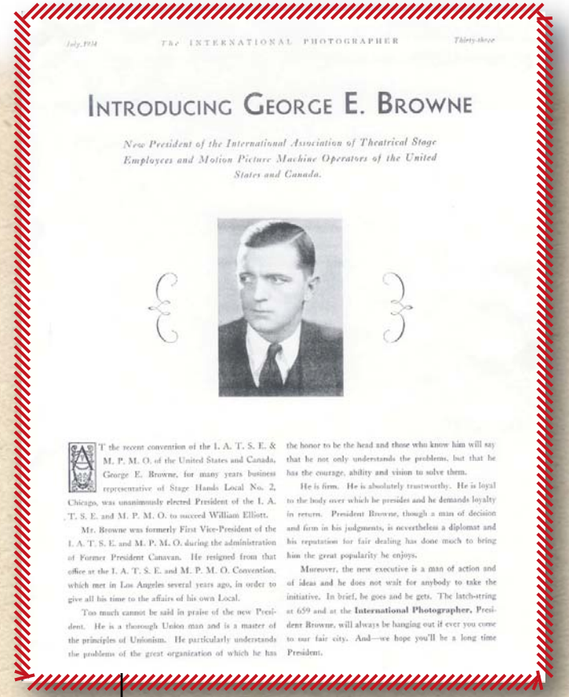


The Chicago Theater in the late 1930s. The flagship theater of the Balaban & Katz chain; theaters like these would provide a source of cash for the Chicago mob after the Prohibition years.

Author's note:

This piece is a continuation of the article from the winter 2011 issue of the 695 Quarterly, *which examined the early beginnings of Local 695. For those who toiled behind the scenes at the various studios during the mid-to-late 1930s, times were tumultuous. With the economy still reeling from the effects of the 1929 stock market crash, and unemployment in the double digits, Hollywood was not exempt from the crisis that gripped the rest of the nation. With much at stake for both workers and producers alike, a fierce (and bloody) battle ensued for the control of craft unions engaged in film production. In the end, the studios would be the ultimate winners, but there was no shortage of embarrassing moments for both sides.*

While much ink has been spilled pertaining to charges of influence peddling during this period, I have tried to steer clear of any conjecture. Any opinions expressed herein are those of the author, and should not be construed as representative of the IATSE.



July, 1934 THE INTERNATIONAL PHOTOGRAPHER Thirty-three

INTRODUCING GEORGE E. BROWNE

New President of the International Association of Theatrical Stage Employees and Motion Picture Machine Operators of the United States and Canada.

AT the recent convention of the I. A. T. S. E. & M. P. M. O. of the United States and Canada, George E. Browne, for many years business representative of Stage Hands Local No. 2, Chicago, was unanimously elected President of the I. A. T. S. E. and M. P. M. O. to succeed William Elliott.

Mr. Browne was formerly First Vice-President of the I. A. T. S. E. and M. P. M. O. during the administration of Former President Canavan. He resigned from that office at the I. A. T. S. E. and M. P. M. O. Convention, which met in Los Angeles several years ago, in order to give all his time to the affairs of his own Local.

Too much cannot be said in praise of the new President. He is a thorough Union man and is a master of the principles of Unionism. He particularly understands the problems of the great organization of which he has the honor to be the head and those who know him will say that he not only understands the problems, but that he has the courage, ability and vision to solve them.

He is *firm*. He is absolutely trustworthy. He is loyal to the body over which he presides and he demands loyalty in return. President Browne, though a man of decision and firm in his judgments, is nevertheless a diplomat and his reputation for fair dealing has done much to bring him the great popularity he enjoys.

Moreover, the new executive is a man of action and of ideas and he does not wait for anybody to take the initiative. In brief, he goes and he gets. The latch-string at 659 and at the **International Photographer**, President Browne, will always be hanging out if ever you come to our fair city. And—we hope you'll be a long time President.

Article from July 1934 issue of *International Photographer* praising the election of George Browne to the office of President of the International.

1935

Still reeling from the effects of the strike actions of 1933, Local 695 (and the IATSE West Coast locals in general) continued in their quest to negotiate a contract with producers. It was tough going. IBEW Local 40 continued to be a thorn in the side of 695, and they had lost a significant number of members to IBEW as a result. With membership dwindling and the possible extinction of the West Coast locals looming large, the International played the only card they had left—bring in the boys from Chicago.

The Chicago Connection

George E. Browne began his show business career in Chicago, having been elected in 1932 as the head of Stagehands Local 2. His assistant and right-hand man was one William "Willie" Bioff, who had an illustrious career as a small-time criminal, running prostitution and minor protection rackets in Chicago's Levee district.

In the early 1930s, after hitting up a local theater chain for $20,000 in exchange for labor peace, Bioff and Browne went to a local club to celebrate their coup. It was during this drunken outing they had the misfortune of running into a gentleman by the name of Nick Circella, a member of Frank Nitti's gang, who, along with Al Capone, controlled much of the Chicago mob during the Prohibition years. With the end of Prohibition in 1933 causing a severe dent in their cash flow, the Syndicate needed to come up with some creative ways to keep their empire afloat. The film business suited their needs perfectly. Bioff and Browne were subsequently invited to join the organization. The only acceptable answer was "yes."

Using his position as head of Local 2, Browne was able to exert control over local theater owners by threatening action by the projectionists. During this period, most of the major theater chains were still owned by the studios. In 1934, Browne, with the backing of the Chicago mob, ran in an uncontested election to head the International. Bioff, as his right-hand man, would accompany him to New York.

Having managed to seize control of the International, Bioff and Browne then went to the heads of Hollywood studios, threatening to disrupt the operations of studio-owned theaters unless they bowed to their demands.

Studio heads, having just lived through an expensive halt in production, were anxious to avoid any more labor problems. A previous, albeit brief, projectionists strike in Chicago had already cost the studios a significant amount of money and they didn't relish the thought of further disruptions in either production or exhibition.

Studios Go Closed Shop Jan. 2

Thus read the headlines in the December 16, 1935, issue of *Variety*. After months of wrangling with the National Labor Relations Board and IBEW Local 40 over jurisdiction of soundmen, Local 695 and the International managed to regain representation of studio workers for most crafts.

This was a major coup on the part of the International, and brought at least 4,000 members back into the folds of the IATSE. While the tactics associated with this action would come back to haunt them, it did, at least for the time being, put the question of representation to rest. The move apparently caught many by surprise, including the cameramen, who just 10 days previously were still trying to sign members of camera Local 659 into the ASC guild.

However, the closed shop conditions did not remain in place very long. By April of 1939, the leaders of the International announced the return of an open shop policy on studio lots. This move was designed to head off a looming battle over charges that the IATSE was acting in collusion with producers to control labor rates and conditions.

1936—The Deal

In 1936, with the events the previous year still looming large in his mind, Joseph Schenck, head of 20th Century Fox, as well as the producers' liaison for the Hollywood majors, was called to a meeting in New York with Willie Bioff and George Browne. At that meeting, Bioff declared that "I'm the boss—I elected Mr. Browne—and I want from the movie industry $2 million." Schenck, astounded by the demand, began to protest, but Bioff warned him: "Stop this nonsense. It will cost you a lot more if you don't do it."

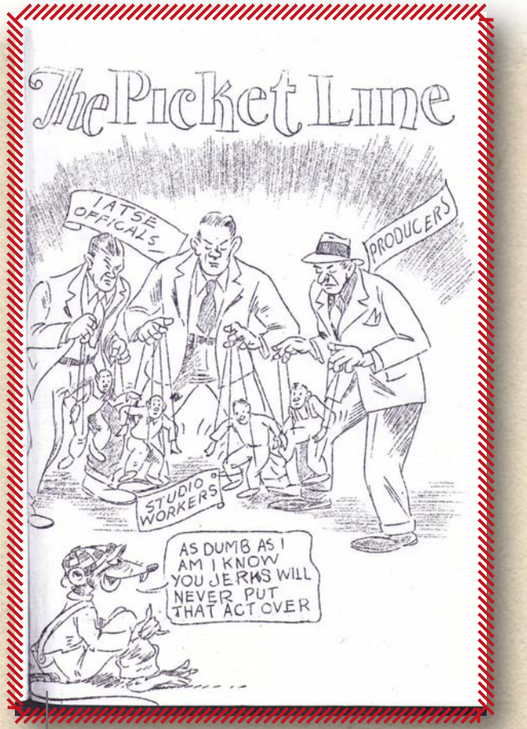
Two days later, at a second meeting, Bioff took him aside and confided: "Maybe $2 million is a little too much… I decided I'll take a million." In the end, Schenck agreed to pony up $50,000 a year from each of the majors and $25,000 from the smaller studios. Mr. Schenck later took a small bundle containing $50,000 in large bills to the Waldorf-Astoria hotel, dropped it on a bed, and looked out the window. Sidney R. Kent, president of Twentieth Century-Fox Film, came in and did likewise.

A year later, Schenck received another call from Bioff, and repeated the routine. This would continue until May of 1941, at which point Bioff and Browne were indicted and found guilty of extortion in federal court. They were subsequently given sentences of eight and ten years respectively, along with a fine of $20,000. Richard Walsh took over as President of the International. Joseph Schenck, for his part in the scandal, received a sentence of a year and a day, but received a Presidential pardon after serving four months. When faced with charges for his participation in the scandal, Nitti put two .32 caliber bullets in his head while standing in a suburban rail yard. Bioff, not long after his release, was blown up, along with his car, in the driveway of his home in Phoenix. Thus came to an end one of the most scandal-ridden periods in the history of the IATSE.

Local 695 Survives

While the actions of Bioff and Browne brought disgrace to the IATSE, the members of the individual locals continued in their fight for fair wages and working conditions. This effort on the part of the members would result in a new, more democratic IATSE Constitution. In addition, to their credit, some members spoke out against the rigged election of Browne as head of the International. For their trouble, they were frequently subject to beating by Bioff's henchmen and "blacklisted" from working.

Tommy Malloy (no angel himself), who headed Projectionists Local 110 in Chicago, was one of those who had protested the influence of the mob during the wildcat projectionists strike of 1935. In response, his Packard, with him at the wheel, was riddled with machine-gun fire on Lake Shore Drive. The message was clear to both studio owners and union employees alike: go along with the program, or face the consequences.



Industry cartoon from the 1930s. From *The Story of the Hollywood Film Strike in Cartoons*. Cartoons by Gene Price, book by Jack Kistner. From the collection of Dr. Andrea Siegel.

With the issue of jurisdiction settled, at least for the time being, Local 695 went back to the task of organizing its membership, and signing up new members who worked in areas related to sound recording and reproduction. This included not only production sound and re-recording crews, but maintenance technicians and theater sound personnel, as well as those working at laboratory facilities.

One such group was the engineers and technicians who worked for ERPI (Electrical Research Products, Inc.), which was the engineering arm of Western Electric. Most of these men were part of the Western Electric engineering group which handled installation of sound equipment in studio facilities, and the installation and maintenance of theater sound equipment provided by Western Electric. Local 695 had previously signed many of the men who worked for RCA Photophone, and the signing of the ERPI engineers in June of 1936 further bolstered their ranks.

While these hard-won gains helped to establish Local 695 as the primary bargaining agent for production and re-recording soundmen, they would continue the fight for the representation of *all* soundmen working at theaters and laboratory facilities well into December of 1936.

1937

While Local 695 continued in its efforts to organize those working in sound-related crafts, the fight to maintain representation of soundmen was far from over. On April 30th of 1937, the Federation of Motion Picture Crafts (FMPC) staged a surprise walkout. The FMPC was essentially a coalition of unions under the leadership of Jeff Kibre and covered about 6,000 members in various crafts, including art directors, costume designers, lab engineers, technical directors, set designers, scenic artists, hair and makeup artists, painters, plasterers, cooks and plumbers.

Kibre was a second-generation studio worker. His mother, a divorcée who had moved from Philadelphia in 1908, worked in the art department of some of the studios. After studying English at UCLA, and failing in his bid to become a screenwriter, Kibre joined Local 37 and took a job as a prop maker. He was reportedly a likable man and had a talent for making those around him feel as though he understood their problems. He was also an avowed Marxist and Communist, but apparently did not follow the party line, preferring to make his own determinations as to the correct course of action. As such, the Communist Party leadership refused to support his actions, which left him on periphery when it came to organizing.

While the April 30th walkout against the studios eventually failed, Kibre was not totally out of the picture. With the help of attorney Carey McWilliams, Kibre reorganized under the banner of the IATSE Progressives, and began a campaign to investigate the mob ties of the International.

While Kibre's efforts to clear the IATSE of mob influence may have been laudatory, his ties (however loose) to the Communist Party ultimately worked against him. To his credit, however, Kibre's actions led to the resignation of Willie Bioff, and well as the end of the 2% assessment fee levied on all members of the IATSE by George Browne after he had been installed as head of the International.

In the end, Kibre's attempt to organize various crafts failed amidst the continued allegations of Communist influence, which were picked up on and exploited by the media during the late '30s and early '40s. He also received numerous death threats during this period, to the extent that he required a personal bodyguard around the clock. Despite his failure at fully organizing studio workers, he did manage to negotiate a deal to leave town if the IATSE leadership agreed not to persecute the membership of the democratically oriented United Studio Technicians Guild. Upon his departure, Kibre went to work for the CIO fishermen's union.

Unfortunately, the media attention surrounding Kibre's Communist Party affiliation provided a further distraction for the studios to exploit, serving to deflect attention from their own role in influencing labor negotiations, as well as their mob ties. This unfortunate scenario played right into the hands of the producers, who were only too happy to instigate any unrest within the labor movement.

It was probably due in part to this unwarranted attention (along with Jeff Kibre's continued actions against the IATSE) that the membership of Local 695 took the unprecedented position to vote *against* the autonomous local leadership during a meeting held on December 22, 1937. Apparently, members felt that they had a better chance of maintaining their current wage structure (paltry as it was), if they let the International handle bargaining with the producers.

Variety headlines depicting the varying stances taken by IATSE in regards to home rule.

It wasn't until a contentious three-hour meeting, held nine months later on September 16th of 1938, that more than 400 members of Local 695 would finally nominate a new set of officers to the Local, thereby returning control to the officers and members (although the actual election was deferred until the 28th of the month). Likewise, three other key IA locals (Camera Local 659, Laboratory Technicians Local 683, and Studio Mechanics Local 37), also voted to return control of their unions to local leadership. Once again, Harold Smith was voted business representative for Local 695.

The question of certification of Local 695 as the exclusive bargaining agent for soundmen, which was initially filed with the National Labor Relations Board (NLRB) on October 12th of 1937, would continue to drag on into 1939, with no clear resolution.

Keeping Score—A Look at Wages

Given the current economic times we are living in, it is instructive to make a quick comparison of wages during the late 1930s. Below is an illustration of what a sound crew might expect to make on studio-

Sound Dept. Studio Wage Scale—April 1937

Position	Hourly	2010 Equivalent	Weekly (54 Hours)	2010 Equivalent	Weekly (3-Week Guarantee)	2010 Equivalent
Class 1	$2.42	$36.35	$116.15	$1744.58	$79.20	$1189.59
Class 2	$1.82 ½	$27.50	$87.10	$1308.25	$66.00	$991.33
Class 3	$1.41	$21.18	$67.75	$1017.61	$52.20	$793.06
Class 4	$1.01	$15.17	—	—	—	—

based productions after new wage scales were put into effect in April of 1937, with equivalent comparisons to 2010.

Clearly, nobody was getting rich at these wages, especially when one takes into account that only very few of those members working in 1937 would be fortunate enough to work 42 weeks a year.

Willie Bioff on his release from prison.

The aftermath of the car bombing which ended Willie Bioff's life on November 4, 1955. The killers were never found.

In comparison, it was reported in the September 17th issue of *Variety* that director Frank Capra received a salary of $100,000 each for three pictures, two bonuses of $50,000 each, plus 25% of the profits. While Capra was certainly an exception, director Rouben Mamoulian was reported to make $50,000 per picture, which is still nothing to sneer at.

Likewise, it is interesting to note that in September of 1938, Technicolor reported gross earnings for the first eight months of $862,612 (approximately $13.2M in 2010 dollars), which was nearly double the earnings for the same period in 1937. Somebody was making money—despite a national economy that was still faltering. (The national unemployment rate in 1937 stood at 14.3%, rising to 19.0% in 1938.)

It is therefore understandable when stories such as these hit the press, some crew members who toiled long hours in production might begin to feel that they were being taken advantage of. A similar parallel exists today when comparing the salaries of corporate CEOs to those of the workers who produce value for their companies.

1939 and Beyond

After having just approved the return to autonomous control of Local 695 by its newly elected board in September of 1938, the members would reverse this decision six months later. Fearful of losing the gains that had been made over the past years in wages and working conditions, the membership felt that the only leverage they had with studio management was the threat of a walkout by the projectionists.

Therefore, the members of 695 (along with Business Agent and International West Coast rep Harold Smith) felt letting the International handle the bargaining for a new Studio Basic Agreement would offer greater leverage than what they might be able to muster on their own. However, in a nod to local membership, it was agreed that any contract negotiated by the International would be ratified by the membership of the individual locals.

While the tactic of having the International control the negotiations may have been a good move in the short run (it took a threatened walkout of projectionists on April 16th of 1939 to even get producers to agree to come to the table), ultimately it placed a lot of power in the hands of the International, which at this time was still headed up by George Browne.

However, despite the events that would take place in federal court two years later, it is probably fair to say that Local 695, as well as most of the West Coast IATSE locals, would have not been able to survive the union-busting tactics of producers without having the projectionists support them. While some of the tactics employed by IA leaders during this period may be questionable, one must also remember that the studios employed their own set of "goon squads" which were equally unsavory in their tactics.

Ultimately, the greed of studio bosses was the factor that forced the rank-and-file membership of craft unions (regardless of their affiliation) to vote for measures that they might otherwise think twice about. Surely, most members of 695 would not have willingly handed over control of their local to the International unless they felt that was the only option left open to them.

While both the International and individual locals have to share some of the blame for the events that took place during this time period, if studio bosses had come to the bargaining table instead of trying to circumvent the rights of workers, things may have turned out differently.