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2 CRITICS
CHOICE AWARDS
INCLUDING
BEST LIMITED SERIES

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SERIES OR MOVIE
ERIC HIRSCH, ERIC HOEHN, ROLAND WINKE

THE QUEEN'S GAMBIT
INSIDE THIS ISSUE

THE 57TH ANNUAL CINEMA AUDIO SOCIETY AWARDS RECAP | 14

DEPARTMENTS

The President’s Letter | 5
From the Editor | 6
Collaborators | 9
Learn about the authors of your stories
Announcements | 12
In Remembrance | 90
Been There Done That | 91
CAS members check in
Book Review | 92
Mierzwa’s Behind the Sound Cart
The Lighter Side | 94
See what your colleagues are up to

FEATURES

The 57th Annual CAS Awards Winners for Outstanding Achievement in Sound Mixing for 2020 | 14
Motion Picture Live Action | 20
Motion Picture Animated | 28
Motion Picture Documentary | 36
Television Series One Hour | 40
Television Series Half-Hour | 46
Non-Theatrical Motion Picture or Limited Series | 54
Television Non-Fiction, Variety or Music Series or Specials | 60

Outstanding Product Award Winners | 66
CAS Student Recognition Award Winner | 72
Brandyn Johnson
Teaching Sound Mixing: Production | 74
Production mixers share their knowledge
Post Mixing for Commercials | 84
EIPMA Speed Mentoring Event | 86
Sharing with the next generation

Cover: 57th ANNUAL CAS AWARDS
FOR YOUR EMMY® CONSIDERATION
Outstanding Comedy Series

Outstanding Sound Mixing for a Comedy or Drama Series (Half-Hour) and Animation
Griffin Richardson, CAS, Sound Mixer
Tony Pipitone, Dan Brennan, Re-recording Mixers
Episode 101 “Pilot”

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Dear Friends,

As we enter the summer and social distancing protocols are relaxed, as COVID rates are vastly declining, please remember the importance of keeping your work environments clean and washing your hands often. When I think of all the friends and colleagues I have not seen in some time, my heart flutters that we may soon be able to visit in person. I am so excited to return to a world where we can all safely revisit one another.

The 57th CAS Awards were exceptional! I couldn’t have been more proud to be a member of CAS than on April 17. Despite enormous hurdles, learning curves, and challenges, we held our annual CAS Awards show virtually. With more than 400 registered attendees from all over the world, we succeeded in celebrating and reconnecting. Talented members presented awards from their sets, dub stages, and recording studios and in an XR stage here in Los Angeles. Afterward, guests were visiting into the night in our virtual video chat reception.

It was a truly international event for which I am tremendously grateful for all the support and innovative thinking of our Awards Committee and professional team. A special thanks to Carol Thomas, Kelly Hernacki, Jason Eberly, Andy Gustin, XR Studios, Delicate, Perigon, and SoundsAdventurous! These individuals and companies went above and beyond to ensure a high production value worthy of the great work of our nominees, honorees, and members.

Due in great part to the generosity and support of our generous sponsors, we will be donating more than 50 percent of our ticket sales from our awards show to the following three charities this year: The House Institute, Motion Picture Television Fund, and World Central Kitchen.

We are also soon launching a YouTube channel that will present exclusive content produced by our Social Media Committee, chaired by Amanda Beggs CAS and Michael Wynne CAS. The first content will feature exclusive interviews with many of this year’s winners of our CAS Awards!

We are now also in the planning stages of our CAS Summer Event Series.

Please reach out if you would like to volunteer or offer feedback, thoughts, and ideas for future events and programs to CASPresident@CinemaAudioSociety.org or CASOffice@CinemaAudioSociety.org.

Your Board of Directors, organization manager, publicist, and team of member volunteers are always diligently seeking new ways to serve you.

With tremendous gratitude and excitement for summer 2021,

Karol Urban CAS MPSE
Welcome to our annual “Meet the Winners” issue, where we celebrate the awards recipients from the 57th Annual CAS Awards. And while nothing can replace the face-to-face mingling and celebration we traditionally experience, the virtual awards presentation was truly enjoyable and well-produced (not to mention humorous!). Kudos to the production team, hosts, and presenters for all of their work.

While this issue focuses on hearing from our awards recipients, we have a couple other articles we think you’ll find interesting. In a continuation of his article from the Winter Quarterly that focused on post, David Bondelevitch CAS MPSE explores the PRODUCTION side of teaching in his article “Teaching Sound Mixing: Production.” David also provides a recap of the “Speed Mentoring” sessions that were held for this year’s student award nominees from ACE, CAS, and MPSE. In a break from workflows for traditional scripted or unscripted programming, CAS Associate Sam Casas shares some approaches and considerations in his article “Post Mixing for Commercials.” And whether you’re new to the production game or an experienced practitioner, CAS Associate Whitney Worthen finds the new book Behind the Sound Cart—which she reviews in these pages—can provide some valuable info and insight. Finally, be sure to read about the happenings of your fellow members in the “Been There Done That” and “The Lighter Side” sections.

As we get closer to normal interactivity, I’d like to thank you for taking the time to check out this issue. If an article makes you think of a friend or colleague, send a link to the online version of the Quarterly, available on the CAS website. Thanks goes to all of our contributors for volunteering their time—especially for this thick issue. Please remember that our sponsors are professionals like you who understand the business and the needs of our industry; we encourage your commitment to them. And if you have the urge, feel free to reach out to us at CASQuarterly@CinemaAudioSociety.org.

Stay well and I hope to see you (unmasked) soon.

Matt Foglia CAS
FOR YOUR EMMY® CONSIDERATION
OUTSTANDING SOUND MIXING
FOR A COMEDY OR DRAMA SERIES (ONE HOUR)
“THE GLASS SANDWICH”

DAVID MORENO
PRODUCTION SOUND MIXER

RON BOCHAR
RE-RECORDING MIXER

GEORGE A. LARA
FOLEY MIXER

THE MOSQUITO COAST
“exquisite”
CONSEQUENCE OF SOUND

fyc | apple tv+
David Bondelevitch CAS MPSE

is a re-recording mixer and educator who has won two Emmy Awards and two MPSE Golden Reel Awards (and has been nominated 22 times). He is Past President and Board member of the Motion Picture Sound Editors, David was the Secretary of the Cinema Audio Society 2012-2019, Vice President 2007-2011, and has been on the Board of Directors since 2006. He has been writing for the CAS Quarterly magazine since 2006 and was co-editor in 2007.

His most recent projects include mixing the documentary Empty Net, about the US Paralympics sled hockey team that aired on NBC Sports. He also mixed the documentary Southwest of Salem, which won a Peabody Award. He also mixed the cult comedy Jimmy Vestvood: Amerikan Hero, starring Persian-American comedian Maz Jobrani.

David is an associate professor at CU Denver, where he teaches Recording Arts. David received his MFA in Cinema Production from USC and also holds a Bachelor of Music in Jazz Composition from the Berklee College of Music in Boston.

Revelle College as a music technology major in 1999, Sam began his career in audio post-production in the tape vault at POP Sound in Santa Monica. In 2003, he helped open Lime Studios, a boutique audio facility specializing in sound design and mix for TV commercials, where he still works today. Sam has found a successful niche mixing commercials for huge brands such as Nike, Facebook, Old Spice, and Apple, counting several Super Bowl commercials as career highlights. In 2017, Sam joined the union and began actively pursuing more narrative work as a supervising sound editor and re-recording mixer on various independent features, shorts, and documentaries. Working on a major studio feature or limited series is Sam’s next career goal. Sam’s 5.1 home studio has enabled him to stay busy during the pandemic while allowing him to spend more time with his wife Elise and 4-year-old son Sebastian.

Stephen Fitzmaurice CAS

studied sound and music at USC, starting his career as an assistant for albums and film scores. He earned his first credit as a re-recording mixer in 2001 and has continued in that capacity in sound for television since. Stephen is currently working on productions for Netflix and ABC Television.

Peter Kelsey CAS

started his career in sound at the illustrious independent recording studio Trident Studios, where all the early Elton John and David Bowie albums were recorded. Here, Peter learned from engineers and producers such as Rupert Hine, Ken Scott, Roy Thomas Baker, Robin Geoffrey Cable, and David Hentschel. He was a second engineer on the Carly Simon album No Secrets, and part of the mixing team for Elton John’s album Goodbye Yellow Brick Road.

After moving to the USA, he did a lot of work as a scoring mixer before moving into post-production sound. He has worked on many David Kelley shows, including Ally McBeal and Boston Legal, for both of which he won sound mixing Emmys. He worked for RH Factor for many years and for the last three years has worked for Smart Post Sound. He is currently working on Speechless, The Chi, Arrested Development, and Dead to Me.

Peter has a degree in mathematics, a black belt in taekwondo, and loves public speaking.

G. John Garrett CAS

is a production sound mixer living in Boston, MA. He began mixing live music around 1970 and learned acoustics, signal flow, and recording technology along the way. He began in the industry booming for Boulder mixer Garrett Collenberger and moved into mixing documentaries, commercials, and feature films after moving to Boston in 1984. He then expanded his RF training by working with broadcast engineers and now also consults with a broadcast tech company in the area.

Adam relocated to L.A. in 2002. After an internship at Hans Zimmer’s studio and working in the music industry, Adam ventured into post-production audio before finding his passion in the field as a production sound mixer. He has mixed and supervised over 100 unscripted shows and feels fortunate to have worked on so many diverse projects with creative and talented individuals. When not pressing record, Adam enjoys playing the guitar, Beatles trivia, documentaries, hiking, and spending time with his wife and son.

Adam Howell CAS

Upon earning a recording engineer degree from Full Sail, Adam has spent the last 15 years working as a Scorpio 5.1 Surround Sound mixer for a wide range of major studio feature and limited series projects. He has also worked extensively in sound design, music production, and mixing live music across various genres. Adam’s diverse background in sound has allowed him to work with a variety of clients including brands such as Nike, Old Spice, Apple, and many others. He is currently working on a personal project called “Under the Sea” which is a collaborative effort with several artists and musicians, focusing on delivering high-quality music and soundscapes for the listener.

CAS Associate member

Sam Casas

After graduating from UCSD’s Revelle College as a music technology major in 1999, Sam began his career in audio post-production in the tape vault at POP Sound in Santa Monica. In 2003, he helped open Lime Studios, a boutique audio facility specializing in sound design and mix for TV commercials, where he still works today. Sam has found a successful niche mixing commercials for huge brands such as Nike, Facebook, Old Spice, and Apple, counting several Super Bowl commercials as career highlights. In 2017, Sam joined the union and began actively pursuing more narrative work as a supervising sound editor and re-recording mixer on various independent features, shorts, and documentaries. Working on a major studio feature or limited series is Sam’s next career goal. Sam’s 5.1 home studio has enabled him to stay busy during the pandemic while allowing him to spend more time with his wife Elise and 4-year-old son Sebastian.

CAS QUARTERLY | SUMMER 2021 9
Daniel Vasquez Velez CAS

is a re-recording mixer, sound editor, and sound designer from Colombia. He studied recording arts and earned a master’s degree in audio post-production in London, United Kingdom, where he started his career in sound. He is the co-founder of Clap Studios, a sound post-production facility in Medellin, Colombia, and SoundNode in England. Some titles he has worked on include *Animal’s Wife*, *The Courier*, *Perdida*, *Days of the Whale*, *Guilty Men*, Netflix’s *The Great Heist*, *Green Frontier*, *Crime Diaries: Night Out*, and has five nominations for Best Sound at the Colombian Film Academy Awards for *The Nobodies*, *A Thing Called Love*, *The Dragon Defense*, *The Smiling Lombana*, and *The Silence of the River*. Daniel also has one nomination at the Venezuelan Film Awards for *Being Impossible*. He has been a member of the Colombian Film Academy since 2015; Audio Engineering Society (as part of the section committee); Colombian Cinema Sound Association (ADSC); and is part of his Regional Film Council. Daniel has also worked as a teacher at universities and academic institutions in the United Kingdom and Colombia, and has been invited as a guest speaker at various events. Daniel shares his passion for sound with aviation, as he’s also a private pilot.

Patrick Spain CAS

began his career in the scoring world at Signet Sound in 2001 working on varied films like *Cars* and *Eternal Sunshine of the Spotless Mind*. In 2006, he was hired at the venerable Ocean Way Recording (now renamed United Recording), this time working on everything from Dr. Dre productions to John Mayer records to the score for *Avatar*. In 2011, Patrick was hired as a mix tech at the industry-leading Todd-AO Lantana Stages in Santa Monica. His very first day there was an FX playback of a single reel of *Avengers* for director Joss Whedon on the same stage where *Saving Private Ryan* was mixed! It was in this incredible environment where Patrick learned the ropes of film and television audio post from some of the best re-recording mixers, editors, and sound supervisors in the world. He worked on shows as different as the run-and-gun feature *Lone Survivor* to HBO’s *Girls* to the music-centric hit *Nashville*. After the closing of Todd-AO, Patrick worked a quick stint at Technicolor Sound Services, and then made the jump to freelancing as a re-recording mixer full time. In that time, Patrick has mixed for clients such as Netflix, Disney, WB, ABC, and DreamWorks.

Whitney Worthen

A graduate of Grace College, Whitney studied communications with a focus in film, but unsure of her place in the film world, headed back home to rural Indiana where she jump-started her journalism career. She began professionally writing in 2016 as a sports journalist for the *Pilot News*, covering high schools across North Central Indiana. After two years, Whitney moved to L.A. to pursue a career as a boom operator in the film industry. Though new to the industry, she has jumped in feet first learning the ropes from a number of great mentors and getting to know the sound community better. She’s best known for wearing a Pepsi hat while out-and-about and for her deep love of Harry Potter.
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“THE TRUNK”

PHILIP RO SATI, CAS
PRODUCTION MIXER

JOE EARLE
RE-RECORDING MIXER

DOUG ANDHAM
RE-RECORDING MIXER

“BRILLIANT...SPECTACULAR”

POSE
FX

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UNTIL AUGUST 31, 2021
The May Board meeting of the Cinema Audio Society certified the results of the recent Board of Directors vote. CAS President Karol Urban announced the certification and commented, "We are fortunate as an organization to have volunteer Board members who respond to challenges with a renewed sense of service and a commitment to the community. With tremendous gratitude, I thank these dedicated individuals for their service."

The CAS Board election resulted in Karol Urban and Lee Orloff being reelected to their positions as President and Treasurer, respectively. Continuing on the Executive Committee are Steve Venezia as Vice President and Frank Morrone as Secretary, who were not up for reelection this year.

The CAS Board of Directors (Production) reelected Amanda Beggs, Mary H. Ellis, Peter Kurland, and Jeffrey S. Wexler. Mark Ulano will be returning to the CAS Board and filling the seat left vacant by Peter Devlin.

Incumbent Board members (Post-Production) reelected are Onnalee Blank, Bob Bronow, and Mike Minkler. Joining them will be Tara Paul, who will be filling the seat left vacant by Mathew Waters.

Continuing to serve out their terms in Production seats are Willie D. Burton and Stephen Tibbo. In the Post-Production seats, David Bondelevitch, Tom Fleischman, Marti Humphrey, and Sherry Klein continue their service.

The CAS would like to thank all of the nominees who offered their service to help continue the mission of the organization.

CAS PARTNERS WITH EIPMA FOR CAREERS IN AUDIO PANEL

In March, the Cinema Audio Society participated and co-produced the panel Careers in Audio 2021 with the Entertainment Industry Professionals Mentorship Alliance. EIPMA is a CAS partner and provides expert guidance to young people seeking meaningful and productive careers in the entertainment industry.

The Careers in Audio panel sought to introduce many of the audio industry’s career options to aspiring professionals. Experts gave general descriptions of their positions and what is needed to pursue these very viable fields, as well as answered specific questions from the viewers.

Fields discussed included: Production Mixing, Sound Supervision/Sound Design, Scoring Mixing, Re-recording Mixing, Live Sound Mixing, Mastering Engineer, and Technical/Manufacturing.

The informative event had hundreds of attendees from all over the world virtually participating.
FOR YOUR EMMY® CONSIDERATION
OUTSTANDING SOUND MIXING FOR A LIMITED OR ANTHOLOGY SERIES OR MOVIE
“EAST/WEST”

J.T. MUELLER
PRODUCTION SOUND MIXER

JEFFREY PERKINS
RE-RECORDED MIXER

JOSH ECKBERG
RE-RECORDED MIXER

“DIZZYING, DELIGHTFUL” Rolling Stone

Fargo
FX

NOW STREAMING FX on hulu
The CAS Awards this year were very different than in previous years. Owing to the pandemic of 2020, the show was put on in a virtual fashion. It was also much later in the year than previous shows; April instead of the traditional late January/early February. That given, it turned out to be a very successful endeavor.

It started with a preshow half-hour in which each of the sponsors was highlighted, the nominees were listed, and the CAS Career Achievement Award recipient, William Kaplan CAS, shared stories from his career. The main takeaway for me was when he related being asked what he did, and he responded, “I record actors talking while the camera is rolling. That’s it. They talk, I put a mic on them, record it, and go home.” Bill also talked about working on Forrest Gump and working with directors Tony Scott, Bob Zemeckis, and John Landis. Then the show started.

Hosted by CAS Board member Bob Bronow and CAS President Karol Urban, the general format had each of the award categories being introduced by an actor talking about how sound was important to them, followed by a CAS member announcing the winner, and then live acceptance speeches.

Nathalie Emmanuel, an actor from the UK, was up first and talked about shooting a very emotional scene on a balcony in a location near Heathrow Airport. Both the actors and the sound people were frustrated as they would have to stop so the planes could fly over and then continue.

And the first award, “Non-Theatrical Motion Picture or Limited Series,” was introduced by Bob Bronow and went to the crew of The Queen’s Gambit.

Actor Briana Venskus was next and did a fun bit with lots of props creating a lot of sound that, obviously as mixing professionals, we would like to not hear. Definitely illustrating the point that actors with props give us the hardest time while mixing.

Karol Urban gave a rousing speech saying that this past year has been a challenge but that everyone has risen to that challenge. She pointed out that everything we do is contained in the CAS logo. It’s a film clip reinforcing that our work is all about telling stories that resonate along with the power of listening and the importance of being heard. It’s about the success of everyone. Karol quoted author Ryunosuke Satoro, “Individually, we are one drop but together we make an ocean.” A video showing events since last year’s awards show played and then Karol introduced and thanked the Board of Directors.

The “In Memoriam” section reminded us of members of our community who had passed since we last met to celebrate the awards. Karol wrapped this section by giving thanks to member-
OUTSTANDING ACHIEVEMENT IN SOUND MIXING FOR 2020

MOTION PICTURE – LIVE ACTION
SOUND OF METAL
Production Mixer – Phillip Bladh CAS
Re-recording Mixer – Jaime Baksh
Re-recording Mixer – Michelle Couttolenc
Re-recording Mixer – Carlos Cortés Navarrete
Foley Mixer – Kari Vähäkuopus

MOTION PICTURE – ANIMATED
SOUL
Original Dialogue Mixer – Vince Caro CAS
Re-recording Mixer – Ren Klyce
Scoring Mixer – Atticus Ross
Scoring Mixer – David Boucher CAS
ADR Mixer – Bobby Johanson CAS
Foley Mixer – Scott Curtis

MOTION PICTURE – DOCUMENTARY
THE BEE GEES: HOW CAN YOU MEND A BROKEN HEART
Re-recording Mixer – Gary A. Rizzo CAS
Re-recording Mixer – Jeff King

NON-THEATRICAL MOTION PICTURE OR LIMITED SERIES
THE QUEEN’S GAMBIT: EP. 4 “MIDDLE GAME”
Production Mixer – Roland Winke
Re-recording Mixer – Eric Hehn CAS
Re-recording Mixer – Eric Hirsch
Re-recording Mixer – Leo Marcil
Scoring Mixer – Lawrence Manchester

TELEVISION SERIES – ONE HOUR
THE MARVELOUS MRS. MAISEL: S3, EP. 8
“A JEWISH GIRL WALKS INTO THE APOLLO...”
Production Mixer – Mathew Price CAS
Re-recording Mixer – Ron Bochar CAS
Scoring Mixer – Stewart Lerman
ADR Mixer – David Boulton
Foley Mixer – George A. Lara CAS

TELEVISION SERIES – HALF-HOUR
THE MANDALORIAN
EP. 102 “CHAPTER 2: THE CHILD”
Production Mixer – Shawn Holden CAS
Re-recording Mixer – Bonnie Wild
Re-recording Mixer – Christopher Foegel CAS
Scoring Mixer – Matthew Wood
Foley Mixer – Blake Collins CAS

TELEVISION NON-FICTION, VARIETY OR MUSIC SERIES OR SPECIALS
HAMILTON
Production Mixer – Justin Rathbun
Re-recording Mixer – Tony Volante
Re-recording Mixer – Roberto Fernandez
Re-recording Mixer – Tim Latham

OUTSTANDING PRODUCT AWARDS 2020

PRODUCTION
Manufacturer: SOUND DEVICES, LLC:
CL-16 LINEAR FADER

CONTROL SURFACE FOR 8-SERIES
POST-PRODUCTION
Manufacturer: iZOTOPE, INC.
RX8

CAS STUDENT RECOGNITION AWARD
BRANDYN JOHNSON
University of Southern California,
Los Angeles, California

CAREER ACHIEVEMENT AWARD
WILLIAM B. KAPLAN CAS

FILMMAKER AWARD
GEORGE CLOONEY
FOR YOUR EMMY® CONSIDERATION
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“EXPANSION”

JOE EARLE
RE-RECORDING MIXER

DOUG ANDHAM
RE-RECORDING MIXER

TONY GRAY
PRODUCTION SOUND MIXER

“TREMENDOUSLY ENGAGING”

SNOWFALL

NOW STREAMING
nominated Cinema Audio Samaritans. She finished by saying that tonight is a celebration for all of us.

As the show continued, actors shared more sound-related stories. Actor Greer Grammer related how when she was working on the TV show Akward, the whole crew would gather around the sound cart and be jamming and having fun between takes. Michael O'Neill talked about working on Ghost Story, where Jim Alexander was responsible for the sound. He also spoke of Jim’s father Gerald, who was one of the first sound mixers. Rodrigo Santoro shared that while working on the movie 300, he had to shave his whole body. His mom called and told him to not shave his eyebrows because they would not grow back the same. After the call, the sound supervisor came to him and told him to follow his mom’s advice. Songwriter extraordinaire Diane Warren, who stated that she is in love with sound, also took a moment to congratulate all of the nominees.

Production mixer and Board member Amanda Beggs introduced the Career Achievement Award winner William B. Kaplan CAS. She related working with Bill while shooting a long single take where the actors were in a semi, then had to get out and walk through a war zone. She drove a golf cart behind the semi and then parked and trailed Bill, carrying the antenna for the radio mics as he captured the action. And of course, they got fabulous sound.

Bill’s longtime sound tech Thomas Giordano and directors Bob Zemeckis and John Landis all gave glowing accounts of Bill Kaplan. John Landis even celebrated him as an actor in a couple of small roles in his movies—all while poking fun at the honoree. Bill graciously accepted the award and said that filmmaking has always been a family endeavor. If you missed it, read about Bill’s incredible life in his featured interview from the Spring 2021 CAS Quarterly (available online). He said that after 155 features and 51 years, the set is his home, and the crew is his family. They’ve always been there, and they’ve never let him down.

Board member Sherry Klein announced the Student Recognition Award. She thanked the sponsors who had donated products to the gift bags each finalist received. Sherry also thanked iZotope and Lectrosonics for donating the cash prizes that the finalists received.

Former CAS Career Achievement recipient Randy Thom provided a very humorous intro to this year’s Filmmaker Award recipient, George Clooney. Randy stated that it was easy to remember George’s name since that’s the name of his boss, called George “devastatingly handsome,” and stated that George pays attention to everything. Actor Richard Kind also contributed to George’s intro, stating that the CAS is a generation too late! Rosemary Clooney, Jose Ferrer (who is George’s uncle), and his dad Nick Clooney, all had great voices and never received an award from an audio society. Finally, producer Grant Heslov had good words to say about George, including how he writes in the sound on scripts. He also joked about favorite “mixers” being tonic water and soda water.

George was very gracious in his acceptance and acknowledged how sound is such an important part of a movie. He related working with Ed Tyce, a sound man on Three Kings. The cinematographer was ticked off because they had to do another take for sound and Ed said to him, “On a plane, you get the picture for free but have to pay for the headphones.” He noted that the
importance of sound in a movie was shown to him while watching *All That Jazz*. George also stated that, until you get on a mixing stage, you don’t know how different a film is when you’ve mixed it.

In addition to Randy Thom’s intro of George Clooney, there were also some other funny setups from our mixer colleagues. During his intro for the “Outstanding Product Award for Production,” Board member Willie D. Burton said he misses recording on a Nagra and if we ever go back to analog two-track recording, he still has a Nagra in his garage. Production mixer Marlow Taylor CAS introduced the “Television Non-Fiction, Variety or Music Series or Specials” award from the set of *The Walking Dead*—complete with a zombie boom op roaming around in the background.

The final award of the evening, “Motion Picture – Live Action,” was introduced by re-recording mixer Gary Rizzo CAS. Presenting from the Orson Welles Stage at Skywalker Sound, he related that on that stage, dinosaurs first roared, *Forrest Gump* first ran, and toys came to life. The evening concluded with Karol and Bob congratulating the winners, thanking everyone for attending, and reminding everyone to attend the virtual “after party” event that immediately followed, allowing all in attendance to rove through a virtual ballroom hall and video chat with other attendees. A successful evening of celebration—even though it was from behind a screen—was had.

*Videos from the event, including introductions, presentations, and speeches, can be found on the CAS website at: https://cinemaaudiosociety.org/57th-annual-awards-coverage/*
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“YOU CAN’T PRAY A LIE”

MARK HENSLEY
JOHN MORSE-CHALFANT
STEVE MORANTZ

MATT HOVLAND

“MORE MAYHEM AND EXCITEMENT”

FX
MAYANS

M.C.

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Meet the Winners

MOTION PICTURE – LIVE ACTION

Sound of Metal

by KAROL URBAN CAS MPSE

Sound of Metal was a mysterious sound titan this awards season, garnering BAFTA, AMPS, Oscar, and CAS Awards, celebrating its incredibly emotional and evocative sound.

The story follows Ruben, the drummer in a traveling underground metal duo, who begins to experience spontaneous hearing loss that threatens his livelihood, relationships, and identity as a musician. As a recovering drug addict, Ruben is tested to remain sober while battling this catastrophic change in his perception of the world. His journey to find peace through this catastrophic life change invokes a kaleidoscope of sonic colors that powerfully juxtapose the hearing world, the deaf community, and the inner turmoil as he transitions beyond both.

The film is a combination of intensely realistic, almost documentary-style scenes, intimate dramatic hyper-natural-sounding dialogue, and abstract POV sections that throw the viewer into the sonic experience of Ruben’s progressively deteriorating hearing.

To learn more about how the sound for this film was created, I met with the production mixer Phillip Bladh CAS, re-recording mixers Michelle Couttolenc, Carlos Cortés Navarrete, and Jaime Baksht, and Foley mixer Kari Vähäkuopus.

So, tell me, when you first read the script or watched the screener, did you know this would be an incredibly well-received and impactful film for so many? Did you know then this was an Oscar-worthy film?

Phillip Bladh CAS: Well, I figured that when you would work with Scorsese or James Cameron or someone [like that], then you would get [nominated for] an Oscar. Because those are the guys who I always saw winning the Oscar. So, Sound of Metal, to me, was another Tier 1 small movie. I knew it was incredible because of the way that we were shooting it. I shot it piece by piece, one scene, one problem at a time. When I saw the thing cut together, of course my mind was blown. I know we’ve said this, but I just cannot stop saying it, it was so great to work with such a great sound team. But I still didn’t think, “Oh, this is gonna get an Oscar nomination.” Because I’ve had movies that have been screened before, and I thought, ”Oh, maybe this is the one,” and then it just gets swept under the rug, and no one ever sees it.

Sound of Metal was the complete opposite. It was nothing but good news and then better news. Then it’s getting a Criterion release, and we’re nominated for the BAFTA. Everything I heard about it from the get-go was just ... “No way!”

But I still wouldn’t let myself—I mean, even when we were on [the Oscar] stage, and Riz is announcing it, I still would not let myself believe it. I just couldn’t.

Jaime Baksht: Well, for me—well, no, for me, it was scary. Because the idea of going deaf was...

PB: For sound people, it’s definitely like a horror movie, for sure.

JB: [Laughs] So, that’s the only thing I knew at that time. But I never thought we would get into the Oscars or the CAS [Awards]. I told Michelle, “If we don’t get into the CAS [Awards] and you get into the MPSE [Golden Reel Awards], I’m going to take a step back because then I’m going to applaud all my editors—Phillip and everybody, the guys from the Foley team.” But I need to recognize that it was that. But when we got into the CAS [Awards], my heart started to jump like you cannot imagine. And
when we won the CAS, oh, well, at that moment, I said, “Well, it doesn’t matter if we don’t win anything else.”

Carlos Cortés Navarrete: I thought it was a special movie, but in a lot of different ways, in the sense that it could impact. But I never thought about the awards or anything like that. I thought that it was very special in the sense that it made a different statement overall, and not only for the inclusion of disabled people. For me, it’s a statement of redemption and how we’re running all the time in life. To me, it was a really special thing to consider, that this was something special, but I never thought it would get to this point.

Kari Vähäkuopus: Well, I sat down and watched the movie for the first time. I thought it was a fantastic movie. I really loved the actors. [But it was] just like an ordinary job for me. Same thing.

Michelle Couttolenc: I didn’t think about the Oscars or the other awards; only the film within it. Because of its sound approach, yes, I think it was very special. And because that’s so crazy and [the narrative is] telling us, “I want this to be really, really, big and inventive.” [It says] “Do whatever you want.” It was special in the sense of being able to explore and create all of these things.

PB: The movie was so small—it was just two of us. It was me and a boom operator named Jeremy Eisener, who had been the sound utility on Castle Rock.

They shot a lot of stuff nonconsecutive. I think our actual shoot was probably something around 18 to 20 days. Nico [Becker, sound supervisor] was there at the beginning to bounce ideas off of us to make sure we’re kind of on the right path. Nicolas Becker was on the movie, like, almost two years before they even rolled camera.

We had all these kinds of ideas as to, okay, he’s going deaf, how can we record this on set so that it has life and energy to it instead of just something that we’re going to have to just fully recreate in post? That was something we wanted to do.

[Jeremy and I] were doing things that I’ve never done before. “All right, so he’s playing the drums. Should we stick a mic in the drums? What do you think? You think we should stick a mic in the kick drum?” He’s like, “Yeah, let’s stick a mic in the kick drum.” “Do you think it’s a contact mic we should stick or maybe like a gooseneck? Should we stick them on the outside?” “I think we should stick it on the inside, and maybe we should stick another one on the outside if we can.” I was, “Okay, okay, let’s do that, let’s do that.”

And the really, really great thing about this was that Riz [Ahmed], our lead actor, he was so game for anything. If he would’ve responded, “Hey, I’m in the zone, don’t touch me, don’t talk to me,” and kept us all at arm’s length, this would’ve been a completely different-sounding production track. Darius Marder, our director, would come to me and say, “Can you come to talk to Riz with me because I want to put tape down his back and put a wired microphone … maybe under his armpit.” We were experimenting. We’d do one take and decide, “That didn’t work,” and we’d move it and try another take. He [Riz] was beyond awesome.

This movie, when we were shooting it, to me, it’s almost similar to what it would be like if you were filming on a green screen stage. You might think, “Oh, I imagine what this will actually look like,” when you actually see it. To me, this movie almost had me thinking, “Oh, I wonder what it’s going to sound like when it’s all cut together.”

Did this experimentation continue in Foley? Kari, were you also manipulating and playing with things in strange ways? What was your experience?

KV: We experimented with a lot of things. We also used lots of contact microphones and stuff like that. We built up a stethoscope microphone, also. We got that idea from Nicolas Becker. We bought a good stethoscope and put a microphone on it, inside of the stethoscope. And then I recorded his body resonance through it.

How many were on the Foley team?

KV: Me and Heikki [Kossi] recorded Foleys here in Kokkola together, and we had [Pietu] Korhonen doing spotting and editing in Helsinki. We had 10 days for recording.

How were the duties on the dub stage broken up and performed?

CCN: Well, it was kind of a different method. For this film, I did the first pass of everything because when Nico, Darius, and Carolina [sound editor Maria Carolina Santana Caraballo-Gramcko] arrived at the studio, we had meetings before, and we had made a template as to how to approach the mix.

I spent a weekend before with Jaime and Michelle trying to figure out how we were going to do it. And so, we received the material, they came, and I was like a bridge between what I would say [is] an “edi-mix,” because there was still some editorial [to be] done when I got it.

Also, when Michelle and Jaime got it, they realized they needed more. So, I spent the first three weeks with Nicolas and Carolina.
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doing all this portion. Afterward, Michelle and Jaime got in and it was like a tag team in that sense.

PB: Yeah, nothing about this movie was normal. That’s the thing I think everyone needs to know. We kind of started and reinvented.

Carlos, you did the complete pre-dub, the music pre-dub, the effects pre-dub, the dialogue pre-dub before Jaime and Michelle in three weeks? Were there three seats at the board later for all of you to work together?

CCN: Not really, because when Michelle and Jaime came, I stepped out, and I was just around giving my impressions.

JB: At the beginning, we were [also] supposed to have three weeks. Then things started to change because they realized that we need more time, of course. There were a lot of things to do. Carlos did a great job in creating how Darius and Nicolas’s ideas are supposed to work. But when we arrived, what happened was we saw the whole film with Carlos’ pre-dubs. Michelle stuck the film together because we have it in reels of 20 minutes, and we played it back for the first time for everybody. It was the first complete pass of the film without stopping.

MC: We were thinking, “Well, they have already done, like, three weeks of mixing, Perhaps we will see the film and it will be great and we will go back to Mexico, and that’s it.”

What happened is that we saw the film together and then we started to do dubs. I usually take a lot of notes with timecodes and things that I want to change, and I remember that I did like 600 notes of things that I would like to change because it’s like my Christmas list to Santa. [Laughter] These are all the changes that I would do. And then with Jaime, we talked also about his changes because he always sees the film as a big…

JB: As a whole.

MC: …the big picture. And I’m always looking at the details. And then we talked with Darius, Nicolas, and Carlos and said we think we might change the concert, the beginning concert, because it’s the start of the movie and Riz is a drummer, a heavy metal drummer, and he’s playing there. We needed to be, like, inside the movie. So, the first concert should be super impressive but not, like, just a wall of everything sounding really loud.

JB: Yeah, for every cut, we did a change in the color of the sound. We changed reverb, we changed a little bit of EQ, some harmonizing, and things like that. We also changed the panning of things. But we did like 12 versions of this concert. So, the first version had all these changes—a lot. We wanted to hear a lot of change, and Nicolas says, “Well, I think it’s a nice idea, but it’s too much. So, please make it…” And then Darius said, “Okay, let’s see what Nicolas says.” So, we redid the concert, and we made some more notes. We did 12 different approaches.

MC: I think there were, like, three versions of the movie; three cuts. So, regarding the time that we spent mixing, the first cut was seven weeks. And then we got back to post to do the second version of the film. With the second cut, we mixed two weeks there, and then we came back here to Mexico for 2½ days to do corrections and the DCP. And then the third cut, we did another two weeks in PostLand. And then we came back here to Mexico to do two [more] weeks. And then we had all these deliverables.

PB: And I’m jealous how much time you guys had. I had like two takes, and then we had to move on! [Laughter] They also shot the
And you are both taking turns on a single-operator console?

**MC:** Here in Astro, we have a two-operator console. Jaime usually does dialogue and music, and I usually do effects, ambience, and Foley.

But on this film, you worked on a lot of the dialogue mix and edit on the dub stage?

**MC:** Yes, because sometimes we switch. [Laughs]

**JB:** But the thing is, our work is not—“Okay, Michelle is going to be in charge of all the effects, and I’m going to be music and dialogue.” If Michelle has a great idea in dialogue, instead of telling me to do this or that, I say, “Do it.” If I have a better approach for a specific effect in a specific moment, instead of explaining to her what I will do, she’ll say to me, “Okay, why don’t you try it?” And sometimes it’s “Okay, Mich, I would like to do this, but we need to organize differently in Pro Tools so we can mix it differently.” So, Michelle can help me do the reorganizing or edit something; Michelle is really good at Pro Tools. She can do it very fast and very nice. That’s the way we work.

And in the case of *Sound of Metal*, what happened is that if I was doing [for instance] dialogue and music [and] Michelle was doing some effects, but Carlos had a great idea of something... Carlos was there and tweaking. It was no problem—as long as you don’t destroy the work. [Laughs] You can do whatever you want, my friend.

**So you worked “combined”... back-and-forth. How did that affect the music?**

**JB:** Well, the music in *Sound of Metal* is really interesting because it is not exactly—I don’t know if you can call it music; I mean, I know it is music; it’s all great music. It’s harmony, rhythm, and colors.

So, we combined the music with the effects so that you don’t know, really—we combined it so that sometimes we use more music than the effects. The original version was, like, all the effects, all the music, and we said, “Oh, no.”
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The film was directed and co-written by Darius Marder, whose grandmother experienced sudden deafness after taking an antibiotic for pancreatitis. How was it working with Darius on such a personal story?

**PB:** He’s a good collaborator. He’s definitely not a director who would say, “I see it my way and do what I want.” Honestly, he was almost downright giddy sometimes that we were finally making his movie and that he was shooting the thing.

**CCN:** Amazing, yeah. He would allow you to be creative, and as long as you portrayed whatever he was thinking about, he would listen to your idea and then evaluate it or discard it.

The film is generally very well regarded by the deaf community as portraying an authentic experience. Was research done on the deaf experience, the sound of deafness, or the sound of a cochlear implant, or was the approach to the sound intentionally subjective?

**PB:** We had a cochlear implant guy on set. But I heard him talking about when you first get the implant, everything is, like, very high-pitched … like everyone sucked in a giant thing of helium.

Darius is also endlessly fascinated with the things that he’s interested in. We had deaf actors and people with cochlear implants, and all he did was pull them aside all day. “What was your experience? How was it for you? What did it sound like to you?”

Was there a deaf or cochlear consultant on the dub stage or in Foley?

**MC:** Nicolas [Becker, sound supervisor] did a lot of research. Carlos, Jaime, and [Nicolas] spoke with many people [about their experience], as did Darius.

**KV:** We talked [in Foley] about those hearing implants with Nicolas. Otherwise, we blocked our ears and tried to get that feeling.

The skillful marriage of sound elements is the hallmark of this film’s soundtrack, and upon learning how this mix team worked together, this makes perfect sense. Open collaboration and a steadfast commitment to experimentation in service of the narrative is how this film became incredibly impactful and award-worthy. The Cinema Audio Society could not be more proud to congratulate the incredible cohesive and creative mix team of *Sound of Metal* on their success.

**PB:** I think we can just be very proud of the fact that we were rising to the challenge of what this movie was giving us, and we were all, all of us, as the sound team, firing on all cylinders to make this movie. And its Character No. 1 on the call sheet—Sound.
Meet the Winners

MOTION PICTURE – ANIMATED
Soul
by DANIEL VASQUEZ VELEZ CAS

Soul is a film that highlights the importance of living in the present as the most precious moment. A reminder that life is happening now and sometimes the most subtle and overlooked things in life are the ones that keep us fresh, alive, and emotionally active. As the film’s director Pete Docter described it, “This film started as a love letter to jazz, but we had no idea how much jazz would teach us about life.”

Joe is the main character in Soul. He’s a middle school music teacher who is in love with jazz and is constantly looking for that opportunity, waiting for that special gig that will transform his life and make him a professional jazz musician. He discovers an “afterlife” and “beforelife” while trying to avoid the idea of dying, just when his life-changing opportunity is about to happen. He struggles to join his soul back to his body by trying to find the spark that would give 22, an unborn soul, the badge that Joe could use to return to earth.

This wonderfully crafted story draws you into it and targets both kids and adults with profound thoughts in a fun way. Its extraordinary sound and music have made it meritorious of various awards and nominations, and the CAS Awards were no exception. I spoke with the award-winning sound team of Ren Klyce, David Parker, David Boucher CAS, Scott Curtis, Vince Caro CAS, Bobby Johanson CAS and Atticus Ross about their background and the process of making and mixing the sound of Soul.

Sound Design and Mix
Ren Klyce was Soul’s sound designer, supervising sound editor (with Coya Elliott), and re-recording mixer (music and SFX), along with David Parker (re-recording mixer: dialogue and Foley). Ren considers David Parker his mentor, not only in the art, craft, and technique of mixing, but most importantly in the human aspect—in how to behave as a human being with other people.

Ren was born in Japan and moved to California when he was a child. He has a remarkable career that includes working with top directors and having numerous nominations and awards for his work in sound. He remembers experimenting with sounds on tapes when he was a kid, which led him to study music at the University of California, Santa Cruz. Later, he got one of his first jobs working on a film produced by George Lucas (Twice Upon a Time), where he met a young David Fincher and became collaborators years later on Fincher’s films. The first Pixar film Ren worked on was a short called Lava. Then he met Pete Docter while he was making Inside Out and became friends after that collaboration. Ren feels that “In the end, hopefully, it comes down to just people enjoying other people’s company.”

The process of creating the sound of Soul was interrupted during premix due to the pandemic. Part of it had to continue at Ren’s home studio and Nathan Nance, also a key member of the mixing team, did premixing at his home studio in Texas. Thanks to the engineers at Skywalker, they managed to go back to the dub stage by making some adjustments such as having a piece of plastic divide the console to maintain distance between the mixers, using infrared sanitation lights for console cleaning, and by applying strict protocols, they managed to finish it. David Parker mixed dialogue and Foley using the Neve DFC, while Ren mixed SFX and ambiances on the S6 and music on a Neve DFC.

Being an animated film, there is no sound at the beginning. Once
they had scratch dialogue, everything else needed to be created. Ren worked early on in the process with Pixar picture editor Kevin Nolting and music editor Justin Pearson, cutting music and sounds to help shape the film. During the early stages of the film, Ren moved to Pixar, working on the film for more than a year. That allowed him to have a close dialogue with the directors (Pete Docter & co-director Kemp Powers) and editors.

Pete Docter described the different environments in terms of what he wanted to feel emotionally with sound; one of the environments being New York City, where Joe lives. He wanted this place to have its own grittiness and it would have jazz music. Then in the afterworld, there were different places, like The Great Beyond, which is where souls go when people die. There are also other layers, and finally, there is a place where the new souls are, The Great Before. Each place was to have its own sound. Pete Docter had the idea of a completely organic and synthetic juxtaposition from the beginning.

Music
The organic side of the music was a jazz score, composed by Jon Batiste, who also performed the piano. David Boucher CAS recorded and mixed the jazz score, with Kevin Harp handling the music editor duties. David and Kevin started playing music together in Atlanta when they were 13. David continued his studies in music, while Kevin started touring at 16 and soon began doing studio work. After getting tired of touring, he joined David in music school at the University of Miami, where they also studied jazz and music recording. After going separate ways for a few years, they reunited in Los Angeles, where they are currently based. David first brought Kevin into the team as a music editor on the Pixar film Toy Story 3. They then worked again on Monsters University and continued collaborating as a team.

They got involved in mixing the score for Soul when David received a call to record jazz at Capitol Studios, which was an offer he couldn’t refuse. Subsequent sessions took place in New York at Reservoir Studios, and again at Capitol in Hollywood. They even combined takes from sessions as they found differences in the style, performance, and sound between the musicians from the two coasts. There were very few overdubs, mainly for textures like a prepared piano Jon used for certain scenes.

In some tracks, independence between sounds would be required. So, they recorded the score with isolation between instruments with sax and drums in booths, and bass divided with gobos close to Jon’s piano. For the club performances, the setup was like a gig, with players close together and with little separation between instruments, matching the layout of the scene.

Sometimes Jon Batiste would send voice memos with melodies and ideas, or would sing them on the floor. Then jazz orchestrator Dave Giuli, or as Kevin calls him, “ear genius,” would write them down and put them in shape for the musicians. Additionally, there was also one track that Jon recorded at his house and David B. mixed it.

David and Kevin explain that “it is important that music doesn’t just sound correct, but also that it elicits something emotionally when it comes out of the speakers and is something that is truly unique. Sound comes from the performance first and then the
recording chain is based on that sound and the desired goal. You have to fit both musically and within the technical demands of these projects.”

David Boucher mixed the score on the John Ford Stage, with only two people in the room due to COVID restrictions, and delivered 5.1 stems. Then they had listening sessions of the full mix in the same studio and gave very few notes to Ren since “Ren and David Parker had really nailed it,” noted David. The references for this film were mostly mono, so they had to be subtle and creative with the mix. The fact that Ren was involved in every session helped everyone understand the process and convey the ideas effectively during the final mix.

When Joe and 22 are back in New York City and they have switched bodies, the idea was to create the sensation of hearing for the first time, so all sounds were intensified. There is a particular sequence when the two characters leave the hospital and all the sounds are really loud with helicopters, traffic, jackhammer, and voices used to create the contrast. Then those sounds are lowered and Jon Batiste’s music blends in.

Ren had worked before with Trent Reznor and Atticus Ross. Those experiences were helpful to Pete in shaping the contrast between realms. Atticus Ross is an English composer, musician, engineer, and producer. He moved to the United States in 2000 and became a collaborator with American musician, composer, and producer Trent Reznor, founder of Nine Inch Nails, which Atticus joined in 2016. They have since worked together on numerous records and films, establishing an unique style and expressive sound.

As an exercise a few years back, Atticus and Trent had written a list of people they would love to work with, and at the top was Pixar & Pete Docter. Atticus shares, “Pete has a sunny disposition, but he’s clearly a man who suffers from a degree of existential angst. He makes sophisticated films that can simultaneously speak to me and my child, though likely in different ways. Whether it’s Up or Soul, I find myself utterly transported in the cinema and reflecting on the themes for weeks to come. Surely that’s the measure of a good movie?”

The first environment that Ren worked on was The Great Beyond to ensure that it had a feeling of curiosity, danger, slightly scary but not too scary, and big but not too intense that it would push children away. It had to convey the idea that dying is a natural phase, a reality, and within the story, that was the place where souls would go when the person dies. This space, however, evolved throughout the story and toward the end felt peaceful with the use of wind sounds and Trent and Atticus’s music, which conveyed this idea.

Pete also wanted the feeling of The Great Before, the You Seminar, to have the opposite feeling of The Great Beyond. It had to feel tranquil, soft, inviting, safe, blissful, peaceful, and organic. Ren recalls that the first sound he came up with for this environment was like a tonal bed, a happy major chord, with SFX of leaves, grass blowing in the wind, and children’s voices. Ultimately, the temp tones were replaced with Trent and Atticus’s score.

The traditional role of “mix” is somewhat subverted in the way Trent and Atticus work. As Atticus explains, “Our process is radically different to what one imagines as the ‘traditional’ approach, in the sense that composing, recording, editing, and mixing all happen at the same time. There’s never a point where we pull down the faders and say, ‘Now it’s time to mix.’ “We’ve been building the mix from the first note recorded and our view is that ‘the sound’ is a crucial part of the experience. The landscape where the notes, the melodies, and the progressions sit is as important for us as the notes themselves.” With Soul, as is the case with most of the films they work on, the majority of the score was recorded, mixed, and written all in one room. They were working on the film for nearly two years.

“Every project, for better or worse, sits in a unique sonic world we have designed for that story. Our approach and choices toward instrumentation are not accidental; it’s a conscious decision based on our interpretation of the most effective way to convey the emotion of the story. We try to trust our instincts and we’ve become more

30 SUMMER 2021 | CAS QUARTERLY
confident in taking risks. Mank (also a nominee at the CAS Awards), for instance, was a radical departure and, though initially intimidating, an incredibly rewarding journey. It’s those ‘journeys’ that keep us coming back, in some ways like confidence, etc. I think we’re just getting started. This work and award are Trent’s as much as mine,” shares Atticus. “We always work at the same time in the same room. The only time it changed was during the pandemic.”

They have a discipline of working every day and creating, even when there is no specific project, which allows them to experiment, to keep learning, and to maintain the same level of enthusiasm toward the process that they enjoyed 20 years ago.

One particular piece of music that had additional work was the Epiphany cue. With this cue, Joe is sitting at his piano at home and places on the music stand the things 22 has collected during her initial ‘earth’ experience. The cue was written by Trent and Atticus, but we first hear it played by Jon (Joe) before transitioning smoothly into Trent and Atticus’s score. Ren’s role was pivotal in the cohesion between live performance and the body of the cue. This is the only scene in the film where Joe is not playing jazz music. In essence, the montage plays as the emotional climax of the film: Joe’s Epiphany. This is the only track that Jon, Atticus, and Trent recorded together. They went to Capitol to record Jon’s intro piano and the solo that ends the piece as Joe is transported to the Astral Plane.

There was constant communication between Jon, Atticus, and Trent regarding the music for the transitions and handoffs; it had to feel organic for the score to work. Trent and Atticus even ended up doing the music for the classic chase scene that emerges as jazz, but transforms into “Terry’s World” as Joe and 22 are sucked back to face the consequences of their actions. Ross is humble, stating, “We needed to deliver an important moment. Unfortunately, the initial recording didn’t provide the required energy. No big deal. At minimum, we had weekly turnovers and I believe Jon’s music was a fixed date recording. Picture changes as do the musical needs, and we were able to cover that spot.” That said, they stayed true to the voice of ‘earth’ and it would be difficult for any viewer to imagine this piece as an outlier. “Every movie is a collaboration. However creative one can be, the contribution is still a cog in the machine of the film and its emotional journey.

“The way we work means the stage is clear on how the music should sound. It’s meticulously constructed, but we understand this as a moment of letting go. It’s simultaneously exciting and terrifying. Will it deliver or be undermined? Luckily, with people like Ren at the helm, one can be assured of option #1,” Ross continues, “Delivery is traditionally stereo stems into the hands of Ren or someone of his capabilities; masters in multichannel and spatial sound.” Atticus & Trent usually attend and get involved during the mixing sessions, but with Soul, due to COVID-19 restrictions, it was impossible, and communication was limited to notes via email.

Dialogue

Original dialogue mixer Vince Caro CAS was responsible for recording most of the dialogue for the film. He is from New York and recalls childhood memories of listening to Frank Sinatra, The Beatles, and Duke Ellington on his dad’s stereo. He began playing guitar and bass in grammar school and started experimenting with sound equipment and electronics during his teenage years—even building his own guitar amp. He later graduated from Berklee College of Music where he majored in music production & engineering. In the late 1980s while on staff at RCA/BMG Studios in New York, Vince began working for Disney on the original 2D-animated Beauty and the Beast and later, subsequent Disney animated features. In 1992, he got the call to work on Pixar’s Toy Story, and has worked on every Pixar animated film since. In 2005, Vince moved to the Bay Area and is the chief recording engineer at Pixar. He works on the films from the beginning. From table readings, ideas, scratch audio, all the way to the final production dialogue—which is usually a four-to-six-year process.

On the East Coast, ADR mixer Bobby Johanson CAS was responsible for the dialogue recordings in New York. Bobby got into the business like most of us, coming from a passion for music. Since he was a kid, he wanted to work in music. In his teenage years, he got a job at a local recording studio in Long Island doing pre-production recordings for some of the big local bands in the ‘80s. The active pace of the recording studio life had Bobby thinking about his future, as he wanted to pursue his dream but with a more balanced life. His father was in the business as a colorist in Manhattan, so he had connections and knew one of the big mixers at the historical Sound One. There, he got hired as a messenger and worked his way to the position that he wanted. “At that time, as long as you put your foot at the door, it was up to you. I was running film reels around, and a new ADR studio was opening up and they needed somebody to work the machine room in the back with the dubbers. I ended up getting in this machine room for ADR and sitting in the studio during sessions. I found it related to what I wanted to do by having the artists in the studio, in a controlled environment.” He usually works with recordist Mike Rivera during the sessions so they can focus on all aspects of the recording sessions, from technical, artistic, and personalities.

When asked about the setup, Vince and Bobby mentioned that for these animated films, they usually place a large diaphragm microphone (normally a Neumann U87) set back a little bit which provides a more consistent sound than ADR. Another microphone is used for backup while sometimes an additional mic may be needed based on the production. “There is a common setup for recording throughout the last few films, not much has changed,” Vince shares. They often face the challenge when working on a project that is
recorded in different places, as it was with Soul, where you have to make sure that microphones and placement are matched as close as possible between locations.

In fact, the film had to be finished during the pandemic, therefore, some dialogue had to be recorded at the actors’ homes’ bedrooms and closets, while trying to keep the quality as high as possible. Phones were used only for scratch dialogue, but for actual production, they sent kits to the actors’ homes. First, they would do a virtual tour of the talent’s house to identify the best spots, and then they would get a kit for the actual recording. They had to come up with a kit simple enough to not be distracting or intimidating for the talent. They didn’t want the talent to have to think about how to use it, set it up, or take care of it. And although there was the need for complex kits with a U87, Pro Tools, and an interface, they found a simpler solution consisting of two iPads. One was running Zoom, where they would see the script on screen and would communicate with the dialogue mixers and directors through a Bluetooth headset. The other iPad would be running the Audio Recorder App by Tentacle. This is a mono recording app with one red button in the middle and a virtual fader to control the level. Tests were performed to identify the right level settings for each type of dialogue or sequence. Vince, Bobby, and their team weren’t actually moving faders on the fly to adjust levels for the different dialogue takes while using this setup, but they would give directions, based on the tests, on what level setting to use for each line of dialogue.

After testing different USB microphones, they went for the Sennheiser MK4, a large diaphragm microphone of which there is also a regular XLR version. While it offered what they were looking for, the challenge was to get enough microphones to complete the task on time—which they managed to do by getting some units directly from the manufacturer. It was the right mic and didn’t have any knobs or buttons that could accidentally be changed during the session, which was the reason they discarded other widely available and good sounding USB microphones.

When the talent records in their closet, even with a simple setup like the one that was used, they might still feel that there’s much more to be responsible for than the actual vocal performance; something that usually doesn’t happen in the studio. Talent can become worried about having to take care of the equipment, keeping the right distance from the mic, dealing with background noise, and other factors. Vince remarks that it takes a lot more time because it is not only about performance, there are other aspects like environment and settings, plus constantly receiving and reviewing the files before moving on. They also had to cover themselves with many takes, which increased the recording and editing time. Even so, “After all the effort, putting all the heart into it, it’s good to see that we had a good result and it worked well for the film.”

This shows the importance of the dialogue mixers in animated films as they do much more than twist knobs; all the contributions add up. Dialogue recording and mixing deserve the right credit and Pixar does a great job and tries to have as many people who contributed to the film included in the credits. Vince and Bobby would like to recognize the work of Doc Kane CAS, Paul McGrath CAS, and Mike Rivera as key team members in mixing the production dialogue. Vince was partly responsible for having Jon Batiste as the piano player for the film, and was also involved in the recording of the song played by the busker on the subway platform (they even used his 55-year-old Martin guitar for the track).

In the afterworlds, Pete wanted the counselor characters to sound big compared to Joe and the other souls, without them sounding scary like a monster. Instead of looking for a down-pitched voice, Ren and David Parker came up with the idea of adding bass to the dialogue, adding a small room reverb, and then filtering it off to make it very dark. They mixed the bass portion of the voice through the LFE and they also added some LCR divergence to it subtly, but enough to give the perception of a character a little bigger than the souls, enhanced with some left and right reverb and a subtle delay in the rear, very soft, barely audible.
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The lost souls also had a voice. The sound would transition into a muffled dialogue with a process chain of plugins that transitioned to and from the clean dialogue. The formant shaping process available in the plugin Iteam Trax from Flux:SE was used to create the sound. It was important that it didn’t feel just like a crossfade, but as an actual transition and change. To achieve this, pitch shifting was also used. This processing chain was also given to the foreign-language re-recording mixers so there would be consistency throughout.

During the ‘mystics’ sequence, Pete wanted the mystic characters to perform their own instruments to conjure the portal to the earth world. Instead of hiring professional musicians, Pete opted for a sloppy amateur performance and enlisted himself, Kevin Nolting, Justin Pearson, and Klyce to perform. Jon Batiste worried it was too sloppy and offered to re-perform it, but Pete insisted it had to have an amateur feel to it. When recording Foley for the sequence, regular sand sounded too bright, so it was pitched down and processed to give a darker quality, shared Foley mixer Scott Curtis.

Foley

When Coya (co-supervising sound editor) and Ren began the process, they used library Foley as temporary place holders. The Foley team then met with Coya and Ren for a spotting session and Foley supervisor Thom Brennan cued the Foley to be recorded. Scott recalls, “I’ll never forget when we all sat down with Ren and Coya for the initial spotting session. We watched a rough cut to get an idea of the story and concept a few months before we actually started working on the film. It was a good opportunity for us to begin thinking about the Foley early on. Even though the animation was not fully rendered, I remember being blown away by what I was experiencing because the characters and story were so touching.”

Scott Curtis became interested in the concepts of orchestrating, timbre, and tone while he was playing music in his high school bands. He set out to pursue a career in recording music. Then, while working at an independent post-production house, was offered a chance to sit in and assist on a Foley record session. Scott realized that he could apply everything he knew about recording music into recording sound effects and also have a balanced work schedule that allowed him quality time with his family, so he jumped at the opportunity. Now, Scott has been working in Foley for more than 25 years. “I’ve been very fortunate of the opportunities and projects I’ve been able to work on,” he says.

Scott’s first job as a Foley mixer unexpectedly came to him at Klasky-Cuipo, an animation house in Hollywood where he worked on series such as Nickelodeon’s Rugrats. While Scott was helping wire the new Foley stage, the person overseeing the project asked Scott if he would be interested in mixing. Scott also had the opportunity to take advantage of an adjacent pathway alongside his mixing career and work as a Foley editor for 15 years. When Scott was asked in 2016 to help open up a new Foley stage at Skywalker Sound, he took his editing skills with him to become an even better Foley mixer. “Every mixer has a different approach. I feel that my experience as an editor helps me understand what can be done on the Foley stage to best equip the Foley editor with usable material. For example, even when the first take has a great performance, we will provide the editor with a second performance for more options or we will sweeten single props with several layers to enhance the overall effect. Equally important, we know how to judge when we have enough material to move on so we can be as efficient as possible.”

The team had four to five days per reel to complete the Foley on Soul. Luckily, when the COVID lockdown took place, they had already recorded the primary Foley. “As a team, we have so much fun despite also having a certain amount of pressure to deliver.” Scott shares, “I would like to thank my Foley artists Shelley Roden and John Roesch. They are the ones generating the sounds. They are the musicians in the song we orchestrate. Each project that we work on has its own personality and temperament. We all enjoy the process of creating, and I’ve been lucky to work on projects that I feel connected with. Soul was quite a special one.

“Soul was a unique challenge in that the special realms required different approaches. In The Great Before, the surface looked like various heights of grass, but we didn’t want it to necessarily sound like grass. Some elements that were used included a nylon bag filled with plastic straws, silk cloth, and Easter basket grass.” Scott mentions, however, that he tries not to look at the objects the Foley artists are using to make the sounds so that it does not influence his judgement of the recorded material. “If they can fool me, we’re probably going in the right direction. For example, the maple seed that flutters from the tree was an important story point. I honestly don’t know what Shelley used to achieve the sound of the whirling seed. It didn’t take long and it turned out awesome. All I know is she was flapping something around in her hand.”

Scott continues, “When working on animation, there are no production effects to fall back on since there is no production sound. You have to create everything, which can be a good thing because you start from scratch rather than trying to match previously recorded material. But everything has to be perfect.” To help add perspective and movement to the recorded sounds, Scott continuously mixed between the close mic and a more distant mic to create the illusion that the sounds were organically connected to what the audience is seeing. Throughout this process, Scott had Thom, Coya, and Ren do frequent playbacks to make sure the Foley team and the supervising team were all on the same page as far as how to establish the otherworldly sounds for Soul.

Closing

All these elements were carefully crafted to create the mix of Soul, a well-deserving film of the CAS Award. The combination of a deep message, a fun story, outstanding music, and an extraordinary balance with the voices, Foley, and sound effects makes this a film to be remembered. Atticus mentions that “a mix can make a good story into a great film, with a great delivery of sound through the mix.” Soul is a great story and a remarkable film with a great sound. Congratulations to the sound team.
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MOTION PICTURE – DOCUMENTARY
The Bee Gees: How Can You Mend a Broken Heart
by G. JOHN GARRETT CAS

The Bee Gees: How Can You Mend a Broken Heart explores the history of the Bee Gees through archival interviews, footage, and new interviews. The documentary was nominated for an Eddie and a Golden Reel, ultimately winning the CAS Award. Re-recording mixers Jeff King and Gary A. Rizzo CAS took some time to talk about the project.

JEFF KING: Re-recording Mixer
How much time did you have for track prep?
I don’t know how long, a few weeks? I don’t think a lot of time. [Supervising sound editor] Jonathan Greber had a little time, maybe a month, I’m not sure.

How about for the mix?
On independent films and blockbusters, you have a pre-dub period of a week to a few weeks, but often on documentaries, you just show up on day one and go. We mixed this in five days, but we went through it in a few days because we screened with the clients, and went back for tweaks. Since we were doing it so quick, for me, Gary asked me to do it like, last minute, so I had no experience with the material or anything. So, as we were going, I just saw it coming down and was trying to keep up because we were moving so fast. Every once in a while I’d say, “Hey, let me go back and grab this one thing, let me tweak this a little bit.” It seems like with documentaries, there’s never really the time to have a pre-dub. In this case, let’s just go scene by scene and work it out. That was kind of the idea of trying to get multiple passes, see where it was, and go from there.

What kinds of challenges did this documentary present?
Gary Rizzo did the dialogue so it was a bigger challenge for him with so much material from different eras and matching things from archival sources in interviews and music. With me, the FX with all the archival stuff and sometimes there would be a lot of crowds, sometimes it was attached to the music, sometimes we would sweeten that but still make it true to the original. Making the old stuff sound good and maintaining the authenticity was the hardest challenge.

Any interesting FX moments you can share?
It’s so dialogue and music-driven, obviously, but there were a few cool FX moments that were, for me, kind of fun. We’re laying backgrounds and ambiances, matching some of the crowd stuff, that’s always a challenge. In 1979, there’s this “demolition disco” thing where they’re blowing up all these records, and there’s a concert thing woven into that with all these explosions. That took a lot of work finding the right
balance between the music, crowds, and the archival audio.

There was a unique moment when they were talking about the origins of the song “Jive Talkin’” and how they came up with the song while they were crossing the bridge on their way to Criterion Studios. Our FX editor, Pascal Garneau, had cut this “tire on bridge” sound that mimicked how they heard it when they were crossing the bridge, so that was kind of a fun moment for FX. But, usually it’s kind of taking a back seat, laying an ambience or backdrop for all the locations they go to, but there were a few that were a lot of fun.

Sounds like a fun project.

It was such a great crew with sound, producer, director, especially with all the music. I think they did a limited release at drive-ins, but I hope it comes back to theaters because it is a fun movie.

GARY A. RIZZO CAS: Re-recording Mixer

Tell me about your experience with The Bee Gees.

The Bee Gees was the very, very last project we did really before the world shut down. We actually advanced our schedule to work around another show I was working on.

I love to do these musical documentaries because they’re not huge jobs, so I can kind of plug them in and move them around other larger feature jobs that I do. I’ve been so fortunate to be able to collaborate with (director) Frank Marshall numerous times for his documentary division, which is run by Ryan Suffern, who is a dear friend of mine. First of all, it’s nice to be able to have the creative liberties
we are given and the creative collaboration with Kennedy/ Marshall, but they’re small projects. They fit nicely in-between some of the bigger ones and they’re also creatively refreshing to be able to dive into the historic value, as well as the historic value of their content.

And it’s not like you’re having to create a new world out of nothing because it’s driven by the music and actual events. Yeah, you certainly try to find new and interesting ways to ride along for the narrative and the story that’s being told through the energy of the music and through the dynamic of the documentary itself. It’s so much easier when the story really is an honest story and is a truthful, beautiful story, which is what we have with The Bee Gees. You’ve got the most amazing story of the most talented brothers—it was just a perfect, loving combination. And to take that subject matter and have Kennedy/Marshall allow it to be told through Barry the way that he told it was just gorgeous.

Were there any particular mixing challenges that were notable? Certainly you want to try and tie together all of their music. Some of their music pre-dates The Beatles, so some of their source material was mono and not of the highest fidelity going through the eras. And this movie kicks off with a big concert in Oakland. The live performances are pretty rare to be seen, and we wanted to communicate, to some degree, what it was like to have been there, at a concert of that size in that era. Not everybody who’s around today who’s maybe tuning in to this documentary knew what that was like. So, to hear music that you’re familiar with from that era, played as big as we played it, was a real awakening. I think that in doing that, there are a lot of people of the current generation who were not alive for the Bee Gees then and now get to experience the Bee Gees in a little bit of a contemporary or a refreshed, realistic way. I think it’s created a new awareness of this amazing band, and that was really our goal.

I suppose it was a bit of a challenge, like how do you awaken a generation that’s hung up on YouTubers and TikTok influencers? How do you wake them up and illustrate the talent and momentum that this loving, family-oriented band had, and the trajectory that they were on in that era? I think when you take that realistic approach to it or you try to take some of these old masters and play them in a dynamic concert fashion, you do get the attention of kids who would normally have their nose in their phone. And I think we were pretty successful. We’re happy with it.

I think when you present an artist like this that kids didn’t grow up with and you can show the energy and what was happening at the concerts, they can get it. Sometimes they’ve heard some of the music, so they’re vaguely familiar with it. Then you put it into a format like we’ve attempted to do, this grandiose concert format. So for new viewers, as well as authentic fans, they were experiencing the Bee Gees in a way they hadn’t unless they saw them live. And I just love that. It’s a time capsule in a working, creative pipeline, and I dig that. That’s so much fun!
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TELEVISION SERIES – ONE HOUR
The Marvelous Mrs. Maisel:
“A Jewish Girl Walks Into the Apollo…”

by PATRICK SPAIN CAS

Amy Sherman-Palladino is well known for her ratta-tat-tat, tommy-gun dialogue that overruns the audience with its relentless comedic power. With the words seemingly all running together, one is pinned to the chair, with a grin on their face, waiting to see how much trouble her characters can talk themselves into—or try to execrate themselves from.

No one is more emblematic of this than the show’s namesake, Miriam “Midge” Maisel, played to the nines by Rachel Brosnahan. Her ability to credibly utter her lines intelligibly is a feat in and of itself, and one of the reasons the show is so fun to watch. Responsible for getting all this down on “tape” for us is the show’s production mixer Mathew Price CAS.

MATHEW PRICE CAS: Production Mixer

Matt tells me he’s employing all sorts of strategies to capture this on-set magic trick. He’s got boom mics whenever and wherever possible, there are wireless mics always, there are plant mics in the classic mic shells used throughout the show, and there is one wireless mic he’s chosen that is specifically and perpetually hidden in Rachel’s constantly changing wardrobe. Matt told me, “Rachel’s superpower is she can speak so fast and enunciate so clearly…I think one reason it punches through is her voice is a little, I don’t want to say thin, or light, but something like that. So, I’ve been constantly looking for a lav that could kinda beef up her voice and give her a little more bottom end. I’m a big fan of Sonotrim, they are very open, and I tried Sankens, and then Shure came out with their TL line. And, it turned out that our prop people were taking these vintage [stage] mics and putting these Shure mics, these elements, in these vintage [mic] shells. So, I figured, ‘You know what, let me try these.’

“So I did, and they sounded pretty good; a little more full than the Sanken COS-11’s, which are fairly standard. And now [not only is there a little more low end], but the mics match! In this one scene, she’s walking across the stage to the mic stand where I was able to transition from one mic to the other, and it sounds very natural!

“Also, Rachel is what they call a ‘stalker.’ She’ll often pick up the mic and walk around the stage, waving it around in front of her face.
The good off-axis response of these retrofitted vintage mics gives a sense of spatiality and realism during her movements on stage.

In this particular episode, Midge is the opening act for a fictional crooner, Shy Baldwin, at the Apollo Theater. Matt related, “It was challenging because they wanted the band live. Amy Sherman-Palladino said, ‘We’re in the Apollo, it should sound like the Apollo!!’ You know we don’t want to record in a studio and have to [fake the ambience of the space]. It was very challenging. We started out with a set of tap dancers, and the camera crane was behind these two kids tapping with the crowd behind them. To do this, they needed to put the base of the crane in center back of the stage where the drummer was. So, they put the drummer off to the side, and it threw the rhythm off for the band. So, the band’s performance wasn’t as tight as it could have been, and the band was loud! We had put PZM mics across the front of the stage to pick up the tap dancers, but it kind of got overwhelmed. In hindsight, I might have tried to find a way to mic each shoe? But you know, you live and you learn. So, eventually they got the tap dancers great, and we turned the camera around, the band was tight, but the tap dancers were a little off. I think they ended up recording Foley for all of that tap dancing anyway, and I’m sure they made use of it!”

**GEORGE LARA CAS: Foley Mixer**

I thought that story set up a nice segue into chatting with George Lara CAS, the show’s Foley mixer. He’s been active for more than 20 years, first at Sound One and then at C5 Sound in Manhattan as a Foley mixer. George tells me his approach to the show takes about three days per episode. After his Foley editor has spotted the show, they sit down and screen it, and then go straight into recording a full episode cloth or “rustle” track. On day two, they address all the footsteps in various passes depending on the footwear and the floor surface. Day three consists of hitting all the called-for props cues.

Since the show tends to have long uncut shots with enormous frenetic action, how do you keep from over-covering the show with footsteps?

Well, in the big musical moments in the show [for example], where people are singing or there is a lot of score, we tend not to cover a lot of material there. We tend to focus on the more important things that are able to carry the scene. So, if there is a scene in a train station or in a store where people are walking in the background, we try not to cover them. We try to do all the passers-by who are crossing in front of the camera and in front of the character instead of doing everyone all around.

And that leads me back to the big scene shot in the Apollo Theater with its tap dancing bit. I’m told that you guys had a major hand in making that audio work for the scene.

When that happens, we get the production track and [my Foley walker] Marko Costanzo will throw on his cans and listen to the music or whatever is happening and perform it to help out the scene. That’s if we have to replace it. [I do remember that] we did the main tap dancing, but then after, they would be able to use other means to get that happening, like the effects sweeteners.
Tap shoes seem like a very specific task. I would imagine that they’re a hard thing to record since they must be so transient. How do you control that? We actually have a dance floor that was made for our work on *Mary Poppins*. We open that room up and Marko will sit and perform the scene! Then I take two, maybe three different mics to record the different perspectives of what is happening [on screen]. Also, I don’t use any compression. I use different miking techniques to limit peaks and get a good recording. That being said, I don’t like to record too much ambient noise, so I’ll switch for one fader to another. And whenever there are different shots, say a medium shot to a close-up, I’m able to make the changes on the fly. If I’m late, we just roll back and punch it in.

And when you are done with it, where does your recording go? It goes to our Foley editor and our supervising sound editor who look at it, approve it, and put it into re-recording mixer Ron Bochar’s template. And in terms of that tap dancing shot, I think the happy outcome was a result of collaboration between everyone involved. Because the person at the end who has to put it all together is Ron, he does his magic and that’s why the show sounds the way it does.

**DAVID BOULTON: ADR Mixer**

For this episode, with the scene in the Apollo, I would imagine that you did a ton of work recreating that environment.

We did! Well, the way that we do stuff like that is we let the loop group actors record the first time they see [the footage]. In other words, they don’t get any direction—we just want them to watch it and react like they would in the real world. So, you know, whether it’s [Midge] in the little nightclub or at the Apollo, [we get a realistic reaction].

Was there a different approach between the small club and the Apollo? Well, just that I had 25 actors for the Apollo scene and had two days of group to get it done! You know, the different approach is the way I mic it. A little tighter for the intimate club and less so for the Apollo. And we always find out what mics they used on set [so we can find the same, or mimic what they were using].

**Is there an overall approach you take to getting a good performance on the ADR stage? Is it setting a mood or is it technology; how do you go about it?**

It is setting a mood. But I also think it’s being flexible to work the speed and style the actor wants to work in versus trying to impose my will. So, we do a lot of staying open after the cue and getting two or three takes in a row, or we do a lot of sampling.

**Sampling, what’s that?**

[It’s] the modern equivalent of old school looping. The term “looping” came from that fact that it was a physical loop of tape. So, you’d hear it, and there would be a blank piece of tape with the same timing, and the actor would say it. Now-a-days with Pro Tools, you can cut in a take to see if it will fit, where you were kind of running blind before that. But if you did enough takes, eventually you would find something. You know, in the immortal words of Mel Brooks, “Keep it light, keep it fun, keep it gay.”

**STEWART LERMAN: Scoring Mixer**

What is your role on the show? I ask because I get the feeling it is a “multi-hat” situation, given the scope of the show.

I am the music producer, which involves a ton of pre-records and a ton of live stuff. Depending on where or how we record, I engineer and mix everything as well; anything that involves new music.

So, whenever the germ of an idea arrives, they come to me and say, “Here’s the task at hand. Here’s the scene.” If it’s something in pre-production or something we’re doing while we are shooting, I’ll go on set with the music and do that. Then there’s the whole post-production [music] thing, which doesn’t involve going on set. As they are editing, they might call for a piece of orchestral music here or a band to do something there. So, I’m kinda involved from soup to nuts.

This particular episode has some big on-camera music moments. There’s the club scene with the smaller band and there’s the big number in the Apollo. There are two numbers in the Apollo! There’s the tap dance thing and Shy’s song. Those were very difficult. Listen, our director and show runner is really awesome and she’s pretty adamant about recording in the space. If we’re in a nightclub, let’s try to record in a nightclub. If we’re in a bar, let’s do it. If we’re in a concert hall, let’s do it. In fact, at the beginning of this one, she sent me a message saying, “Don’t try to talk me out of it!” That was risky; we only have so much time at the Apollo. Also, the Apollo is a union hall, so my team couldn’t touch a cable!

The technical part was I had to record it there. Typically, what we do is the night before we would record a master, and we would try to shoot to that master. But this was even more complicated because of the tap dance thing. Amy wanted it live; she wanted the band to play live.

I spoke with David about that and it sounded really tough.

Right! So, I need to record this sophisticated piece of music live,
so I hid an entire horn section on the side of the stage. It was very complicated. [David’s] trying to record the tap while I have a band blowing “Bill Bailey” at 85 dB on top of his taps. We had to figure it out. Do we redo the tap? Do we redo the band? What’s good, what’s not.

We have an awesome post team! Annette Kudrak, our music editor, who I’ve worked with for years, is a miracle worker. I’m so lucky to have her. She was very involved in fixing all of this stuff because there was a lot of fixing [to be done]!

And here’s the bigger part of this whole shoot for me; Amy our director is saying, “I want a full audience and I want them hyped up!” So, on top of it all, I’m bringing in a PA that’s blasting in the room to get the crowd going and I have all that stuff coming back through my microphones and the tap microphones. It was a Hail Mary! Literally [I was wondering], how is this going to work? Well, let’s just try to do it and make it look beautiful. The amazing thing is music ended up going down live.

I’m guessing there was some serious tight miking and hidden miking?
Funny you should mention that part of it! It’s 1959-1960s Apollo, and I know I have to record it. So, I rent Neumann M49’s, RCA 77’s, and RCA 44’s and I place them around the band. We’re setting it up to do a mic check and Amy walks in and says, “What are those?” “Those are the microphones.” “I don’t want to see any microphones.”

And, now the clock is ticking! Now we have to hide everything. I have a full drum kit, piano, and my crew can’t touch the mics or the cables! It was—you know, I’m re-living it right now and having palpitations! [Laughter] Oh, and that was just the first number!

Then we do a dance piece into a Jackie Wilson song called “A Woman, a Lover, a Friend,” that we recorded live and later shot to our master [with our lead singer lip syncing]. I even had a great recording for the band done in the studio that morning, and I was flipping out because it’s so complicated. But Amy wanted to do it live, and she looked at me and said, “Go big or go home.” So, we went big!

RON BOCHAR CAS: Re-recording Mixer
I have spoken with a handful of others on the sound team about this episode and it seemed pretty ambitious. Because there is so much work being done before it gets to you, does that help you focus when you’re mixing it on the stage?
Most of the time, yes. I come from editorial; I got into mixing through editorial. I know the power of the edit and I know that there are enough tools at the editors’ disposal that if you trust them and let them do [their thing], it can make your life as a mixer a whole lot easier.

For instance, my dialogue editor, Sara Stern, does that for me all the time. I wouldn’t call what I get from her a pre-mix, but the edit is so well laid out, and she’s used my template to cut in that, by the time I get the stuff, I don’t have to move things around the [timeline] or anything like that. I know that these tracks are the boom, these tracks are the lavs [and so on].

How about the way the music is prepared?
The way that music comes to me on *Maisel*, Annette Kudrak spends an ungodly amount of time working with the material so that I can get whatever they have deemed as live, that they really love. You know it’s okay in your two-track picture edit, but it’s not gonna fly when we want to be “just on that saxophone” or pan the guitar over there with perspective. So, I’ve got all the splits too.
What Annette does is, she mixes and matches performances the way you would when trying to make the best record. [This frees me up to do other things] such as create the room with some verb and whatever else I need to give it that live feeling; give it some slap, some perspective. And, [directors] Amy and Dan [Palladino] seem to really respond to that, and like it. So, I just dive in.

Ha! I have certainly worked on shows where I have tried to do that only to have the directors show up and say, “What the hell is that?”—while I pull that ambience fader down to -40 :) Yeah, I know! And on the first episode, I was so damn scared that I had maybe gone too far or something, and it turned out, no, they really ate it up. Now I don’t know how much they think I’ve done versus what they remember from shooting because so much of it is done live. You know, I believe the old adage, “If it’s working, you just keep moving on.”

Speaking of room or space, I want to ask you about the show’s transitions from wide shots with many people that end up, through these long choreographed “oner” [longshot] takes, focusing in on a single conversation. How are you approaching that blend, because I assume you are going with wires up to a certain point then the boom is close enough to ease in, or maybe you’re leaning on the wires the whole time because it’s so chaotic?

Well, you’ve probably picked this up watching the episodes—they are talking a mile a minute! They are talking sooooo fast. I spend a long time with the wire tracks, basically with clip gain making sure all the T’s are there and all the vowels are heard, and everything like that. And then I go through and try to align that, the best that I can, to the boom mic. Because, I love the sound of boom!

We are stuck, a lot of times, with buried mics because of Midge’s costumes; everything is so tailor made, tailor fitted for her in particular that it’s hard for Matt and the wardrobe department to place a mic that’s not going to get bumped, rubbed, or you name it. So, I have to rely a certain amount on the boom, and it all works together if it’s done right!

And Sara, my dialogue editor, uses VocAlign to give me dead phase. You know it’s just been bulletproof. So yeah, I’ve been relying on her prep to make me look really good!

Then I do the same thing I have to do with music to all the production dialogue, too. I have to put it in a room. By the time I’m done cleaning it up enough, and we’ve done our pass of editorial on it, I still have to make it fit the space. Because, so often they’ve shot the interiors on a set and you are stuck with that [sound stage] sound; which isn’t the living room, it’s the set. So, it’s a lot of repair work done after the fact.

Well, it’s pretty clear that you and your team have figured out how to manage the onslaught of dialogue, the sheer number of pages per episode.

Had you worked for Amy and Dan in the past?

No, prior to working on *Maiel*, I had never done series work. *Angels in America* was maybe the closest thing that we did, but we approached that show as if it were a feature. We didn’t even work on it broken into episodes until it was done that way for HBO.

So, I was approached to do the pilot, and it fit a window [for me] and I was like, “Sure! The crew’s free, I’m free, let’s do it!” They asked if I had ever done this before, and I was like, “No, but how tough can it be!”

Aaaand, it was tough. It was tough. Only because it’s not at the same pace you get when you do a feature. Amy and Dan are incredibly creative showrunners, but at the time, I had not yet watched anything they had done. So, I never knew [about] the ratta-tat-tat-tata of their dialogue. That was my first shock; it’s a 100-page script! How can we do this in 50 minutes? And [the answer was], it’s a 100-page script crammed into 50 minutes! [Laughter] Ya know, nothing is dropped; it’s all there! So, that’s how it happened, and I loved it. I loved the experience and it got approved to go on and they called and said, “Do you want to do it?” And I was like, “Yeah, sign me up!” And I’ve done it ever since. I love it.

Yeah, my impression from the get go was that in all aspects—sound, picture, acting, writing—it’s an amazingly well-made show.

Yeah well, again, it’s Amy and Dan. Part of what they talked to me about when they hired me was they wanted a feature person to [mix] it because they didn’t want it to sound like television. They wanted it to sound much more full and richer. I told them I’m going to be stuck a bit with the dynamic range, and I’m not going to want to do it the way I would do a feature, [that] it’s something I’m going to have to get a handle on and learn how to control. And, they were like, “I don’t know what that is, but do it!”

The joke that I have with *Maiel* is there is so much dialogue, so much movement, so much stuff going on that [the sound] has to be telling a story without that dialogue as well. I mean, that’s what they are expecting. So, we jam pack that show [with sound]. It’s got stuff going on that I don’t think a lot of people hear, but without it… If you take out the backgrounds…

It wouldn’t feel the same.

Not at all. And Amy and Dan know that. And there’s an expectation [that we’re always at that level]. I have started working on Season 4 and, you know, they make it harder every season raising the bar! [Laughter]

Well, we can’t wait to see it! Again, congrats all around.
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Congratulations to the sound team of production mixer Shawn Holden CAS, ADR mixer Matthew Wood, Foley mixer Blake Collins CAS, scoring mixer Christopher Fogel CAS, and re-recording mixers Bonnie Wild and Stephen Urata on their well-deserved CAS Award win for *The Mandalorian*. This marvelous Emmy-winning show, created by Jon Favreau for Disney+, is the first live-action series in the *Star Wars* universe. After two seasons, it has already become part of our cultural consciousness. I had the pleasure and privilege to chat with the team. (ADR mixer Matthew Wood was unavailable.)

**What got you to where you are today? How and when did you break into the industry?**

**Shawn Holden CAS:** I was attending college at the University of Oklahoma and was doing an internship at a TV station in Oklahoma City. At the end of that internship, they hired me. One of the things I was doing during that time was sound. I worked there for about a year and a half and then moved to Dallas, where I started working as a freelance sound technician in network news. I traveled around the world doing that for about 12 years, but I had always wanted to work in the movies. In 1995, an opportunity to move to Los Angeles came up and I happily jumped on it. At that point, I transitioned into doing movies and dramatic television work and haven’t looked back.

**Blake Collins CAS:** I was a student of the Conservatory of Recording Arts and Science where I learned all about music production and recording. We had a course in post audio and I fell in love with it. We took a scene from *Pirates of the Caribbean* and stripped all the sound away and re-did everything, including the dialogue. My job was sound effects and Foley, and I just had a blast recreating all of those sounds. My internship out of school was at Dubbing Brothers USA (DBUSA) under Fred Taieb, who, sadly, just passed away. He let me mix and record instead of getting coffee and taking out the trash. A real teacher. Once hired on at DBUSA, I met many people, including Dan O’Connell, John Cucci, and Jim Ashwill of One Step Up. Jimmy let me sit with him in the mix room and watch him mix all the Foley they did, occasionally getting to step in on some group Foley cues. Fast-forward a couple years of doing ADR for DBUSA, I drummed up the courage to ask Dan if he could use any help in the Foley mixing role. A couple months later, he called saying he needed a backup mixer. I ended up learning and working with them for about five years before I made the move to Skywalker Sound.

**Christopher Fogel CAS:** I played trumpet throughout high school and got a performance scholarship to attend UC Santa Barbara in 1986. I quickly realized that I didn’t want to perform for a living, so I went back home to Reno and transferred to the University of Nevada. While there, I took up DJ’ing to help pay my way through school. In 1990, I went to recording school in Los Angeles. In 1991, I started assisting producer/songwriter Glen Ballard on most of his projects that came through Westlake Audio in Los Angeles. In 1991, I started assisting producer/songwriter Glen Ballard on most of his projects that came through Westlake. The first album I engineered myself was *Jagged Little Pill* by Alanis Morissette. I used to record pop string arrangements for David Campbell, so I had built up some experience recording orchestral elements, along with dense production. In 1999, a colleague at a record label introduced me to a composer friend (Edward Shearmur) who was looking for an engineer from the pop world for his next score project (*Cruel Intentions*).

**Bonnie Wild:** I studied music and music technology in the UK and got my first job in post-production in 2003 at ITV Leeds after mailing résumés and chasing leads! I made a crazy plan to
Stephen Urata: I have a background in music performance and composition. I got into Skywalker Sound by starting out as an assistant re-recording mixer, then worked my way up to mixing full time.

It’s interesting how these seemingly small events led to such pivotal moments in your career. Do you feel your background helped you land this special gig?

Stephen: I believe it was the fortunate opportunities I had being mentored by so many amazing people at Skywalker Sound.

Bonnie: Matt Wood and Dave Acord hired me on Season 2 of *Star Wars Rebels* as FX editor and re-recording mixer. I consistently worked for them on a variety of projects and was beside myself when they and [producer] Dave Filoni wanted me to be a part of *The Mandalorian*. I have a deep love and respect for those guys.

Chris: From 2003 to 2015, I shared a studio in Atwater Village with Ed Shearmur and composer Theodore Shapiro. Teddy would eventually become my primary client; we’ve collaborated on about 60 projects. Teddy does a masterful job of combining orchestral elements with the pop and indie world, which is why I think we work so well together. In 2008, Teddy hired USC graduate Ludwig Göransson to be his assistant. Ludwig’s talent was obvious from the beginning, so it didn’t take long for him to start landing his own gigs. Ludwig, Teddy, and I now share a facility in Glendale, and the rest is history. So, I guess that’s just a long way of saying that what got me this gig was proximity!

Blake: I believe my background had almost everything to do with it. With the reputation that OSU has, having worked there made my résumé stand out. Through Dan, I was able to meet Shannon Mills, a supervising sound editor and designer at Skywalker Sound. I was on vacation with my family up north in the summer of 2016 and I had gotten a tour with Shannon of the Ranch just for fun. After the tour, I thanked Shannon and we got to talking and we both found out that Skywalker was looking for a mixer and I was searching for the next step in my career. One thing led to another and by September of 2016, I was recording my first show as the Foley mixer on the Jack Foley Stage. It was a dream I never thought would happen.

There have been many technical “firsts” on this show. Can you talk about your technology setup?

Shawn: I record on an Aaton Cantar X3. I am currently using a Cooper 208D mixing panel, Lectrosonics wireless and IFB products, Schoeps microphones, DPA, and Sanken lavs.

Blake: Starting at the Ranch, they asked me what equipment I wanted; I had never been asked that before! Besides the newly installed Avid S6 and Myer 5.1 speaker setup, I use the Martinsound Martech MSS-10 mic pre and the Sennheiser MKH 800 mic. This was my go-to set when I was at Skywalker Sound. I’d throw in a Senn 416 or KMR 81 every now and then, but I like what I like! Having learned to record using outboard gear at OSU, I also have
the dbx Subharmonizer, Eventide H7600, and Lexicon MX200 reverb unit. I really like affecting the sounds recording to tape and going for a more Foley FX style than your more traditional Foley stage might do. I really try to get the Foley close to its final form to really sit in the mix with reverb, pitch, and effects. I won’t tell you how many times I’ve used my iPhone in a pinch. Sometimes you just have to grab what you have on you and do it. Usually, I try to do it properly but also owning a post company that provides Foley as an option, I often find myself on both sides of the glass.

**Chris:** I recorded the score at the Fox Newman Scoring Stage, primarily using microphones and preamps from my own collection. We recorded into Pro Tools. I mix in my own studio, where I have three Pro Tools rigs (two of them HDX3) and an Avid S6. My main HDX rigs are 2019 Mac Pro’s, one used as a mix rig and the other as a print rig. The third rig is used for Atmos, delivery, setup, and occasionally as a reverb toolbox. I monitor on Klein and Hummel (now Neumann) 410’s for my LCR mains and 310’s for the sides, surrounds, and ceiling. Monitor control is through Avid MTRX with DAD Pro | Mon, feeding a 16-channel Burl Mothership via Dante.

**Stephen:** Avid S6 with 32 faders, Pro Tools, and Meyer speakers behind the screen and for surrounds.

**Bonnie:** Pro Tools S6. A simple enough template and layout to keep it quick. These mixes are fast, so I like to keep things flexible on the stage. Everything source-side is in the box and in one session, so it has to be organized and easy to navigate. I just ask the editors to keep to a pre-dub layout. Dx, loop, music. BG’s and FX split into food groups, which we decide on according to the material. Usually about eight hard FX pre-dubs and three BG’s. Then Foley and props, usually four narrow pre-dubs of each and some cloth for good measure. I love the FabFilter series and Phoenix verbs. I lean on the channel strip for some all-in-one EQ and compression. Can’t live without WNS and iZotope, either. I futz a lot just with EQ, but I like a little [Soundtoys] Radiator for some warmth! For these streaming shows, Avid Pro Limiter is catching anything illegal and I monitor spec obsessively with [NUGEN] VisLM.

You’re all part of a groundbreaking team, and setting new standards for mixers on future productions. Can you share any challenges that were unique to this episode?

**Shawn:** So many challenges unique to this project! We have a complement of characters that are in very challenging makeup and wardrobe. Some with animatronic pieces and parts that can be difficult to work around. Our shooting environments have been some of the most challenging of my career.

**Chris:** Anyone who knows Ludwig’s scores knows that they are a hybrid of pretty heavy electronics and live elements. So, in that sense, this episode was no more challenging than *Black Panther*, *Venom*, *Tenet*, or any of the other projects we’ve done together over the years. However, Season 2 scoring was a particular challenge
because we were one of the first projects to record together after the start of the pandemic. Starting in July 2020, we did, I think, five sessions with 40 musicians at Fox Newman. We had to come up with ways to keep musicians safely distanced while still achieving a good, sonorous orchestral sound. It worked in the end, but it’s definitely a different sound not having all those bodies closer together like they traditionally would be. The musicians also had a hard time hearing each other being spaced so far apart.

Blake: This show came with a few challenges. With the fandom that is Star Wars, you want to stay true to the originals while also creating something new and putting your touch on it. The theme going into this show was “Western Samurai Sci-Fi!” That is a few different genres. We wanted Mando to feel like a space cowboy. Give him some creak and maybe some Spurs, even though you don’t see them, and some weight. To me, Westerns have a real sense of bringing the audience close to the character with the grit and leather and those types of things. We wanted the audience to feel connected to Mando with the way he sounded, especially since you don’t see many facial expressions.

Bonnie: Time! Also, creating a theatrical feeling mix within the boundaries of the streaming spec creates a special set of challenges. We want to be making the big moments as impactful and effective, without all of that headroom. It’s equal parts using the right sound and mixing it effectively. I always want to present the mix to the client within spec. It’s important everyone trusts that the mix they hear is the mix that masters.

Stephen: Same as everyone in the industry; too much to do in not enough time.

How much were you in contact with the rest of the sound department?

Shawn: We have not had much of an opportunity to be in contact since they are all up at Skywalker Ranch.

Blake: We were all still in the building, pre-COVID, so we’d get to do playbacks and talk over breakfast and lunch like the good old days. I always love doing playbacks of reels or scenes just to make sure we’re on the right track with what the supervisor is wanting. Getting the feedback as we are working on it means that there aren’t many surprises in the final mix. Keeping the constant communication just ensures that everyone is happy.

Stephen: I was in constant communication with other members of the [post] sound team. Although the mix room was isolated and not big enough to fit all of the editors at once, I never felt disconnected with the people who created all of the amazing tracks in the first place.

Bonnie: A lot. VFX updates are happening as ADR and loop is being shot, while fixes are being flown to the stage. Decisions about many aspects of the episode are still being made while the mix is underway, so all the crew is keeping up.

Chris: Not very often, to be honest. Even pre-COVID, most of my days are spent alone mixing. My music mixes and stems are delivered to the music editor, Stephanie McNally, who then communicates with Bonnie up at Skywalker Sound; although I do have fairly regular direct contact with Bonnie since we collaborate on a couple Disney+ shows (The Mandalorian and The Falcon and the Winter Soldier).

How is this show different from other shows you’ve worked on?

Shawn: This show is much more high-tech than anything else I’ve done to date.

Chris: Did I mention before that it’s Star Wars?! Everything from the scope, to the canon, to the security, to the public anticipation is just different. From a technical standpoint, it’s not much different than other shows I’ve worked on in recent years, pandemic adjustments notwithstanding.

Blake: I think what made this show different for me was how close I was to it. I want to make every show I do sound great, but it felt like there was more riding on this one for me, personally. With Boba Fett being my favorite character, I felt this could be a chance for there to be some justice to his end and be carried on by Mando. I won’t spoil anything from Season 2 though...

Stephen: [This is the] first show I’ve ever worked on where the collaboration was fully remote and through video conference. We streamed the picture and sound mix live across the entire state.

Bonnie: Really just the vast amount of work to do in the time! The expectations are high and there are a lot of moving parts. It reminds me a lot of “Phenomenal cosmic powers! Itty-bitty living space.” [A quote from the Genie in Aladdin.]

What’s the most rewarding aspect of being a part of this show?

Bonnie: This first season of The Mandalorian was just all kinds of firsts. It was scary and exciting and we were all making decisions about the aesthetic and character of the track that would carry from there on. Just delivering the eight episodes in all their formats was its own reward (Home Atmos 9.1, 5.1, and stereo). This crew in general is a little dream. I mean, I can’t express my gratitude and respect for Matt and Dave enough. They strike this balance of collaboration, freedom, and guidance; that’s a real art. It’s a safe space to be creative. Same with Favreau and Filoni, they know the direction they want to travel, but the ride is a collaboration. [I enjoy] figuring out what story we’re telling in each shot. Finding the puzzle pieces and the rhythm that propels and supports the story, action, and emotion. I love following that feeling you get when you
bring all the dialogue, FX, and music together and the mix almost tells you what it needs to do. Also, I love getting a whistle clean out of some dialogue. Who doesn’t like scratching that itch?

Shawn: It’s been exciting to be part of this groundbreaking style of shooting. To be here at the beginning of using this technology has been an amazing learning experience. I believe in the years to come, we will all, from time to time, be utilizing this style of shooting.

Blake: I really enjoy anything that gets the Foley artist and mixer to collaborate as much as possible. When they pick the perfect shoe and surface, and then I can add a little reverb on the fly and ride the fader as the character walks across the screen, you really feel the depth. This being my first dip into the Star Wars universe was all I had hoped. Growing up and having Star Wars be a huge part of my childhood with toys and the films, I was like a kid in a candy shop the whole time. Then The Rise of Skywalker got added to my pallet and that was the cherry on top!

Chris: I’m sure I’m not alone when I say that my introduction to film music was through John Williams and Star Wars. I was 9 years old when my grandmother took me to see A New Hope. That music, in part, inspired me to take up the trumpet, so I pinch myself when I think about the opportunity I’ve been given to contribute to that universe in such a meaningful way today. Ludwig has created an incredible score that stands on its own in the Star Wars universe. His main title can already be considered a classic in its own right, but every once in a while, we get to record a theme from the original John Williams score. If hearing those classic themes played live by an orchestra on the other side of a couple panes of glass doesn’t raise the hairs on the back of your neck, you might need to find another line of work.

Stephen: Getting to work with such high-caliber teammates really kept me sharp and really helped me improve my ears.

Any closing remarks or thanks you’d like to share?
Shawn: I would like to thank the people who gave me the opportunity to do this show—Jon Favreau, Dave Filoni, and Colin Wilson. I’d also like to thank my stellar crew for this episode—Ben Wienert on boom and Veronica Kuhn utility. And, of course, the amazing artists at Skywalker Ranch.

Stephen: I am so thankful to Bonnie Wild, Matt Wood, and Dave Acord for inviting me to work with such an amazingly talented and friendly group of people. I wouldn’t have had the opportunity to even be considered for such an amazing award if it wasn’t for all of the hardworking members of the sound team who prepared the tracks. Mixing is nothing without a fantastic editorial team.

Chris: First, I’d like to thank Ludwig Göransson for continuing to trust me with his music for all these years. I’d also thank his crew—Joe Shirley, Max Sandler, and Monica Sonand. Thanks to Erin and the crew at the Fox Newman Scoring Stage. Thanks to my assistants, Jacob Moreno and Colby Donaldson. Thanks to Larry Mah for keeping it all together and making our jobs easier. And thanks to Lucasfilm for allowing us to record in Los Angeles with the finest musicians in the world. Oh, and also big thanks to my wife Jennifer, and my sons Ben and Henry!

Blake: I have to thank my wife Shayla and my kids Addison, William, and Eisley. This job sometimes has long hours or takes up a lot of my mental space. They are always so forgiving and loving and without that support, I wouldn’t feel I could give my craft my all. Professionally, Dave Acord for giving me a shot on this show. I would like to thank Bonnie Wild for being a great supervisor on the show and putting my work in front of Dave. Her love of Star Wars was a definite plus. Ronni Brown and Jana Vance were my artists on the show and they both have a résumé of Star Wars content that is longer than my mic cable. Their ideas and performances are the foundation on what I get to add to any show.


Corresponding with these fantastically talented mixers was so incredibly rewarding. They are true artists. Their enthusiasm and love of the craft is palpable; almost like osmosis, rubbing off on me to strive to do better. And for that, I thank them. I can’t wait for Season 3!
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Meet the Winners

NON-THEATRICAL MOTION PICTURE OR LIMITED SERIES
The Queen’s Gambit
Ep. 4 “Middle Game”

by STEPHEN FITZMAURICE CAS

The Queen’s Gambit is the story of prodigy Beth Harmon and her vault to the pinnacle of chess competition who must overcome trauma and substance abuse along the way. The show is at once real and stylized. I found myself impressed by the bold choices for playing sounds as simple as a door close or the voice treatments in a natural hall; not unlike the way Anya Taylor-Joy’s portrayal of Beth creates a character that is at once awkward, strong, vulnerable, and unstoppable.

In a field of stiff competition, The Queen’s Gambit won the coveted CAS Award for a Non-Theatrical Motion Picture or Limited Series, along with MPSE Golden Reel wins for Dialogue and ADR; Music or Musical; and Effects and Foley. I reached out to the team to find out what sorcery went into creating the soundscape. Re-recording mixers Eric Hirsch and Leo Marcil were joined by scoring mixer Lawrence Manchester, and I’m grateful for the time they carved out of their busy schedules to share their stories. (Production mixer Roland Winke and re-recording mixer Eric Hoehn CAS were unavailable.)

I always love hearing people’s origin stories. Can each of you share how you got your start and anyone who influenced you along the way?

Eric Hirsch: I came to mixing through playing in bands in high school and college. The desire to record and produce records myself drove me to learn Pro Tools. When I had a chance to work as a messenger at Sound One in New York, I jumped at it. While working there, I would hang out in the machine rooms and learn from the re-recording mixers, and eventually got the chance to start working on student films that one of the mixers recommended me for. I met Eric Hoehn fairly recently through the sound designer on the show, Wylie Stateman. I’ve known Wylie since I was about 5 years old through my father, who is a film editor who has worked with Wylie a number of times. I love the opportunity to work with filmmakers who care about sound, and I find it particularly satisfying when a client notices a small piece of Foley or something that I never expected anyone to hear consciously.

Leo Marcil: I originally grew up in Topanga Canyon, California, with instruments all over my house (my area of expertise is the drums). From an early age, I was always recording things and, without realizing it, I have always gravitated toward sound. I come from an overall very creative family, so my parents were thrilled when I decided to attend Savannah College of Art and Design, where I played baseball and was first introduced to post-production sound. After graduating with a degree in sound design, I moved back to L.A. and have been working in the industry ever since. The significant mentors in my life include supervising sound editor Wylie Stateman, SFX designer Harry Cohen, and re-recording mixer Eric Hoehn.
Lawrence Manchester: I grew up in Maine, playing and studying music all through high school and enrolled at the Peabody Conservatory of Music for college, where I pursued music performance and recording engineering. My internship at NYC’s Power Station got my foot in the door of recording music professionally. I eventually found my way into the world of film music, working with composers John Corigliano (The Red Violin), Elliot Goldenthal (Frida), Howard Shore (The Departed), Danny Elfman (The Girl on the Train), and Carter Burwell (Howl). Upcoming releases include The Woman in the Window and Steven Spielberg’s West Side Story. In addition to recording and mixing film music and Broadway cast albums, I am the music mixer for The Tonight Show Starring Jimmy Fallon on NBC.

How did you come to be attached to The Queen’s Gambit? What was your approach?

Leo: I became associated with The Queen’s Gambit by having worked as an editor/designer on [creator] Scott Frank’s previous series Godless. From the start, my focus was on sound effects and design. Early into the project, after watching rough cuts and taking notes, I knew that my goal for the show was to audibly reflect Beth’s world and really bring to life everything encompassing her journey that we see on screen, like her roller coaster of internal struggles and maintaining an “aged” ’50s, ’60s feel.

We knew right away that we wanted to spend as much time as possible mixing each episode. The most significant factor to our success in accomplishing this was the ability to go back-and-forth on sound concepts with the picture editor early on in the post process. We were getting sound approvals on heavy design moments (ceiling chess, flashbacks, chess matches, etc.) well before we hit the final mix, allowing us to really dial in and make the most out of each episode. We took this approach when working together on Godless and knew it would prove effective again for The Queen’s Gambit.

Eric: I was on the show very early in the process; from the initial turnover of the sound rolls before the picture assembly had even been completed. Having the mix run the entire length of the post-production process allowed us to always be working toward the completed soundtrack and never forced the director and editor to have to listen to temp material that they knew would be replaced. It’s also a job where there was a very blurred line, if the line existed at all, between editing and mixing. Wylie Stateman likes to say that the mantra is “always be mixing, always be editing,” and as a result, we could start thinking about the creative vision for the sound while the picture department was cutting.

We basically had a small mix stage (Avid S6, 5.1 speakers, and a projector and screen) set up down in the picture department. This was so Scott Frank and [picture editor] Michelle Tesoro could always be listening to the sound in its proper environment. And since their cutting room was steps away, they could very quickly use the insights they gained from watching the cut in our mix room to make further picture changes. We were all on the picture department’s Nexis share system, so that streamlined the process of turnovers significantly; we didn’t have to spend time
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uploading and downloading files to-and-from different facilities.

One thing that was always important was the need to help maintain tension and suspense, and we had to think about how best to use the limited tools at our disposal to achieve this. The chess matches were generally a crowd of silent spectators around two seated, unmoving players—themselves also silent. So, we had to think outside the box of literal sound to give ourselves a palette to work with.

**Lawrence:** I had mixed the scores for both of [composer] Carlos Rafael Rivera’s prior collaborations with Scott Frank: *A Walk Among the Tombstones* and *Godless*. So, I signed on to mix *The Queen’s Gambit* long before starting work on it because, without knowing anything about the story, I knew it would be a great collaboration. Because of the pandemic, we had to modify our workflow in order to work fully remotely, but the creative collaboration was quite similar to our previous projects.

The music had to do a lot of heavy lifting in support of the game play throughout the series. There were many chess tournaments that required long sequences of music, which Carlos scored beautifully. My challenge in mixing the score was to ensure that the tension and drama built into the compositions were supported by the mixes. Essentially, 1) Do no harm, 2) Help the music emotionally where appropriate, and 3) Recognize when my help might be needed and when it wasn’t.

I always want the music to sound as lush and impactful as it can while standing on its own. But when I mix music for a film or TV series, I also work with the reference sound design turned on much of the time, probably more frequently than many other music mixers do. And because the sound work on *The Queen’s Gambit* was in such good shape when I came on board, I was able to mix the music to fit cohesively within it. Hopefully, that made life easier on the dub stage.

**Can you talk about the design of the chess sets and gameplay?** The sound of the pieces moving and the drive/urgency and interaction of the clock are great. **How did you utilize PFX, designed FX, and Foley to create so many depths of foreground, background, and occasionally hyper-reality?**

**Leo:** PFX played a huge role in this series, especially with the chess pieces. Many of the chase scenes had great on-set recordings of gameplay captured on multiple mics. This not only provided the real sound with natural acoustics, but also sync marks and reusable material to layer throughout other scenes. Foley was the next crucial layer that made these chess matches, pieces, and movements so intricately detailed—touching, grabbing, sliding, and cloth movements really added to the fullness of the chess piece gameplay. The final component, of course, was design. Almost all moves during focused chess play are sweetened with whooshes and stingers, which not only add indications of speed but also convey a lot of character emotions. The clock was a huge player and tool used to naturally bring us in-and-out of hyper-real moments. Music influenced a lot of the design throughout the series and we continuously created syncopated moments between the clock, music, and chess movements. Music was also a big driver in the ceiling chess moments and influenced the rhythm of the movements. The goal was to feel (through the sound) the movement of those pieces as if we were in Beth’s head with her. Most source materials used to create those ceiling chess moments were from contact mic recordings on many different surfaces with different movements.

**How did you go about creating an open but not empty feel to the backgrounds? This is as true of Mexico City as it is of the far less exotic junior college exterior at the beginning of the episode as Beth leaves class.**

**Eric:** During production, we asked the on-set sound team to record with a Decca tree, so we had multichannel recordings of a lot of the interiors, which was really helpful in blending the production sound with our designed backgrounds. The sense of space that these recordings gave was helpful with the openness of the backgrounds, especially in some of the large locations where the matches were shot (hotels, gyms, etc.). Then, in order to make these open spaces not feel empty, we relied on loop group, which was especially helpful in creating a sense of specificity. The Dann + Bruce Company, which supplied the group voice talent, was able to get native Spanish speakers for Mexico City, native French speakers for Paris, and native Russian speakers for the final episode. We had a group of young girls come in to record the kinds of lines that orphans in Kentucky might say for walla for backgrounds at the orphanage. So, having some specially designed vocal elements to play with was a hugely helpful tool.

**Did you have to make any significant adjustments to overcome the adversity of COVID-19?**

**Eric:** At the end of the week when it seemed like working
in the city was going to quickly become unfeasible, we packed up the Pro Tools mix system and drove it out to my house in New Jersey. The biggest challenge by far was the simultaneous collapse of child care and school. Because of social distancing, we couldn’t have anyone come to watch the kids, and remote schooling hadn’t really become a thing, so I had two kids at home all day, 24/7. To get around this, I was basically just weaving work in through my day from 9 a.m. to about 1 a.m. After the kids were asleep, it was much easier to get work done in uninterrupted stretches. It was not an ideal environment, but allowed us to do what we needed to do, which was keep refining the sound design, conforming to the latest picture versions, and working on the dialogue.

Lawrence: By the time I started mixing the score for The Queen’s Gambit, my wife, kids, and I had already left our home in New York City for a family farmhouse in the woods of Maine where we rode out the summer months of the pandemic. I rented a huge SUV so that I could bring all the gear I would need to build a temporary mix studio. It was from there that I worked my way through each episode. With secure servers, Google Docs, and an occasional phone call, I stayed in regular contact with Carlos, his assistant, and our music editor, Tom Kramer.

Congratulations to the whole team on a beautifully recorded, designed, and mixed project!
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Meet the Winners

TELEVISION NON-FICTION, VARIETY OR MUSIC SERIES OR SPECIALS

Hamilton

by DAVID BONDELEVITCH CAS MPSE

Hamilton as aired on Disney+ was shot in June of 2016. It was originally scheduled for a theatrical release and was mixed as such. For various reasons, there had not been an announced release date until the pandemic moved it up from the back burner. In a stroke of marketing genius, Disney released the film during the shutdown for Independence Day. In addition to giving Disney+ new subscribers, the film was a welcome respite from the daily gloom of news and effectively cheered up the country on a holiday where gatherings would not have been safe.

I spoke with the four winning crew members, each of whom had different jobs at different times during the process.

Justin Rathburn recorded the original dialogue, vocal, and music tracks over three days in June 2016.

Tim Latham was, essentially, the scoring mixer, prepping the tracks for a final mix.

Tony Volante did the theatrical mix, which was intended to be the final over a year before Roberto Fernandez was brought in to remix it for a streaming release. None of them worked together at the same time in the same room. I must add that it was a real pleasure speaking to these gentlemen.

JUSTIN RATHBURN: Production Mixer

Justin Rathburn is originally from Buffalo, NY, but moved to Vero Beach, FL, when he was young. “I started playing guitar when I was quite young, but never really got very proficient at it. I did, however, take up bass (electric and upright) in high school. I ended up playing in several groups that helped me pay for college, including a music scholarship for a short time before Full Sail. I do use almost everything I ever learned as a musician in my work. It’s critical to know the intent and building blocks (sonic qualities included) of the music and instruments before you try to reproduce it.”

Justin went to Full Sail and studied show production. He then worked on cruise ships for almost six years as an audio technician, moving to NYC in 2005 and has been there since. “Until Full Sail, I never had any formal audio training. That being said, I have learned more technique in the field than anyone can learn in school. I certainly encourage school for the basics, but learning from others who are not in a classroom setting was the most beneficial for me.”

He has two mentors that helped shepherd him though his Broadway career. “The first is Peter Fitzgerald, who happens to be one of the owners of Sound Associates, Inc. in Yonkers, NY. He gave me my first shot at mixing a show here in NY. I treasure his advice and would not be where I am without his belief in me. The second is Nevin Steinberg, who has designed nine of the shows I’ve been associated with, Hamilton included. He has included me in this wild ride of fun and intense shows that have kept me sharp and always looking to improve my skillset.”

Justin got a call from Nevin, who asked him to mix a workshop of The Hamilton Mixtape in 2013. “I said, ‘Of course,’ as I had worked with him on In the Heights. I thought I knew what I was in for. After the very first read through, I turned to Nevin and said something to the tune of, ‘I have to work on this show, regardless of the cost (financially).’ We did a few more workshops, some staged readings, and opened at The Public Theater in 2015. In August of 2016, Hamilton opened on Broadway, and I’ve been there since!”

Asked about microphones, he replied, “A good majority of the microphones we use come from the DPA catalogue. There are a few Shure, Sennheiser, Point Source, and Audix mics in there as well.

“For the cast, each was fitted with a custom DPA 4061 or Sennheiser MKE-1 lavaliere rig, paired with Sennheiser 5212 transmitters and Sennheiser 3732 receivers. There was a total of 25 of those used for the capture. Microphones were either placed on the hairline of each actor, or custom ear rigs were created to fit each individual cast member, depending on their activity throughout the show. The handheld mics are Shure UR-2/SM58 transmitters with UR4D receivers.

“There is a total of 57 lines coming from the orchestra pit. We also added more than a dozen room microphones for Dolby Atmos support. I believe we used Sennheiser MKH 8060’s, as well as an Atmos capture microphone setup in the balcony. All in all, around 130 total (plus or minus a few). Everything was transferred through close to a dozen (if not more) 96 kHz MADI streams from the existing DiGiCo system that we have in the Richard Rodgers Theater.”

 Asked about interference with wireless mics, he replied, “No, we did...
not encounter much, if any, during the shoot. Broadway is one of the
densest RF environments on the planet, and all of the shows and
audio shops coordinate with each other in order to ‘play nice’ with
the other theaters in the area. We do encounter interference
sometimes, but only when there happens to be a large event in Times
Square with an outside sound company that isn’t aware that there is a
pecking order for available frequencies. That said, we have several
spare transmitters, receivers, and frequencies that are available, should
we encounter something that is not able to be addressed.

“The primary front end of the audio system we use for Hamilton
on Broadway is the DiGiCo SD7T. We have a sub-mixer here and
there, but it does not affect the audience mix. I have full control of
each input to the system at the FOH mix position. We are also
using the SD racks for the system backstage. The system is running
at 96K, and that sample rate stays in place throughout the system
from input to speaker output. As for DAW, we do have a Logic
setup in place to capture events, but it is used mainly for
troubleshooting.”

Asked about specific challenges, Justin replied, “The entire event
was filmed in the theater, which is where I go to work every day. So,
I know the space and had worked on the show for long enough that
nothing really phased me during the capture. As long as the truck
was getting all the data necessary, I was doing my job.”

Justin wanted to thank the backstage audio crew of Hamilton:
Anna-Lee Craig (aka A2D2) and John Senter (retired). “They are
the best in the biz! NONE of what we heard could be made possible
without their attention to detail.

“Also, many thanks to both Nevin Steinberg (sound designer for
the theatrical show) and Jason Crystal (associate sound designer)
for, not only being there for moral support, but also with the
technical assistance in planning for almost any detail that can pop up
during a capture this large.”

TIM LATHAM: Re-recording Mixer

Tim graduated from Berklee in '89, where he studied music
production & engineering. He learned mostly by practicing in the
studios at school and relied on networking to find jobs out of
school. He has spent most of his career as a music mixer. He had
previously done the Hamilton cast recording and won the Grammy
for it. (He has a previous win for In the Heights as well). He was
hired by musical director Alex Lacamoire and Lin-Manuel
Miranda for the project because he had worked with them before
and knew the score very well. He mixed the music, creating a pre-
mix that could be used further down the line. All of the music
and vocals were performed live, there were no pre-records or
replacements. Any sound effects were added later.

Tim’s recollection is that there were about 160 tracks
delivered. A lot of planning went into his mix so that his mix
would be usable for multiple purposes. He met with music editor
Dan Simmons to plan a standard template for each song. Tim
mixes everything inside the box. His mix was delivered to the
dub stage in numerous stereo pairs. In addition to split vocals,
he also mixed stereo drums, bass, keyboards, strings, ensemble,
background vocals, and multiple guitar pairs.

He said the hardest song to mix was one area where there was
11 minutes of continuous performance (including “Non-Stop”) that needed to play as a single take. The biggest challenge was

<table>
<thead>
<tr>
<th>Source and mics used on the project</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of mics used:</strong></td>
</tr>
<tr>
<td>Cast (actor) microphones = 25</td>
</tr>
<tr>
<td>(all wireless, including backups)</td>
</tr>
<tr>
<td>Drums = 16</td>
</tr>
<tr>
<td>Percussion = 15</td>
</tr>
<tr>
<td>Bass = 5</td>
</tr>
<tr>
<td>Guitar = 5</td>
</tr>
<tr>
<td>Strings = 5</td>
</tr>
<tr>
<td>Keyboards = 8</td>
</tr>
<tr>
<td>Reverb and Effects = 10</td>
</tr>
<tr>
<td>QLab (Sound effects) = 16</td>
</tr>
<tr>
<td>Misc. (VOG, etc.) = &lt;8</td>
</tr>
<tr>
<td><strong>Types of mics used:</strong></td>
</tr>
<tr>
<td><strong>Drums:</strong></td>
</tr>
<tr>
<td>Beyer M88G (has been swopped recently due to multiple capsule failures to a Shure Beta 52)</td>
</tr>
<tr>
<td>Yamaha SubKick</td>
</tr>
<tr>
<td>Audix D2 and D4's</td>
</tr>
<tr>
<td>Shure SM 81</td>
</tr>
<tr>
<td>DPA 4011’s</td>
</tr>
<tr>
<td>JDI Duplex DI</td>
</tr>
<tr>
<td><strong>Basses:</strong></td>
</tr>
<tr>
<td>Avalon U5</td>
</tr>
<tr>
<td>Aguliar Tone Hammer</td>
</tr>
<tr>
<td>DPA 4099</td>
</tr>
<tr>
<td>JDI Duplex</td>
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<tr>
<td><strong>Strings:</strong></td>
</tr>
<tr>
<td>DPA 4099’s</td>
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<tr>
<td>DPA 4011</td>
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<tr>
<td><strong>Guitars:</strong></td>
</tr>
<tr>
<td>DPA 4011</td>
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<tr>
<td>JDI Duplex/Fractal</td>
</tr>
<tr>
<td>BSS AR-133 DI’s</td>
</tr>
<tr>
<td><strong>Keys:</strong></td>
</tr>
<tr>
<td>JDI Duplex DI’s</td>
</tr>
<tr>
<td>BSS AR-133 DI’s</td>
</tr>
</tbody>
</table>

that the arrangements were all unique as the songs vary in genre.
“Dear Theodosia” and “Burn” were the most delicate to mix.

Tim said that the tracks were extremely well recorded, but it
was a live theatrical performance, so some reflected sound was
already built in to some of the ensemble tracks, even though the
sections were very well isolated. In addition, stage practical
effects (a rotating stage) presented some noise issues that
needed to be removed with iZotope RX. There were also
occasional problems with cloth noise on the lavalieres.
Additionally, he did some minor pitch correction using
Melodyne. Tim is a fan of the Universal Audio, Waves, and Plugin Alliance plugins. For reverbs, he likes Altiverb and Seventh Heaven Reverb from LiquidSonics.

Tim added, “Security was crazy. We had to use encrypted drives supplied by Disney, and the entire studio had to be disconnected from the internet [to avoid hacks].”

He would like to thank music editor Dan Simmons, as well as Derek Lee, who did the editing for the cast album.

**TONY VOLANTE: Re-recording Mixer**

“Working on *Hamilton* was perfect for me because it was right in my wheelhouse. It combined all the things I had done over my career; mixing music with a film element. I was able to use all the expertise I learned over the years and put it into this one project. It was a lot of fun!” Tony shared this right at the start of our interview.

“I started in the music world, mixing records for 15 years in New York, Boston, and L.A. I started at Pyramid Sound in Ithaca, where I mixed punk music, jingles, and commercials.” Tony would stay after work and mix his own projects. He then moved to Soundtrack in Boston. From there, he went back to New York and tried to find work in film. He eventually got into post and mixed the indie film *Welcome to the Dollhouse*. He continued with records as well, but eventually post work took over.

Tony met Chris Richard, who had produced Broadway shows, and was invited to mix *Shrek* on the stage. Tony also worked as a consultant on *Kinky Boots*. “Chris called me up and said, ‘I have another project for you: *Hamilton!*’” Tony mixed it at Harbor Sound in New York.

“It wasn’t more challenging than the average feature. The performances were amazing and it was very well recorded, so it was not challenging to get it sounding good; it was just a unique project using tools from mixing both music and film.”

Director Tommy Kail’s vision of *Hamilton* was that he did not want a typical live capture of a Broadway show. “He made it clear, right from the start, that it was unique in what they were trying to do. He wanted to be cinematic.” Every character was panned across the stage as they moved, including background singers. “This creates a panoramic space, which makes the whole thing come alive.

“The workflow was unique because the job was so enormous. The tracks were fabulous. They recorded at 96 kHz, but to run that many tracks (close to 200) with many plugins was a big challenge. The audience was all recorded live, with 6-8 stereo mic pairs, including a set in the dome of the theater. Tim Latham did a great job mixing stereo in his studio and I up-mixed it to 7.1. We knew that eventually there would be an Atmos mix.

“I used the same session, adding some plugins of my own so that my mix would layer on top of his. I did not have to do any pitch correction. I worked on it for about four weeks. Once I finished the 7.1 mix, the project was put on the shelf. With COVID, Disney pulled up the release date. I was unavailable, so I recommended that we use Rob Fernandez to finish the Atmos mix and complete any remaining fixes.”

I had noticed that the mix used much more crowd in the surrounds than a typical television show. “The biggest challenge was trying to find the balance between a ‘live’ and a studio album, but when you open the crowd mic, it sounds like a party!” Tony explained. “You also still need clarity in the lyrics. The balance would change between songs. Some of the songs were more like a music video and were mixed more intimately.”

Asked about plugins, “It was the first time I used UAD plugins, which Tim had used. They were all plugins that emulated older analog gear, like the UREI compressor. I did not need to add much reverb as it was already in the mix, but occasionally I used Altiverb to match the space. I had 6-8 reverbs set up, but they were used sparingly.” Tony also used iZotope to deal with some noise issues on the set.

“The song ‘Wait for Me’ is very dynamic, starting soft and going very loud. At one point, there is one of the loudest moments in the show, and I thought it sounded great, but I looked at my compressors and they were all lighting up like a pinball machine. This reminded me of a story working with Japanese artist Makoto Kubota. I asked why he traveled all the way to New York to mix, and he replied that the engineers in NYC care less about the meters and more about how it sounds. In Japan, everything had to be technically perfect!

“A lot of hard work went into this show, and it was a team effort with everyone chiming in. Tommy Kail, Alex Lacamoire, Nevin Steinberg, and Dan Timmons were there throughout the whole

(L-R): Re-recording mixers Tim Latham and Tony Volante
process. Our engineer, Avi Laniado, helped keep all the technical issues fine.”

**ROBERTO FERNANDEZ: Re-recording Mixer**

Roberto started working in audio as a DJ and slowly moved into mixing music and then post-production in New York. He was brought aboard *Hamilton* by Tony Volante, who did the theatrical mix of the film. They both work at Harbor Sound in NYC. “Tony was involved in the project over a year before I came on board.”

The decision to mix a final version happened in February, although Disney at that point did not have a release date. The goal was to create an Atmos mix for a theatrical release. When the pandemic hit, the goal changed. It was to be released in July, so suddenly there was a real rush to complete it.

In addition to creating the Atmos mix, Roberto was charged with creating a near-field mix for the streaming environment, as well as downmixes. He had about five weeks to complete the mixes. He spent the first week working alone, and then started getting feedback from the clients. It was mixed in Pro Tools using faders and an Xkey controller.

“The Atmos miking was great; there were numerous stereo pairs around the theater during the performance. Occasionally, I added a little bit of reverb to fill out the speakers.” Roberto used three 9-channel beds and created a 7.2.4 mix, as well as a 5.1 downmix and a stereo version. Clients were never in the room with him when he mixed due to the lockdown. Picture editor Jonah Moran would monitor in his 5.1 setup for notes.

Eventually, the 7.1 and Atmos mixes were sent to Disney for approval by upload to a secure server. Lin-Manuel Miranda was included at this stage, resulting in Roberto getting texts at 2 a.m. from Lin asking, “What’s the password?” Roberto added that the notes were all great, particularly from musical director Alex Lacamoire, who “has the most amazing ears!” according to Roberto.

Asked about plugins, Roberto said that he used Altiverb, ReVibe, and PhoenixVerb, using mostly stereo pairs for the Atmos tracks. He also used some multiband compression, but did not use any spatialization plugins.

Roberto thanks “Tony Volante, of course, who did the mix first, and Dave Patterson, who did some editorial fixes working at home.” Closing out the interview, Roberto added this funny reveal, “Oh, and by the way, I had never seen the show when I was hired to work on it!”
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Meet the Winners

OUTSTANDING PRODUCT – PRODUCTION
Sound Devices CL-16
Linear Fader Control Surface for 8-Series

by Matt Foglia CAS

Sound Devices has been creating devices that resonate with the world of production sound for more than two decades. Many awards have been bestowed on the company for the impact its products have in our field. According to my records, this is the 10th CAS Award win for Sound Devices, garnering its first for the 744T back in 2007. Co-founder Jon Tatooles took some time to discuss the company’s history, growth, and impact.

When you founded Sound Devices in 1998 with Matt Anderson and Jim Koomar, what was your initial goal?
We didn’t have particularly lofty goals when starting Sound Devices. It was the right time for a few guys to take a blind leap. And as a startup, we had to do things a little differently than in our previous roles at Shure, a mature company we continue to admire and respect.

The first thing we wanted to do was to directly engage and build strong relationships with the individuals who actually use and abuse production gear. We continue to build and nurture those relationships, which advise our product strategy.

Another early, important goal was to simplify sales. In 1998 and 1999, the internet was predicted to revolutionize every aspect of business; it did in many ways. We offered our first few products directly from our website for the first few years. We didn’t sell much, but it informed much of what we did later.

What were some of your original products?
The MP-1, a battery-powered single-channel microphone preamplifier is the origin product. It is still an active model and one of the few all-analog products the company offers. The (original) MixPre and MP-2 came shortly after that. The USBPre, the industry’s first bus-powered microphone interface for computers, was previewed at AES in 2000. The 442 field mixer was first available in 2001. In 2004, the 7-Series began shipping.

Do you recall a moment when you felt the company was really making traction in the industry?
The first shipments of the 744T in 2004 were an important milestone for the company, and for production sound. The 744T
introduced Sound Devices to a whole new customer base of production mixers doing narrative work, where the 442 and 302 field mixers were more broadcast-oriented. The 744T also helped accelerate the transition industry-wide from analog and digital tape-based recording to file-based recording. The 744T was Sound Devices’ first product where all mixing, summing, and routing was done in digital versus analog.

Since then, Sound Devices has continued to introduce products or improvements to workflows that have allowed the company’s footprint to grow. How does the company decide where to invest its resources?

I like to describe the world of production sound as one that is “an inch wide and a mile deep.” We all know live sound mixers and music recording mixers who have little knowledge of our craft and our tools. And what our customers are asked to do continues to be more challenging, both operationally and technologically.

The challenge of deciding where to put money and manpower is the most difficult, and important, for the company. Some products are logical extensions of what has come before, but some products are things that no one ever asked for, but we believe there is customer benefit.

Our single-ended noise-suppression plugin, NoiseAssist, is an example of the latter. Steve Popovich and Matt Anderson worked on NoiseAssist for several years before its introduction. No one was asking for it, but even in its earliest form, we saw its benefit for real time applications. NoiseAssist wouldn’t be possible without the computational power on the 8-Series and MixPre II recorders. The recorders were developed knowing that, in the future, they would offer features that have yet to be defined.

When developing the CL-16, were you thinking of a target production sound mixer?

Our earliest recorder, the 744T, was designed primarily for the
portable, over-the-shoulder applications. With the introduction of the 788T and its additional I/O, customers wanted to use it on the cart, and we offered the CL-9.

When the Scorpio was first introduced, it offered MCU-control capability, and that works for many customers. Third-party controllers are cost-effective. However, a population of cart-based mixers demanded a dedicated Sound Devices controller for their 8-Series, and the CL-16 was born. It was very much designed for the narrative mixer working from a cart with a bunch of wired-up cast members coming and going.

Since other manufacturers offer control surfaces, what was your approach to differentiate features when developing the CL-16?

The CL-16 was designed to operate as much like an analog desk as possible, while still providing deep control and quick access to an 8-Series. The immediacy of a smooth fader and a dedicated trim control and big meter mean that, in the heat of the moment, there is no ambiguity what control to grab. That’s what most production mixers were asking from us. However, the 8-Series continues to support select third-party MCU fader controllers, some of which have motorized faders, which the 8-Series fully supports.

Over the past couple of years, Sound Devices has been expanding its market beyond the initial pro “sound for picture” field. I’ve read stories of folks using the MixPre, for instance, for music recording and even podcast recording to iPads. It seems like the build quality and feature sets of your products are broadening the company’s reach.

The latest MixPre models do cover a lot of applications. Many production mixers who have much more comprehensive kits have a small MixPre recording setup when they want to operate as small and light as possible.

But as you mentioned, we have seen the MixPre show up in a whole different range of applications. Because they can connect as multi-channel USB audio I/O to computers and mobile devices, the MixPre models get used as high-performance audio interfaces for Zoom, Skype, FaceTime, etc. Many “content creators” are “broadcasting” using the MixPre as their complete mixer and audio interface, as well as using it for “grab and go” recording.

The MixPre also shows up in music recording applications, both as an interface and as a stand-alone recorder. We first introduced the analog MixPre in 2000 as a useful utility mixer. The 2021 version of the MixPre continues that heritage of versatility.

You may have realized this by counting the awards on your mantle, but I believe this is your 10th CAS Award. That’s some successful longevity! It is an incredible honor for our products to be recognized by the members of the CAS, as all of the nominated products over the years have been deserving of recognition.

We know that our products are simply tools for our users, though we do know that many of our customers consider them indispensable. For that, we are grateful for contributing a small part to a production’s success.
Meet the Winners

OUTSTANDING PRODUCT – POST-PRODUCTION
iZotope RX8

by MATT FOGLIA CAS

When situations can’t be fully controlled on location and noise rears its unwanted voice into our tracks, RX can act as an audio post ER or fine surgery center—depending on how much time you have. You know a product has made an impact when its name can be used as a verb. “Hold on while I RX this,” is a common phrase in audio post. In a field of some extremely impressive and influential audio post developments, RX keeps receiving recognition and collecting awards—and deservedly so. To learn some more about the software, I reached out to iZotope’s Principal Product Manager, RX, Mike Rozett.

Each version of RX since RX2 has been recognized with a CAS Award. Relative to post-production, as the program’s features grow, how are new features decided upon?

We always start by speaking directly with our customers and understanding what problems they face. Once we understand the magnitude of a problem, we rank it against other issues we’ve identified and decide on the set of solutions we want to pursue.

Sometimes technological capability lags behind customers’ needs, such as some years ago before we implemented machine-learning to automatically separate noise from dialogue. And there are always more problems to solve. When we can’t get to something, we’ll try to come back to it later and tackle it fresh with the latest research.

When developing new features, are folks put together in teams to tackle a proposed feature—kind of like how there are different artists working on various aspects of a frame of animation?

We break feature work down into sub-teams, which we call streams. A stream of work is led by a product manager who decides what problems to go after and why it’s important to solve them, and a tech lead who determines the approach we’ll take and manages a small team of software developers and quality assurance engineers. This approach gives the team a lot of room to be creative in how they build a feature. In many ways, our teams are crafting a production for release similar to the way a creative team delivers a television series or a feature film.

The new Spectral Recovery feature seemed very timely with this release given the remoteness COVID forced on the industry and the potential for receiving lower quality audio in post.

The initial work on Spectral Recovery was started before COVID-19, but we accelerated production after the pandemic hit. The need to re-synthesize missing frequencies above a cutoff is a trend we
were already seeing that grew exponentially during COVID. More and more, ADR and interviews are recorded in non-studio, uncontrolled environments over VoIP connections, resulting in compromised audio to say the least. We will continue our work in this area as recordings on iPhones and Zoom are here to stay.

Given that there are so many features, what influences which existing ones get a look at for improvement? Seems like picking would be similar to deciding which buddies you weren’t able to invite to a party!

The process for making improvements to existing features is driven by customer input and opt-in usage analytics. Analytics help us identify how customers are spending their time inside our products. When you combine numbers and feedback, you understand the context of how features are used. If we see people spending a lot of time with a feature, at first glance that might seem like a success, but customer context might tell us that our workflow is actually too slow and
time is being wasted. We are always looking for performance and ease-of-use improvements that help customers speed up their work.

In prior “Meet the Winners” interviews, we’ve read how iZotope’s work environment possesses a strong sense of community given the diverse artistic and creative backgrounds of the employees. How did the company and employees do as things shifted remotely?

As a company, we were able to shift to remote work fairly quickly. For most of us, a laptop and an internet connection are what we need to do our jobs. We relied a lot on collaborative virtual whiteboards, so we could map out ideas and product designs and facilitate brainstorming sessions. Like most companies, we shifted everything to video calls, from weekly company meetings and community support days, to lunches, happy hours, and one-on-one meetings. However, even with the constant connections over Zoom and Slack, we’ve missed each other and miss working together in person. People have been very supportive of each other and we are excited to get back together at work, hang out, and go to each other’s gigs.

iZotope was one of the generous companies that helped universities transition to online teaching in the middle of the spring 2020 semester by offering extended trial versions of their software. I’m a professor at Middle Tennessee State University and, because of this, all of my “sound for picture” students were able to complete their noise restoration/cleanup labs since the university facilities had shut down. So, thank you for that!

I’m very happy to hear you were able to keep teaching and that your students could finish their labs. It was important to us to support educational institutions and help keep them up and running during the pandemic. Schools are incredibly important to us in that they teach students best practices in the world of audio and keep the software we make relevant to the next generation of editors and mixers.

It seems that iZotope continues to broaden its reach and has been coming up with more ways for hobbyists and semi-professionals to improve their audio, along with we professionals. Any interesting things on the horizon you’re able to mention?

Making audio production accessible to everyone is a big part of what we do. So, without giving too much away, we are pushing our technology to get you to the results you want substantially faster. On the RX side, we continue to work on getting closer to the DAW so that it feels like we are right there in your timeline.

Any closing remarks?

A very big thank you to the members of CAS for this award and for using RX. We rely on you to challenge us to make the software better—so keep sending us your hopes and dreams. Stay safe and happy editing!
Meet the Winners

CAS STUDENT RECOGNITION AWARD WINNER
Brandyn Johnson

by PETER KELSEY CAS

As re-recording mixer Sherry Klein CAS said as she announced the winner, this award has become an integral part of the CAS legacy. The CAS is proud to say it has always been inclusive and diverse in all things CAS, and this was exemplified by the gender and ethnic variety of this year’s SRA submissions.

This was the seventh year of awarding this honor. The last few years have seen many women entering the cinema audio field—and this year was no exception. While four of the five finalists were women, this year the prize went to Brandyn Johnson from the University of Southern California.

I sent some questions to Brandyn to find out more about him and here are his responses.

What brought you into sound and specifically “sound for film”? I graduated from the University of Albany, SUNY with a BA in Documentary Studies. Narrative fiction storytelling had always been my lane. Unfortunately, University of Albany didn’t have a film production program at the time, so I chose the next best thing. Understanding the role sound played in the filmmaking process was important for me, so I focused on audio/radio docs. That decision sent me on a more technical trajectory than I expected. I walked out of UAlbany having a solid understanding of the recording process, microphone types, polar patterns, and the acoustics of a space (in addition to amazing guidance and mentorship by the Documentary Studies faculty—Hi Susan, Gerald, and Sheila!!!).

It wasn’t until I got to USC’s School of Cinematic Arts (eight years later), that I started to think about sound as a serious career path. I noticed a huge hole that needed to be filled as there weren’t many students interested in production sound. I knew the basics of it fairly well, and I enjoyed it, so I dove in. Over the course of three years, I got the opportunity to make a lot of great projects with a lot of great people. Those opportunities coupled with mentorship by some of the GOAT’s—David MacMillan, Stephen Flick, Richard Burton, Midge Costin—helped me get to this point. I’m super grateful!

What’s your favorite part of the “sound for film” process? I’m a production guy! I love the adventure. The autonomy. The quiet responsibility. I get paid to travel to cool places and make dope stuff with dope people. I also really love not getting those “planning” calls from a director/producer after wrapping a day. My job is (usually) done at wrap. That gives me more mental space for the other important things in my life—like my son! I couldn’t design my life any better if I tried.

What does the CAS Award mean to you? It’s incredible—a true life-changer! It’s only been a week since the award and I’ve already been given unreal opportunities in...
Any immediate plans for the money?
I’ll probably use most of the money to pay off the debt from gear I already own! I’m sure I’ll be able to add a new toy to the collection though.

Having won this award, do you have any advice for someone who would like to apply for the Student Recognition Award?
Yeah—just do it! Apply. What’s to lose? Make the effort and put your best foot forward while you do it. I learned a good deal about myself in the process of applying. I’m confident that you will, too.

Do you have any advice for someone starting out in the “sound for film” business?
Well, I’m just starting out, so I’ll take some advice as well: Jokes aside, I love sound. I love how integral it is to filmmaking. You don’t have a movie if you don’t have sound (at least not one that I’d want to watch...). I love being the person that can contribute excellence to that supremely important element of the process. I guess the advice I’d give is to love it. Hard. And to take every opportunity seriously. The “better” jobs are a byproduct of continued passion and attention to detail.

Do you have any stories or challenges from your path that you can share?
Aside from being a filmmaker of color in America? I’m sure there’s plenty of material in there somewhere. Maybe we can save that for a drink at a later time! (LOL) I’m incredibly grateful for the opportunity. It makes me smile to know that someone somewhere will see me as a kind of model of success and use that to create a lane for themselves in this industry. When one rises, we all rise.

Who have been the people that have influenced you the most and what did you receive from them?
Definitely family—my son, mom, pops, siblings... Extended and chosen family have been crucial, and well deserving of praise—especially my L.A. peeps. Technically, I’m out in Los Angeles on my own, but I’ve never felt lonely or unsupported. My circle is pretty amazing... Man, honestly, everyone who I’ve ever come across. I’m a big believer that people are in your life for seasons and specific reasons. All of my encounters (good and not so good) have been helpful in getting me here. I appreciate you all!

I would like to take a moment to show gratitude toward the Black and brown filmmakers who have broken ground and paved the way for young people like myself. I’m afforded more opportunities and space to create because of their contributions to this art form as a whole.

What’s your next step?
Keep doing what I’m doing—mixing, learning, growing, supporting—with the people and creative collaborators I admire. Practically, though, I’m looking to get into the local union and eventually become a CAS member. Any tips (wink-wink)?

Student Recognition Award Committee Chair Sherry Klein CAS announces the SRA winner.
In my last article, I interviewed post-production mixers who also teach. For this issue, I interviewed four production mixers and have included my own comments as well. Former CAS Board member James Coburn CAS has more than 25 years of experience in production sound, taught at The Los Angeles Film School, and now teaches at the New York Film Academy in Burbank. Tod Maitland CAS is a four-time Oscar nominee (his most recent for Joker) and a four-time CAS Award nominee and teaches at NYU. CAS Career Award recipient Chris Newman CAS won Oscars for The Exorcist, Amadeus, and The English Patient, has 12 nominations, and currently teaches at the School of Visual Arts. Former CAS President and CAS Career Award recipient Mark Ulano CAS won an Oscar for Titanic and has three nominations. He has taught full weeklong workshops in Maine at what is now called The Maine Media Workshops and has guest lectured all over the world. I taught at USC for 15 years and have been teaching at CU Denver for 13 years. [Note: These interviews were conducted during the spring semester of 2021.]
**How did you learn how to mix?**

**Chris Newman CAS:** On the job and by the seat of my pants—and making every mistake possible until I ran out of mistakes to make. I was pretty much a self-taught sound man. In November of 1961, I read about Nagra recorders in a magazine called *Audio*. I ordered a Nagra from Europe in 1961. (They weren’t available in the U.S.: At least, not in NYC.) When it arrived, the salesman and I spent the entire day trying to figure out how to use it since they were so new. I learned how to turn it on and off and began to go around NYC telling everyone I was a sound mixer and I was available to do recording jobs (even though) I didn’t know a thing! I did a news show for CBS and left two rolls of film in a taxi. I got a job as a one-man sound crew and I forgot to bring a mic. I was not a sound man to inspire confidence.

**Mark Ulano CAS:** I had long pre-filmmaking period that, in some ways, trained my ear to listen to the specifics of sound in my environment. I believe this was a precursor to applying this in ways to achieve a particular result when I brought elements together in a mix. My earliest encounters with capturing performance happened pretty early in my life as my father, Sam Ulano, was a prominent figure in the NY percussion and jazz music world. This meant being around a galaxy of related music performance experiences (e.g., live, studio, home recordings, etc.). Until my late teens, I was an avid music/drum student, practicing four and five hours daily and weekly private instruction for five years.

In combination with unbelievable good fortune in a series of mentors, and my obsessive passion to learn as much as possible about telling stories with film, this ultimately resulted in the enduring process of trial and error through growing a repertoire of experiences in an era when the safety net of nonlinear file-based technology was decades in the future. The mix was a process and you had to have the vision of its application to succeed. Becoming a student of films past and present was a major source of growth. The desire to understand and interpret directorial intent matters greatly.

But most importantly, avoiding an ideology of approach was the key. To keep an open mind and sensibility to the information before you as it occurs rather than have any illusion of mastery, as a musician does when they prepare and then perform. What does this character, scene, and shot require to maintain the connection between the characters and the audience in the context of the director’s intent? This is my road map to mixing. We must bring all the instruments at our disposal together in wholly formed unity. We must not disrupt the flow of belief in the characters, the journey they are on, and the environment they are in, unless such a disruption is the choice being made by the filmmaker. Serving the project is the highest obligation we have.

**James Coburn CAS:** The first production mixer who taught me anything about production sound recording was Pat Toma, and the next was Bill Reinhardt. I boomed for them and covered as a mixer when needed. We did a lot of TV series and low-budget movies. John Coffey CAS always encouraged me as well. I boomed for him a couple of times, and later usually put my equipment rentals through Coffey Sound. He was always open to questions and was always a big help. Later, I worked with Cameron Hamza CAS, who really taught me how to operate on a set. He sent me down to Roger Corman’s Venice studio to record the *Black Scorpion* TV show and other projects.

**Tod Maitland CAS:** I’m a second-generation mixer. Started in ’77. My father is Dennis Maitland, a CAS Career Achievement Award recipient. My brother, Dennis II, who was a boom operator, passed away. My sister Kim is a recordist in New York. I went to Alfred State College for two years, which had an A/V program. I did only two movies as boom with my father. My first big break as a mixer was recording *Talk Radio*, the Oliver Stone movie. I went on to work on *Born of the Fourth of July* and *The Doors* for him as well. *The Doors* was an incredibly complicated setup. To record “Light My Fire,” we would do playback while also recording everything live in a single 10-minute take. We used two-inch tape. From there, I went to *Cape Fear* with Scorsese.

For a year, I decided to change to mixing commercials. After the year, I wanted to shoot myself, and I went back to film.
You cannot learn mixing without doing it. You really have to sit down and do it. I made many mistakes on my first film, my crossfades were terrible. You have to learn the touch.

David Bondelevitch CAS MPSE: I learned production sound as a grad student at USC at a time when it was a Nagra 4.2 over my shoulder and a Sennheiser 416 in the hands of a boom operator.

Did you have mentors of your own?

Mark: Oh yeah!! I still do. Starting with my dad, then Chris Newman CAS (who is still mentoring and coaching me and many others), editor Mimi Arsham, Jim Webb, Roger Corman (who blessed me with his trust as a member of the last generation of his de facto film finishing school in Santa Monica), and there are more, and more to come.

James: Pat Toma, Bill Reinhardt, John Coffey CAS, and Cameron Hamza CAS.

Tod: Les Lazarowitz, as I spent the most time with him as boom operator. I did Tootsie and Easy Money with him.

David: At USC, Ron Curfman CAS (retired) taught me the most about production sound, but I also learned from Rodger Pardee MPSE and Tom Holman (CAS Career Achievement Award recipient).

Chris: Ironically, both of my mentors were cameramen: Gordon Willis and Julian Townsend. A third mentor was Peter Glushanok, a director/cameraman and electronic music composer. They didn’t teach me how to do sound, but they taught me how to tell stories and how to approach jobs. Both men dragged me along to their jobs and taught me how to make films and solve problems. Then I learned how to press the buttons on my own. I made every mistake a sound person could make. But when you keep doing a thing, eventually you get the hang of it!

Another mentor—well, EVERY sound person’s mentor in New York City, a mentor for an entire generation of sound people—was Dick Vorisek, the re-recording mixer. He taught me what mattered when I was on the set recording—what I had to insist on and what I could let go.

“I teach more about the philosophy of being a sound mixer; what sound is, how you record it, how to use microphones, and how to interact on set.”

—Tod Maitland CAS

Julian Townsend took me in hand. He’s a professional. He was organized and meticulous and he took pity on me and taught me to be a filmmaker. Julian taught me that there was a way to do everything and a reason for everything you did. “How do you tell the story?” That was always Julian’s point. “Is it the sound of milk squirting into a pail? You’ll need a directional mic to get that. Is it the sound of the farmer’s boots in the mud? You’ll need carpeting so you can walk on the mud beside the farmer without making noise. Is it the horses? Did you pack apples to get them to make noises? Or is it the farmer’s dog? No problem to record him barking. Dogs bark all the time. But did you bring dog biscuits for when you’re trying to record other sounds and you can’t shut the damn dog up?”

How did your mentors support your learning? Did they help you find work?

Chris: By sharing what they knew and by helping me find work.

James: Yes, especially Cameron, who was focused on his post business. I got sent out on gigs and recommended for shows when they were busy.

Mark: Well, if there is a common thread in my experience with my mentors and
their support for my education, it is this idea of being a perpetual student: stay curious, prepare intensively, have a system of learning that is continuous and independent of your emotions. Also, most important: Love what you do!

As far as finding work, most certainly my mentors helped me establish a professional presence. This was especially true during my early days working in NYC. I went to the School of Visual Arts (SVA) in Manhattan because they had a unique four-year undergraduate program. They have a policy requiring all the faculty teaching the production courses to be successfully working in their primary careers. This created an automatic kind of access to the professional world in two ways. First, we had access to guidance when confronted with challenges in professional work situations and second, it built in a first-level network of pros who knew you and would and could refer you or recommend you for jobs. I’ve maintained my relationship with my alma mater and lecture to SVA students annually.

David: I did get a few production jobs after school, but to be honest, I never really enjoyed it, and I moved into music editing and then re-recording mixing.

Do you teach production sound mixing, re-recording mixing, or both?
Chris: Both. If you’re teaching one, you’re teaching the other.

Mark: My focus has been in teaching the filmmaking aspect first, with my main bona fides in production sound mixing. However, I strongly emphasize the essential relationship between the three legs of the stool. Production sound, sound editing, and re-recording mixing are the three-way collaboration that results in the sound design of the finished project. The philosophy of this collaboration is, in my opinion, the key to better, more creative outcomes. The over-compartmentalization and subsequent non-communication between the practitioners are completely counterintuitive.

James: I teach production sound, but I have been collaborating with the post-production faculty as we work to develop and improve an overall cohesive course of study in sound. Most of the students are aspiring directors or producers, although we also have cinematographers and writers. So, the focus is on how sound can be used to forward the story and their vision.

"THERE ARE THE ASPECTS OF WORKING ON A CREW AND COLLABORATING WITH THE REST OF THE PEOPLE ON THE SET AND UNDERSTANDING THE DYNAMICS OF A SET. TO BECOME A GREAT MIXER, A STUDENT NEEDS TO HAVE A ‘JOURNEYMAN’ EXPERIENCE TO BUILD ON THEIR CLASSES."

–JAMES COBURN CAS

David: I do a lecture on production sound in my intro class, as well as in my second-semester class, but I made sure we hired a real production mixer (Drew Levinson, who has been very supportive to our students) to teach a three-day seminar class for my students to prepare them for doing production sound on student films.

When did you start teaching? What courses have you taught?
Todd: Three years ago, Peter Snyder from Gotham Sound recommended me (he teaches as well) to NYU. It gave me a great feeling of giving back, and I felt connected to the kids. Most of them are there
organize my thoughts when explaining something to others. It seemed a natural extension of the work and it also kept me sharper by forcing me to find individuals of like-spirit among my above-the-line clients who would support this. It came out of my recognition of all the mentoring that had come my way. Often, I could lobbying for apprentices and interns on my jobs from a kind of “pay it forward” attitude. Then, as I began to be established in the freelance workplace, I'd developed a habit of thinking of myself as a teacher/mentor, so this model was set deep inside of me and in some way, was a legacy.

James: I started teaching at The Los Angeles Film School. At first, I was part time between gigs. It all started with a class called Production One. With faculty members in the role of department heads and director (I was the mixer), we shot single episodes of known TV shows with the students in every role on the set including 1st AD. The actors were professionals hired for each shoot. We had a nice standing set, that was redecorated as needed. My focus then was really about teaching boom operation, mic placement, mic movement, and understanding the shot.

Then after a couple of years, I gained more and more classes, became full time and was eventually promoted to head of sound. I worked more closely in designing the courses, but the emphasis was still on practicums. I specifically taught the correct method of wrapping cable and a lot of boom technique to give the students who wanted to work in sound an entry-level qualification.

Then five years ago, I was actually head-hunted by New York Film Academy (NYFA) in Burbank to teach production sound. This has a much stronger academic quotient, but until the recent changes with COVID-19, it was still heavily focused on correct use of equipment and the practicalities of capturing good sound. NYFA has a wide range of offerings to students—everything from four-week introductions to filmmaking, to associate degrees, BFA degrees, and MA/MFA degrees. The courses I teach are varied, depending on the level of the student and the complexity of the package they are allocated for their projects.

One of my favorite courses is the production sound portion of “Sound for Producers,” where I get to talk about practical aspects such as location scouts and budgeting. We also have a strong documentary department, and I teach sound mixing to the documentary students. I have even co-led a documentary group on a field trip to the Dominican Republic in the past.

Mark: I'd break this down into three phases. First, I grew up in the house of a world-class teacher/mentor, so this model was set deep inside of me and in some way, was a legacy. Then, as I began to be established in the freelance workplace, I’d developed a habit of lobbying for apprentices and interns on my jobs from a kind of “pay it forward” attitude coming out of my recognition of all the mentoring that had come my way. Often, I could find individuals of like-spirit among my above-the-line clients who would support this. It seemed a natural extension of the work and it also kept me sharper by forcing me to organize my thoughts when explaining something to others.

Then in the mid to late 1990s, I began teaching full weeklong workshops in Maine at what is now called the Maine Media Workshops. It is a kind of art camp in a small fishing village for grownups in mid-career looking hard at pursuing their real creative dreams under the guidance of very established industry pros. Students came from all over the globe, all ages, and all walks of life. I continue to teach there. In the first few years of doing this intensive form of boot camp, I developed a curriculum that is a blend of practical hands-on under the main expression of philosophy of approach to the filmmaking through telling the story with sound, as a musician would in a band or orchestra. This is an analogy of being intensively devoted to your particular instrument as a creative tool in service of the project or story in collaboration with your peer musicians playing their instruments together as a unified whole.

The teaching aspect of my career has grown exponentially, and I now lecture and teach broadly and internationally, usually in a university context. Oslo, Amsterdam, Shanghai, Beijing, across the UK, including the National Film School, and also at Greenwich and others, Ireland, the DGA, The Academy Gold Program, Chapman University, etc. There is clearly a need, as the explosion of film major courses across the globe have a common deficit of functional career preparation for production sound mixing. A highly lucrative and creative career is often treated as an afterthought if at all. There is a reason the sound arts are recognized in awards cycles as a primary creative contribution. Academia has a few shining examples out there, but it is in the minority.

Chris: I think I started teaching in the 1980s. Primarily, I teach at the School of Visual Arts, but I've also taught at NYU, Columbia, EICTV in Cuba, Montclair State in New Jersey, and workshops all over everywhere. I teach both production sound mixing and re-recording mixing. If you're teaching one, you're teaching the other.

David: I began teaching at USC in 1993, four years after I got my master's degree from the same school. I went back because, frankly, many of the faculty at USC at that time had been teaching for decades, and most of them were no longer practitioners (and some of them were hired to teach directly out of school and had little real-
world experience). The first few years of teaching were very tough as I tried to change the system so that students learned more about contemporary practices. Most of the older faculty retired not long after I started teaching.

In terms of my schedule, I found I was able to teach at night even when I was busy during the day. I was doing a lot of music editing and dialogue editing, much of which I could do on my own schedule. I looked forward to going to campus every week and sharing my experience with the students (yet I was also unable to sleep the night before teaching out of performance anxiety). Even at that point, the idea of being a full-time faculty was anathema to what I wanted out of my career. Eventually, I was promoted to lecturer, then senior lecturer, then assistant professor. School had been a bedrock for me during my freelance years, and I began to enjoy teaching more and more. In 2008, I accepted my full-time position at CU Denver, where I am now an associate professor.

How do you teach mixing in a classroom environment? Do you provide one-on-one teaching? If so, how much?

James: In the classroom, we focus on proper equipment setup, cable wrapping, boom operation, and most importantly, developing listening skills. The classes have always been small enough that I can work with the students in pairs or small groups, or individuals in a very small class. At NYFA, we try to provide enough equipment in a class for everyone to be hands-on to learn the setups and operation and work the boom. I believe that sound mixing is a practical skill which is learned more easily with hands-on and face-to-face teaching.

Each student will be developing and shooting short scripts all the time. I spend time consulting with individual students on bringing sound into their scripts, how sound can create emotional response, and practical aspects of their shoot.

The real opportunity to learn mixing happens when we go out and shoot. Each class has practical shoots on locations, which I attend as a faculty advisor. The sound department will be a two-person team that alternates between mixing and booming. However, on the set, I will also sometimes discuss other technical factors, such as shot setups, preparation, and time management, and how all these other departments affect what the sound department needs and vice versa.

Tod: We have a classroom with 12 students. I teach more about the philosophy of being a sound mixer; what sound is, how you record it, how to use microphones, and how to interact on set. A lot of what I like to teach is stuff that is difficult to learn outside a film set. How to integrate with props, grip, electric, etc. I want them to leave the program knowing how important sound is, how to work with sound, and how to communicate with sound. Also, I want them to learn how to listen.

Mark: First, limiting class size is super important if we’re talking about a hands-on gear aspect of teaching. That said, again, like musicians, the obsession with technique ideology and hardware can block creativity and discovery. It’s essential to achieve fluency with your tools, but the fundamental mission is to consistently achieve connection between the characters, their story, and the audience.

Chris: I do teach mixing in a classroom environment—a VERY SMALL class with an Avid control surface. Tom Fleischman CAS and I co-teach a class to advanced students. We teach one-on-one, in small groups, and then the kids work independently on their own projects. We try to combine storytelling and technical ideas.

David: I agree with Mark and Chris about class size. We try to keep it between 10 and 20 students.

Are you still teaching during the pandemic? If so, how has this changed your teaching? Do you believe it is possible for students to be fully educated online?

James: I’m still teaching. As soon as it became clear that the school would be shifting to virtual, I immediately rewrote the current course I was teaching. I have since revised all of my classes and created new syllabi and rubrics. They are actually better. The new classes I’ve written have more theory, including a historical component that was not in my older classes. We watch and listen to a lot of clips. I really focus on listening.

Most of my students will never become mixers since most want to be directors. So, I teach them to break down scenes and scripts. We talk a lot about how it all starts with the script. We will often compare the script as written and the final cut scenes, analyzing how sound is being used to support the story.

I have incorporated a wider range of
equipment, including apps available on phones, into my teaching. This has made sound mixing more accessible to the students as they continue to exercise their amazing creativity under challenging circumstances. Some have been directing actors over Zoom. Others have roped in their family members as actors in their stories.

Recently, the students—many of whom initially went to their homes overseas—have returned to work on their small COVID-19 compliant shoots. I have been demonstrating equipment use via Zoom and attending their shoots remotely.

However, to really gain the skills of sound mixing, there must be a practical element to learning and practicing in the field. It’s not enough to know how to switch the gear on; there are also the aspects of listening through the headphones, on the set. Plus, there are the aspects of working on a crew and collaborating with the rest of the people on the set and understanding the dynamics of a set. To become a great mixer, a student needs to have a “Journeyman” experience to build on their classes.

**Tod:** Yes, mostly in-person. We started in class in September, then we went to Zoom in November, and came back to in-person. The most difficult to teach is hybrid, which is some students in person and some on Zoom. The Zoom students got the short end of the stick.

I think, to a certain level, you can teach online, but when you get into the workshops you need to be in-person. You need to record sound, hear it, and get comfortable with the technology.

**Mark:** First, yes, I am teaching in multiple situations virtually; primarily with the Zoom platform. I’ve taught in Italy, AMPAS, and Maine this way, as well as chaired large-scale information forums, also on Zoom.

Philosophically, “fully educated” is a bit challenging for me to respond to because it is an ideal I don’t recognize. I believe we must continue to learn new things till we stop breathing. Segovia was still practicing in his 90s because he wanted to improve, grow, and stay relevant.

It seems to me the primary element of a complete education lies within the student, not the institution or the faculty. Again, like a musician, practice is key. Day in, day out, always retracing the steps of what is known and adding to it as an ongoing proposition. So, my answer is yes, learning online can lead to a “full education,” only if it is in combination with all the other necessary elements.

**Chris:** I continued to teach beginning sound during the pandemic when we were only teaching online with Zoom classes. But Tom and I canceled our advanced sound class because there was no way for the kids to get their hands on the equipment. I do not think one can be fully educated online. A motivated student will learn no matter what the circumstances are. But so much about teaching is the human thing—the interactive nature of one-on-one teaching and small groups; encouraging students to take risks, encouraging students to listen, encouraging students to have the patience to do things a new way or a harder way because it will be a better way. Reminding students to have faith in themselves and their own gut feelings.

**Do you have any specific techniques you use to open up students’ ears to become good listeners?**

**Mark:** Yes. I use several exercises to move in this direction. Mainly, the first objective is to develop listening skills that can determine what is being heard and what is the directionality. We do location scouts and assign detailed reporting on what various elements are in any given environment. We apply this for various exterior and interior locations. It is a good entry point for learning quick analysis for both emphasis and mitigation. It also opens the door of discussion of acoustic treatment of environments: the understanding and control of acoustic wave energy in practical work situations and ways to use or avoid organic sound elements.

I then add to this the dissection and...
the technical and focus on the philosophical. Every scene is different. All of these concepts are new for them. They are creative and artistic, so I try to simplify them; just setting up the wireless, set the level, scan frequencies, and send it into a 633. Digital world. Certain people grasp more quickly than others. It is definitely daunting to so they know what older films sound like. We listen to the dialogue on each of these films.

David Bondelevitch CAS MPSE
to campus. There is a fairly steep learning curve to many of the technologies that we use, and many students think they will never use those technologies because they will be doing their own mixing the way they want to, which usually involves tools that they already know and can afford. It is very difficult to motivate them to go outside their safety zone.

What is the hardest part of mixing?
Tod: I’ve been a sound mixer that went kicking and screaming to the wireless world. I understand it, but I find that you do sacrifice one for the other. The hardest part is using multiple cameras. It is difficult to mic for both cameras at the same time.

James: Listening. Understanding and interpreting what they are hearing.

Mark: Staying open to solutions, staying calm and engaged under pressure. Getting fluent enough to relax into the intensity. Developing a subconscious response skill. Often, if you have to think a thing in the moment, it can be too late. Your senses need to become one with the other performers—both in front of and behind the camera. This takes time to develop but is very important if one is to progress.

**James:** I have my students listen to great podcasts from Radiolab and Twenty Thousand Hertz. They analyze and write a breakdown of the podcast for discussion. I then ask them to create a short podcast which uses sound to support the story. It’s so interesting to listen to what they create. They also have short essays where they are asked to analyze a scene for sound. We talk about signature sounds. I have them listen to examples of spoken words that I recorded at different settings, with very subtle differences, to train their ears.

Do you show movie clips in classes? If so, what clips do you use?
**Tod:** Nomadland, Minari, Mank, One Night in Miami…, Sound of Metal, and The French Connection so they know what older films sound like. We listen to the dialogue on each of these films.

James: Yes—many. I have clips from classic films, as well as recent. Some of the films I have used include Munich, Parasite, different Star Wars films, Raiders of the Lost Ark, Apocalypse Now, Saving Private Ryan, Whiplash, Singin’ in the Rain, Some Like It Hot, and The Jazz Singer. I also sometimes use clips of documentaries about sound or filmmaking, and I encourage the students to watch the full versions later. I use the opening sequences a lot.

Have any new technologies been stumbling blocks for students learning to mix?
**Mark:** Yes, all of them.

**Chris:** Every new technology starts out as a stumbling block. And then once you master it, you wonder what the problem was!

**Tod:** The good thing is that they are all “digitally minded” because they grew up in the digital world. Certain people grasp more quickly than others. It is definitely daunting to them; just setting up the wireless, set the level, scan frequencies, and send it into a 633. All of these concepts are new for them. They are creative and artistic, so I try to simplify the technical and focus on the philosophical. Every scene is different.

**James:** No. Most students seem to be able to gain a fundamental understanding of the hardware fairly easily. Using it on the set is another story. It takes them some practice to get it right. The first time around is often difficult, including boom placement and setting correct levels. The physical strength required to operate the boom is always underestimated. Their biggest challenge is learning to listen on the set, rather than anything to do with the new technologies.

**David:** I think the cost of education has left students with little money to invest in their own gear, so they are frequently using their own cheap and non-standard setups. This means that they are not learning the professional gear that we have. This was exacerbated during the pandemic. Although we offered pro equipment at school, no one wanted to go
Chris: Listening. Not losing sight of the fact that you’re always, ALWAYS telling a story. That it’s not about the mixer—it’s not about the sound—it’s about the story.

David: I have always felt the most difficult part is working as part of a crew and interacting with everyone on the set in a productive manner.

**What is the hardest part of teaching students how to mix?**

James: Teaching them to listen.

Mark: That there is no single answer. Every shot is handmade and requires your full attention and intuition to contribute the right approach. You must take full responsibility under all circumstances, even if it seems impossible. “Never give up, never surrender” *(Galaxy Quest)*.

Chris: Reminding students that there are no shortcuts.

Tod: For these students, it would be the technical side. They understand all the concepts. I’m probably the least technical mixer you will meet, even though I put together a huge cart setup for *West Side Story*.

**Do you have any former students/mentees that you would like to mention?**

Chris: Well, of course, Mark Ulano! But many younger ones as well—people who are carving out careers in the sound business for themselves such as Brian Perry, Sven Rethemeier, and Carol Yán Li come to mind. I’m probably leaving out a dozen good people—sorry, blame it on COVID.

Mark: Chris Howland in Los Angeles. Mike Markiew in Calgary. Kyra Westman from Colorado, now working in L.A. David’s student, Danny Maurer, spent some mentee time with me and is well on his way. Nick Grant in the UK. A new mentee through AMPS, Allison Declercq-Matthis in Glasgow, likewise Wäite Jonny.

James: Phillip Ta, one of my best students, actually took up mixing and was building a career. Then he chose to join the Army, where he is currently doing very well. Mehrnaz Mohabati was a student who has gone on to be a successful post sound mixer. She started as a music producer.

David: I’ve had surprising success in Denver motivating students in production sound. Danny Maurer, who won the first CAS Student Recognition Award, was the first student of mine to get into production in Denver. Steve Allmendinger followed, then David and Jon Griesinger, Tom Hopper, Zach Suter, and Kelly McNamara. At USC, Ramsey Mellette CAS was a student. I’m sure there are more that I am forgetting.

**Is there anything else you would like to add?**

Tod: What is very heartening is when they go out to shoot and come back and say, “I used your tip for wiring here,” or “I changed the location based on your comments.” That’s one of the best feelings as a teacher. When it works, they learned it, and said they lived through it.
James: I’m currently writing a book about production sound mixing that I intend to be a college textbook. I’ll be reaching out to members of the CAS for some stories from the trenches. I truly enjoy teaching production sound to future filmmakers. It sometimes takes a while for the message to get through, but once it does, it changes the quality of their films for the better. I like to think I’m having a positive influence on them, helping them to become better filmmakers. I am keen to help elevate production sound as a discrete department and course of study within film schools. I’d like to be able to produce more sound mixers and other sound creatives rather than only teach to directors and producers.

Chris: I’ll finish with a story. My first job was not a paying job. I swept up at a music studio in Englewood, New Jersey, and learned about microphones whenever my boss felt like teaching me. He didn’t pay me but he gave me a second job so I could make money. On weekends, I copied eight-track tapes for a penny a tape. After about three months, my boss got a call to do a TV documentary in the Midwest. He didn’t want to leave his studio, so he asked me if I wanted to do it.

“It’s simple,” he said. “Interviews with scientists. All you have to do is attach the mic to a lanyard and hang it around the guy’s neck.” The job paid $25 a day. Of course, I wanted to do it!

When I got to the Midwest, the producers told me they didn’t want to see any microphones in the shots. The mics were RCA BK-12’s, which are about the size of my thumbs. How was I supposed to hide them? I tried clipping them underneath the men’s ties. Every time the men leaned back, their ties bulged out like they had tumors. I went to the men surreptitiously.

“Please don’t lean back when you talk!” I said. Now, their voices sounded muffled because the microphones were under their ties. I went to the men a second time.

“Could you speak really LOUDLY?” I asked them. The men were wearing heavily starched lab coats. Every time they gestured, their coats went crackle and pop! I went to them a third time: “Uh—if it’s okay—could you sit real still when you’re speaking on camera?”

The scientists were wonderful men. They sat as still as stones and spoke at the top of their lungs. They gave me great interviews. At the end of the job, the director decided to get some shots in their laboratory. I decided to go for some sound effects. They gave me a pair of asbestos gloves and I stuck my mic into a cage of feral cats. The cats hissed and howled and bit my gloves. The director said he’d use the effects, along with the interviews. I went back to the East Coast knowing what I wanted to do with my life. I wanted to be a soundman. I thought I was ready. I went around New York City telling people I was available. I didn’t realize that my first job had been easy. The second job was difficult. I had 12 people talking together in a room. They were improvising, so you didn’t know who was going to talk next. I hung three microphones from the ceiling and recorded their discussion through all three mics simultaneously. (And mixed all three mics onto one track.) “Newman” the producer said when I played him the production track, “That’s the worst sound I ever heard in my LIFE.” But I didn’t know what else I could do, and I’d already invested in the Nagra recorder—so I kept going. And eventually, I had a career.
Post Mixing for Commercials

by CAS Associate member Sam Casas

As a re-recording mixer working primarily in nationally televised commercials for the last 20 years, I’ve mixed many iterations of short form content, including Super Bowl commercials, television promos, music videos, radio commercials, and even those pre-taped sports packages that play during live talk shows such as Fox NFL Kickoff. In all actuality, mixing short form content is not vastly different than mixing long form content. You are still taking someone’s vision and trying to bring their message and story to life. But particular to commercials is how we approach dynamics, a single-person workflow, and how we attract and retain clients. Please allow me to share some of my experience and explore some of the different ways mixing short form has also helped me when attacking a long form project.

Levels

Have you ever wondered why commercials always seem to blast you in the face with excessive volume? Well, that’s my job. The advertising mindset is all about grabbing your attention and grabbing it quickly. Prior to the passage of the CALM Act in 2010, commercial mixers mixed to make sure we didn’t distort our ¾ inch and VHS dub copies, but aside from that, it was basically like the Wild West. Before the standardized loudness spec, I’m sure my mixes were all over the place. On the plus side, I do remember getting booked on a job once solely because the clients liked how loud an Applebee’s commercial I mixed sounded on the air!

Structurally speaking, on a commercial, there is not a lot of time and space to develop dynamics. In fact, an overly dynamic mix, especially one with little or no dialogue, is at high risk of sounding quiet on the air—and advertising clients do NOT like that. This presents the challenge of creating a mix that sounds dynamic, but doesn’t look too dynamic on the meter. Care must always be used when using dynamic compression on dialogue to avoid side effects that sound artificial. Of course, I always want my dialogue to sound natural, but when playing simultaneously against a loud music track, a different treatment is often required. To maintain intelligibility and energy, I might use a touch more compression on dialogue and voiceover and tightly weave music levels with a restrained approach—kind of like mixing a record. This helps keep all of the elements working together.

Lone Wolf

In general, I’m a firm believer that collaboration leads to better ideas than trying to do everything yourself. Working as a team on a film or series allows each participant to focus on their assigned segment of the project, which can provide a huge advantage. When mixing short form, with a few exceptions, it’s a one-person show. In addition to mixing, the mixer also handles the dialogue edit, VO and ADR recording, music editing, FX editing, and Foley. If I think about it, I probably spend more time editing than actually mixing. Often a writer might toil over every syllable of a voiceover-heavy spot to try and create the perfect performance. Sometimes legal comes back and asks you to create sentences using words that have no business being next to each other, so I often feel like Dr. Frankenbyte. Then there are versions galore. Cutting down a 60-second spot to 30 seconds, 15 seconds, and even six seconds. Sometimes you will have sets of nearly identical spots that have a few small word changes that would be easy to miss unless you are actively paying attention. So staying organized with a solid understanding of the big picture is essential.

Perhaps a downside to working solo is that there are few opportunities to be in a mix with another experienced mixer to bounce ideas off of. Since commercial mixers often share clients, there can be a temptation to be competitive and secretive about the tools and techniques we use. This really doesn’t help anyone in the long run. The CAS, MPSE, Facebook groups, podcasts, and online tutorials have really opened my eyes and ears to new ways of working over the last couple of years. I’m glad the desire and opportunity to learn and share knowledge seems greater than ever these days.

Getting the Gig

So how does one get into commercial work? While some freelance commercial mixers are out there, it is definitely advantageous to be hired by a facility. At a commercial mix facility, a team of audio producers handle bidding, rate negotiation, scheduling, coordinating, and billing. Jobs can last between a couple of weeks to as short as an hour, so trying to fit all of those puzzle pieces together is more than a full-time job. When there is a scheduling conflict or a project does not have a specific mixer request, the audio producer makes the call. So, keeping your audio producer happy and looking good is essential.

Volume and Vibe

I try to remember that when clients are in the room (or on the Zoom), as a mixer, you are “on stage.” Of course, I always strive to make the mix sound as good as possible, but the experience is just as important. Many agency clients see the mix as a break from their normal routine, a nice chance to get out of the office. A well-stocked fridge with plenty of delicious food options certainly doesn’t hurt. If you can make the mix sound good and the experience enjoyable, you create working relationships with your clients built on trust and friendship. Do that and you generate future bookings with members of that team and their associates as well.
Conclusion
Getting to work on many shorter jobs with a wide variety of clients keeps my job interesting and fun. I love that I have the ability to wear many different hats in the process every day. What I’ve learned most working in commercials is that, while mixing with your ears is important, it’s a good idea to also keep in mind where your material is going to play—and maybe keep checking those meters as well.

Here are some screen shots from a recent commercial campaign titled “Pizza” for the food delivery and pickup company Postmates. You can listen to (and watch) the ad on YouTube: https://www.youtube.com/watch?v=gDc-6FIZyEs

Choosing VO Tag Selects
An example of how a VO artist will do several takes of a single line. Together with the writer, we choose the take of each version that has the performance they are looking for.

Building VO Versions
This is fully staged, but while building voiceover options, I generally stack different voiceover takes and mute and unmute to make sure the different options will match for tone and timing.

Building Mix Versions
Here is a picture of a couple versions of a 30-second Postmates spot I mixed called “Pizza” that has several different lengths and voiceover end tags designed to play in different markets. The third audio track from the top is called “Edit Guide.” I like to create a blank group region and edit on the grid to mark the edit points. I find this helps me re-conform from the longer length spots down to the shorter versions.
EIPMA Speed Mentoring Event

by David Bondelevitch CAS MPSE

The Entertainment Industry Professionals Mentorship Alliance (EIPMA), supported by the Cinema Audio Society, engaged student nominees from the Cinema Audio Society’s Student Award (along with MPSE and ACE student nominees) by a KMD Pro Speed Mentoring™ event, organized by Karen Dunn.

EIPMA President Bernard Weiser MPSE commented, “Most students are hungry for information they can use as they start thinking about how to enter into the industry. EIPMA is dedicated to helping to inform those talented individuals aspiring to find meaningful employment in entertainment by organizing events such as these.”

The students who attended are all student nominees from the three organizations:

**CAS**
- Brandyn Johnson (Winner, University of Southern California)
- Anna Cassady (University of Southern California)
- Lindsey Ellis (Chapman University)
- Vandana Ramakrishna (Annapurna College of Film and Media, Hyderabad, India)

**MPSE**
- Yin Lee (Winner, National Film and Television School)
- Varun Arsid (Annapurna College of Film and Media, Hyderabad, India)
- Andree Lin (Chapman University)
- Karthik Mohan Vijaymohan (Chapman University)
- Juliana Henao (Savannah College of Art & Design)
- Harry J.N. Parsons (National Film and Television School)
- Ed Rousseau (National Film and Television School)
- Paul J. Vogel (University of Southern California)

**ACE**
- Samuel Bailey (Winner, University of North Carolina School of the Arts)
- Kendall Best (University of North Carolina School of the Arts)
- Conor Callahan (University of North Carolina School of the Arts)
The students were paired briefly with industry experts from all three organizations in rapid-fire rounds so that each student received one-on-one advice from multiple professionals, including:

**CAS**
- David Bondelevitch CAS MPSE
- Bob Bronow CAS
- Sherry Klein CAS (Student Recognition Award Committee Chair)
- Peter Kurland CAS
- Mike Minkler CAS (Former President)
- Frank Morrone CAS MPSE
- Mark Ulano CAS (Former President)

**MPSE**
- Scott Gershin MPSE
- Scott Jennings MPSE
- Mark Lanza MPSE (President)
- Chris Reeves MPSE

**ACE**
- Nena Erb ACE
- Inbal Lessner ACE
- Fabienne Rawley ACE
- Harry Yoon ACE

“IT WAS AMAZING TO BE AROUND SUCH STALWARTS AND LEARN FROM THEM. AS AN INTERNATIONAL STUDENT, I NEVER IMAGINED I WOULD GET SUCH AN OPPORTUNITY. IT IS HIGHLY INSPIRING AND MAKES ME WANT TO KEEP WORKING HARD SO THAT I CAN BECOME LIKE THEM ONE DAY.”

—Feedback from one of the student participants
CAS Student Recognition Award nominees were impressed with the high-profile nature of the mentors. Former CAS President Mike Minkler is a three-time Oscar winner, former CAS President Mark Ulano received an Oscar for *Titanic*, and Peter Kurland CAS is a three-time Oscar nominee. Bob Bronow CAS has three Emmy Awards, and Sherry Klein CAS and Frank Morrone CAS MPSE. Each have two Emmys.

The reactions were very positive. One student nominee wrote: “It was amazing to be around such stalwarts and learn from them. As an international student, I never imagined I would get such an opportunity. It is highly inspiring and makes me want to keep working hard so I become like them one day.”

“MOST STUDENTS ARE HUNGRY FOR INFORMATION THEY CAN USE AS THEY START THINKING ABOUT HOW TO ENTER INTO THE INDUSTRY. EIPMA IS DEDICATED TO HELPING TO INFORM THOSE TALENTED INDIVIDUALS ASPIRING TO FIND MEANINGFUL EMPLOYMENT IN ENTERTAINMENT BY ORGANIZING EVENTS SUCH AS THESE.”

–Bernard Weiser MPSE EIPMA President
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We cross paths with many people over the course of a career. Some are quick acquaintances, some become regular colleagues, while still others we are fortunate to call friends.

The CAS wishes to recognize those who have worked in the industry and have recently passed on, leaving a great legacy behind them to our membership.

**Les Fresholtz**
CAS Career Achievement Recipient and Multiple Oscar-Winning Re-recording Mixer

Re-recording mixer Les Fresholtz passed away in March. Over a nearly 30-year career, his hands were on the faders for some of the best-known films of the ’70s and ’80s, including *Star Wars, All the President’s Men, Blazing Saddles, Ghostbusters, National Lampoon’s Vacation, Lethal Weapon,* and *Tootsie.* Les was nominated for an Oscar 14 times, bringing them home for *All the President’s Men* in 1977 and *Bird* in 1989. In 1995, Les was the recipient of the CAS Life Achievement Award, the precursor to today’s Career Achievement Award. The CAS extends our condolences to Les’ family, friends, and colleagues.

**Claude Riggins**
Production Sound Mixer

Production sound mixer Claude Riggins CAS passed away in January. Born in Marshall, Texas, Claude climbed the sound ladder in Los Angeles, working his way from cable person to boom op to production sound mixer at Universal Studios, where he was one of the first few people of color to become a sound mixer. Claude worked on many projects during his career, including *Alien Nation, V, Bionic Woman, The Incredible Hulk, Simon & Simon,* and *Dr. Quinn, Medicine Woman.* He received an Emmy nomination for his work on *The Jacksons: An American Dream.* Claude was always a positive presence on set and noted that his favorite set location was Hawaii for *Magnum, PI.* Retiring after the series finale of *Dr. Quinn, Medicine Woman* in 1997, Claude enjoyed spending time with his family and was proud to see his great grandchildren working in the industry he loved. The CAS extends our condolences to Claude’s family, friends, and colleagues.

**Al Schmitt**
Music Engineer and Producer

Legendary recording engineer and producer Al Schmitt passed away in April at the age of 91. Al’s 20 Grammy Awards, spanning artists such as Henry Mancini, Steely Dan, Ray Charles, Luis Miguel, Diana Krall, and Paul McCartney, make him the most Grammy-decorated engineer in NARAS history. Getting his first break while apprenticing under Tom Dowd, Al recorded Duke Ellington. Al would go on to record a truly diverse array of artists and garner more than 150 Gold and Platinum records. He co-founded the Grammy P&E Wing, was one of the first recording engineers to shift from staff engineer to freelance (in the ’60s), and even has a star on the Hollywood Walk of Fame! A quick search will yield many tributes for this influential and well-loved engineer. The CAS extends our condolences to Al’s family, friends, and colleagues.

For detailed biographies, please visit the CAS website at CinemaAudioSociety.org
BEEN THERE DONE THAT

Philip Perkins CAS mixed Drea Cooper’s dance short ARTWorks and is now mixing the PBS feature doc The Island in Me, while anticipating the imminent arrival of his first grandchild!

Joe Earle CAS and Doug Andham CAS are currently busy mixing Season 3 of Pose for Ryan Murphy Television, airing on FX, on Stage 3 at Formosa at Paramount. We wrapped Season 4 of Snowfall for FX Networks at the beginning of April and we are looking forward to starting the mix of American Crime Story: Impeachment soon. Cheers to everyone! So happy to be back with the crew!

Amanda Beggs CAS is so incredibly grateful to be back at work with some of her favorite people. She wrapped up mixing the first season of Starz’s new show Blindspotting in February with the legendary Randy Johnson on boom, Saif Parkar as utility, and Ty Moore as sound trainee. She then jumped right into the first season of Netflix’s Monster with the absolute dream team that is boom op Zach Wrobel, utility Saif Parkar, and the soon-to-be utility and all-around phenomenal sound trainee Britney Darrett. Britney will be leaving soon to start work as a utility on a new show, and CAS Student Recognition Award winner Brandyn Johnson will be replacing her as the trainee!

Gary Bourgeois CAS and Kyle O’Neal are mixing Debris for NBC and also mixed the pilot Ways and Means for CBS. Gary mixed the final and Atmos version of The Card Counter at South Lake Audio.

Gavin Fernandes CAS has been finishing Season 2 of CBS Blood and Treasure and Season 2 of Escouade 99 for TVA in Montreal and will move on to a feature in Toronto.

Lori Dovi CAS reunited with Tom Hartig (boom) and Jennifer Winslow (utility) on the ABC pilot Adopted, written and produced by Shawn Vance and Jimmy Kimmel… Seeing the light at the end of the tunnel!

Karol Urban CAS MPSE and Kurt Kassulke CAS finished Made for Love for HBO Max. We are also soon completing Season 17 of Grey’s Anatomy and just recently completed David E. Kelley’s Big Sky for ABC. Finally, we begin mixing Netflix’s Gentefied Season 2. We are so grateful to be busy and to see so many others also busy after such a difficult year.

Woody Woodhall CAS has started the year supervising sound editing and re-recording mixing several great projects. No Ordinary Life is a feature documentary premiering this month at the Tribeca Film Festival. It chronicles five camerawomen who worked the front lines of many war zones for CNN over the last several decades. This powerful doc puts you right in the action, featuring much of their footage shot from Tiananmen Square, Desert Storm, Iraq, etc., and also stars many of the on-camera journalists for CNN at the time like Christiane Amanpour. It shows the strength and resiliency of these powerful women and afforded me the opportunity for some great sound design to complement their images. I have also posted the narrative feature film The Inheritance, starring Mena Suvari and Urkel himself—Jaleel White. This film was shot during the depths of the COVID crisis and will be opening in theaters this fall.

Lee Orloff CAS returned from many lovely months of pandemic-imposed retirement rehearsal to mix Cry Macho for Clint Eastwood’s Malpaso Films, an OG poor man’s free road movie. Jeffrey Humphreys (boom operator) and Jordan Bodhaine (sound utility tech/2nd boom) were along to share New Mexico’s unique charms. Once Los Angeles had bounced back after its recent wave of COVID spikes around the start of the year, we started The Gray Man, a Joe and Anthony Russo film for Netflix. Jeffrey Humphreys and Adam Mohundro are the boom operators and Rene Defrancesch is the sound utility tech/2nd boom.

Geoffrey Patterson CAS is currently working on the Untitled Lakers Project for HBO.

From Uttam Neupane CAS: While entire film productions paused and movie theaters shuttered following all the health and safety protocols, we recently completed the feature film Prakash in the mountain village of Jumla, Nepal, where I was appointed as production sound mixer. The film shot for 45 days. While filming at a location with interesting and distinctive sound, we had to face windy storms and heavy snowfall, and the temperature would get to be below -7 degrees Celsius. While the impact of the pandemic was still present, the whole cast and crew were working very actively and were very optimistic toward the film. My experience with the team and with the people from the Himalayas was very surreal.
Tara Paul CAS just wrapped Season 32 of *The Simpsons*! The whole season was recorded, edited, and mixed remotely to help everyone stay healthy. She is currently mixing Season 4 of *The Good Doctor* remotely, and is looking forward to starting the series reboot of the movie *I Know What You Did Last Summer* (Amazon Studios and Sony Pictures) this summer!

Frank Morrone CAS and Rob Carr CAS are on Formosa’s Stage 4 mixing *Roswell, New Mexico* and *Legacies*.

Devendra Cleary CAS here! After taking it easy in early January due to county request that film productions stay on hiatus; we returned to finish out our third leg of *Dear White People* for Netflix. Chris “Catfish” Walmer, Kelly Lewis, and Venus Leone kept it all running smooth. After that, Catfish, Heather Fink, and I jumped onto a pilot for Warner Bros. called *Pivoting*. Next, onto Season 3 of *Black Monday* for Showtime, with Tanya Peel, Kelly Lewis, and Alexis Schafer rounding out the team. Right now, we’re prepping to load onto Season 1 of an eight-episode miniseries called *Gaslit* for Universal and Starz, with Catfish, Kelly Lewis, and Chloe Patenaude as my teammates.

**BEEN THERE DONE THAT**

Education suffers the most in the fast-pace world of technology. By the time a book hits the shelves, it may already be out of date. Even so, the sound world fights its best fight to provide some cutting-edge educational materials for those breaking into the industry.

Released this past January, *Behind the Sound Cart: A Veteran’s Guide to Sound on the Set* by Patrushkha Mierzwa, joins the short list of production sound educational books. Similar to *The Location Sound Bible* (Ric Viers) and *Location Audio Simplified* (S. Dean Miles), *Behind the Sound Cart* offers up a world of insight specific to production sound for film, teaching anyone new to the industry what sound entails on a film set. The book offers the unique perspective of focusing solely on sound as a utility or 2nd assistant sound on a production.

Having worked big projects such as *Titanic* and *Once Upon a Time in Hollywood*, Mierzwa adds her observations and experiences to the
WHAT HAPPENS BEHIND THE SOUND CART, STAYS BEHIND THE SOUND CART—NOT ANYMORE
A PEAK BEHIND THE SOUND CART

by CAS Associate member Whitney Worthen

educational side of sound. From gear to job procedurals, the author walks through the entirety of being a sound utility on set and preparing newcomers for the expectations of the job. Chapters 8 (Equipment), 10 (Expendables), and 11 (Production) walk through vital basics for anyone newly entering the industry as it covers the spectrum of sound gear, sound accessories, and a call sheet walkthrough. From tapes to the first day on set, the chapters are the tell-all beginner’s guide.

Those entering from film school or who are more familiar with being on set might find Chapters 13 (Booming), 14 (Plant Microphones), and 15 (Wiring) more their speed. These chapters focus on technique and the hands-on job of a utility. From the creativity of car rigs and wiring to the precision of booming, the chapters tackle the art of a sound utility and all that it may entail—including being called upon for a second unit booming (and insight on the technique of booming).

While Behind the Sound Cart may not go into the full technique of wiring like Thomas Popp’s Down to the Wire, Mierzwa offers insight into frequency coordination, the world of wireless, costumes, and working with high-level talent. Even the most experienced utility might garner a handful of new wiring and plant ideas with photos of some of her more creative rigs included.

While the general target audience may be newcomers to the industry, Mierzwa offers insights for all experience levels. One of the most helpful resources offered in the book comes in the very back with a slew of the paperwork one may encounter on set. After a long hiatus, one may seek a refresher on time cards, transportation run sheets, or L&D slips. Along with set paperwork, the author offers helpful templates for day playing notes, Comtek directories, or daily task checklists. She also offers her own insights to financial strategies, negotiations, and mentoring that one may have never tackled in their own career. If that’s not enough, Mierzwa answers a chapter’s worth of those burning questions one may have always wanted to ask but always felt too foolish to ask.

One thing a reader may realize throughout the book is that one is never too old to learn tricks. Whether simply offering a different perspective on how things are done or teaching someone a new technique, Behind the Sound Cart offers an abundance of insight into the ever-evolving world of production sound.
Left: Britney Darrett (sound trainee), Saif Parkar (utility), Amanda Beggs CAS, and Zach Wrobel (boom op) on the Netflix show Monster. Above: Beggs back in a process trailer on Blindspotting.

Woodward Woodhall CAS pre-dubbing one of the animated sections from the upcoming feature doc on the electronic musician Moby called Moby Doc.

Griffin Richardson CAS saw this while filming in the Brooklyn Navy Yard for Suspicion for Apple TV – right next to his location!

Westwind’s team celebrating the wrap of Season 1 of Big Sky for ABC! (L to R): Chris Unthank, Lisa Peardon, Craig Holbrook, Karol Urban CAS, Kurt Kassulke CAS, and Marcelo Payes.

Uttam Neupane CAS on the set for Prakash in Nepal. Writing the sound report (above) and checking the dialogue after a long follow shot (left).
EQUITY
DIVERSITY
INCLUSION
SOLIDARITY

WHAT MAKES US STRONGER