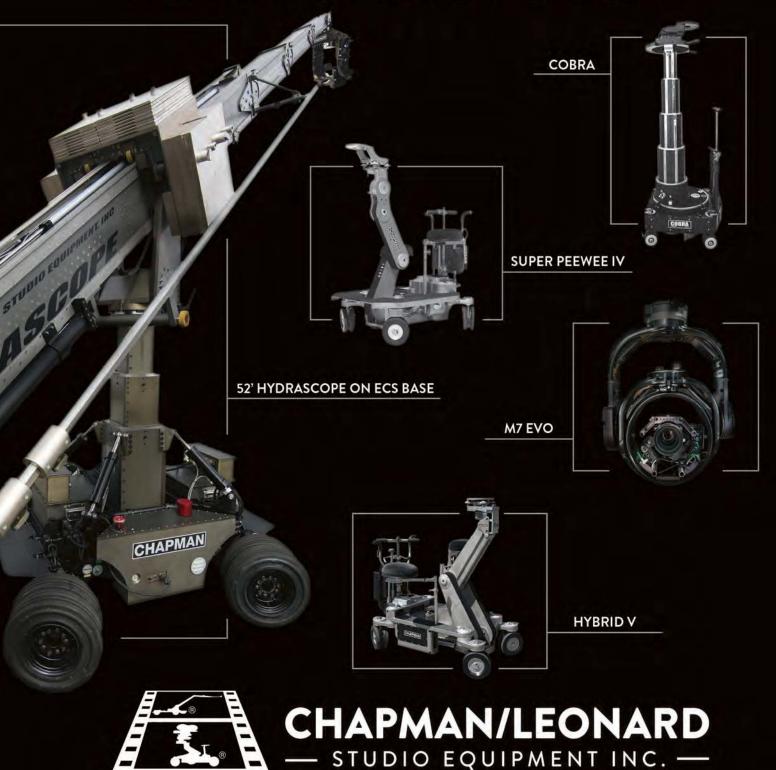


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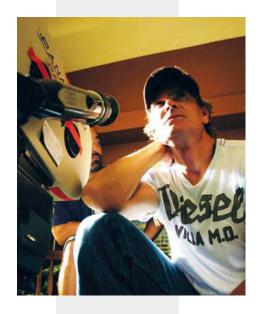
The 12G-SDI and HDMI connections are multi-rate which means they automatically switch speeds, making them compatible with all SD, HD, Ultra HD, 2K and 4K DCI equipment and formats. Formats such as 720p, 1080i, 1080p and Ultra HD are all supported at up to 60 frames per second. You can even record 2K and 4K DCI formats at up to 25 frames per second for digital film work!

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Letter from the President



Dear SOC Members and Camera Operator Readers:

Congratulations to the nominees and honorees of this year's memorable *SOC Lifetime Achieve*ment Awards that took place on Saturday, January 18th at the Loews Hollywood Hotel.

It was a great honor to present Jamie Lee Curtis with this year's SOC President's Award, Natalie Portman with the SOC Governors Award, and Steven Poster, ASC the SOC Distinguished Service Award for his years of tireless service as President of the ICG: International Cinematographers Guild. These awards have the legacy of being presented to individuals who demonstrate dedication, consistent and enlightened service, and leadership in the film and media industries.

It is with great pleasure that the SOC presented Colin Anderson, SOC with the *Lifetime Achievement Award for Camera Operating*. Anderson is known for his work on *Star Trek: The Rise of Skywalker* (2019), *Velvet Buzzsaw* (2019), *Phantom Threads* (2017), and *Star Trek: Episode IV: The Force Awakens* (2015) to name just a few. He was the recipient of the 2011 SOC Camera Operator of the Year – Feature Film Award for his work on *The Town*. The SOC also awarded Dave Levisohn, SOC the SOC Camera Operator Award for Live & Non-Scripted. Some of Dave's credits include; *All in the Family, Grease Live, America's Got Talent*, and several prominent awards show such as *The Academy Awards, The Grammy Awards, The Golden Globe Awards*, and *The Screen Actors Guild Awards* to name a few. David has also been nominated 54 times and has won 19 EMMY Awards for *Outstanding Technical Direction, Camerawork, and Video Control for a Limited Series, Movie or Special*.

The Camera Operator of the Year – Feature Film went to Geoff Hayley, SOC for his work on *Joker*, and *The Camera Operator of the Year – Television* went to Jim McConkey, SOC for his work on *The Marvelous Mrs. Maisel.* Congratulations!

I'd also like to offer a special thank you to our Awards producer, Kristin Petrovich, our volunteers, and to everyone who once again helped make the awards such a success. Thank you!

This coming year, the Board of Directors will continue to increase our membership and focus our efforts on elevating the position of the camera operator. The SOC believes that through education and working with our fellow industry professionals, we can strengthen and elevate the craft of the camera operator in the entertainment industry.

Our continued efforts and passion to advance the art and craft of the camera operator is the result of your dedication, effort and participation, and we thank you—our members and corporate sponsors —for your support!

Here's to continued success in 2020!

Sincerely,

George Billinger, SOC

Society of Camera Operators, President

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CAMERA SLIDERS

SOC MEMBER DAVID FREDERICK TEACHES WORKSHOP AT AFI

This past fall, the American Film Institute graduate level first year Cinematography Class invited past SOC President David Frederick back for the fifth year in a row to present and speak at a full-day class taught by professor, Jacek Lassus, ASC, PCS.

Dave presented on topics which included: real world professional set procedures and politics, safety as job number one, skills training necessities, and striving for ultimate creativity in compositions and camera movements.

The underlying theme of the day was how camera operators serve the many levels of productions with artistic, efficient, and economic savings aspects in filmmaking. All students filled out SOC Student Membership applications, and two were already members.



David Fredericks, SOC with AFI Cinematography Class. Courtesy of David Fredericks

SOC UNDERWATER CAMERA OPERATING WORKSHOP

A huge thank you to everyone who participated in the SOC Underwater Camera Operating & Assistant Camera Workshop in partnership with HydroFlex this past Fall.

The SOC had two successful weekends at the iconic Warner Bros. Ranch where attendees got valuable instruction from the HydroFlex team on composing underwater shots, prepping cameras for underwater and much more.

The advanced operating workshop was designed for working camera operators that have ample experience above and below water.

The second participant tier was for intermediate camera operators, that have experience above water and somewhat limited below.

News & Notes

Both groups worked with Pete Romano, ASC, were limited in size to ten, and had to be scuba certified. They each had an opportunity to shoot an underwater shoot and were able to keep the content.

The third tier was designed for camera assistants, and focused on camera prep, underwater housing and the role of 1st AC for underwater productions. The group worked with expert instructors but did not dive.

Special thanks to the HydroFlex team for bringing their expertise and to the SOC volunteers for helping create an unforgettable experience for our attendees: Chris Salas, Evan Morton, Cong Zhou, Chris Pilarski, Anthony Perrella Jr, Jun Li, Keith Jeffries, and Yongmin Choi.

Thank you also to Sheroes Entertainment for providing their lovely mermaid models and New England Divers for their gear rentals and equipment.



SOC Underwater Camera Operator Workshop in action. Courtesy of SOC

Camera Operator had the chance to ask instructor Pete Ramano, ASC for his takeaways on the workshops:

Pete Romano, ASC: I was very encouraged to see so many people demonstrate a real interest in the field of underwater cinematography. We filled two workshops over two weekends with camera people, many of whom traveled long distances—even internationally—to attend. We kept the number of attendees at about 32 per weekend so we could give the participants real hands-on experience over one day of classwork and two days of pool experience. This year we added a section for camera assistants which, I think, was a crucial decision. An underwater operator needs knowledgeable and efficient support on the surface. A competent, well-trained AC is key to a successful underwater shoot.

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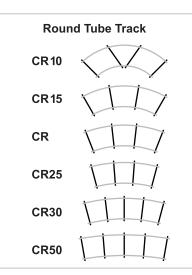
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CO: Can you share any thoughts about your involvement regarding the workshop and teaching?

Ramano: When I commit to something I am all in, especially when it involves the field I am passionate about. Though I was trained as an underwater cameraman in the Navy, translating that experience to the very unique challenges of shooting for film and television, was a vastly different experience. I starting building my own equipment and figuring out a lot of the techniques that worked as I went along. So to be able to share all I have learned, and frankly continue to learn, is an amazingly satisfying experience. It's exciting to help the next wave young men and women develop their technique, their eye and their confidence. Which leads me to note that we were especially pleased to see that over 30% of this year's attendees were female, that included equal numbers of operators and AC's. And I think the students appreciated that our teaching staff also reflected a healthy male/female ratio.

CO: Can you offer any advice for operators interested in underwater operating and what might be their future prospects?

Ramano: The most important attribute to have if you're serious about adding underwater operating to your skill set is that you must be a competent diver who is comfortable and confident in the water. Remember that you are essentially a working diver tasked with pushing a camera around. It's essential to know the mechanics and principles of underwater photography, too. All this should be second nature so that by the time the camera is handed off to you in a production setting, your only consideration is making the shot happen to everyone's satisfaction.

Even with the advent of CGI and all it can do, underwater cinematography has expanded exponentially in the 30 years since I entered the field. Producers and writers aren't afraid of the supposed expense and complexity of shooting underwater the way they once were.

News & Notes

More stories include underwater and action water sequences; more commercials feature water work; and most significantly—more distribution platforms have heightened the demand for more product. I would say there is more underwater work going on than ever before.

Whether one wants to specialize in underwater cinematography, or simply have that competency as one more skill that makes you a valuable camera professional, I think now is the best time ever to pursue that opportunity.

PETE ROMONO, ASC

Pete Romano, ASC is a former Navy Diver and member of the Pacific Fleet Underwater Combat Camera Group. In 1985, he built his first underwater housing for the ARRI-35 3 film camera after recognizing the need for



Courtesy of Pete Romano

standardized equipment to simplify and enhance the underwater shooting process. Soon after camera rental houses were representing his product and Hydroflex, Inc. was born. By 1988, Hydroflex added high power underwater lights to the inventory that were developed specifically for *The Abyss*. Since then Hydroflex has continued to design equipment for the evolving needs of the motion picture industry. Along the way, Hydroflex has been honored with two Motion Picture Academy Technical Achievement awards, and an *SOC Technical Achievement Award*. As an underwater director of photography, Pete has amassed numerous credits, notable among them are: *The Abyss, Titanic, Saving Private Ryan, Waterworld, Pearl Harbor, Men of Honor, Tree of Life, Edge of Tomorrow, Mission Impossible: 4 & 5, Ad Astra, Gemini Man, and the upcoming <i>Call of the Wild*.

MARCH

• March 29, 2020 March BOG Meeting

APRIL

- April 18, 2020NAB Show, Vegas
- April 26, 2020 April BOG Meeting

MAY

- May 16, 2020J.L. Fisher Industry Mixer
- May 24, 2020May BOG Meeting

MORE EVENTS

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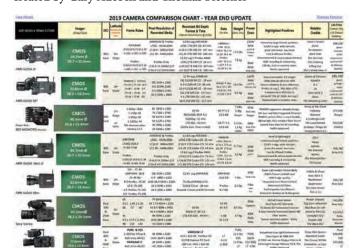
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THE CAMERA COMPARISON CHART

(Formerly known as the Fletcher Camera Chart) created by Gary Adcock and Thomas Fletcher



Find the Camera Comparison Chart at soc.org/CO

From its introduction, the Camera Comparison Chart was designed to provide a tool to educate cinematographers their producers in the wide variety of tools available to them for content creation. We have kept the Camera Comparison Chart focused those mainstream production-centric cameras that are available for purchase and rental around the world to maintain that relevance. That fact is the reason that cameras such as ARRI's Alexa 65 and Panavision's DXL cameras are not included herein, even though those cameras are widely utilized in both television and feature film production.

Being relevant to the rental industry has always been our key focus, Tom's former company, Fletcher Camera and Lens, was one of the most influential rental houses educating both crews and productions in the earliest days of HDTV and what has become a digital revolution as we move into mainstream delivery of 4K and HDR content. Rental houses have always been a focal point for advancing production technology in the film and television communities they serve. The rental houses are important because any new generation of production cameras are often out of the price range most users could comfortably afford, so renting those cameras allow a wider array of users access to the highest level of cinematic production tools that could not have been achieved in other ways.

When we started there was not a large amount of information complied or published on the cameras used as part of most projects. Nearly all high-end projects were shooting film, where the cameras were sometimes secondary to the film stocks that were used. The advent of digital production made everyone far more aware of the differences between each camera and the manufacturer's products. Showing

News & Notes

each cameras credit's list allowed us to better understand what our needs, requirements and look we are trying to achieve for our own productions. We all have gone to a movie or watched a TV show and wondered what it was shot with, so by allow us to credit their cameras helps those productions and their directors of photography while supporting the manufacturers marketing efforts too. The best example of that on the 2019 Camera Comparison Chart is Canon's C300MK2, where every credit listed for that camera was nominated for the Academy Award for Documentary Filmmaking this year, every one.

GARY ADCOCK

Few exemplify the changing technological landscape in digital cinema more than Gary Adcock. With a unique understanding of on-set technologies and their relationships in post-production has allowed him to act



by Marc Hauser

as a guide in the evolving relationship between acquisition, edit, and delivery. Gary is one of the co-authors and tech editor for the original version of the Data Handling Procedures and Best Practices guide used by IATSE Local 600 (Cinematographer's Guild). Gary has been a speaker on cinematography and the related technologies at events around the world, and has presented on various topics at the National Association of Broadcasters Las Vegas convention continuously since 1999, as well as presenting on a diverse array of subjects at NAB Shanghai, IBC Show, Interbee and Broadcast India. His knowledge and capabilities keep him in demand as both a consultant and technical writer for a wide array of manufacturers and publications. You can follow Gary on Twitter and Instagram as @garyadcock or read his blog at garyadcock.com.

TOM FLETCHER

Tom Fletcher is currently the Director of Marketing at Fujifilm/FUJINON. He is an accomplished entrepreneurial in the motion picture and broadcast camera industries having created Fletcher Camera and Lenses in 1987 and then sold the busi-



ness in 2014. Tom is an actively involved member of following organizations: Production Equipment Rental Group (PERG), American Society of Cinematographers (ASC), Society of Operating Cameramen (SOC), and the Digital Cinema Society (DCS). Tom is also well known for publishing the yearly Camera Comparison Chart.

Tom is a graduate of University of Illinois (Champaign), and also holds a Certificate in Business Administration from the University of Illinois (Chicago).



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Establishing Shot

an interview with Dave Levisohn, soc by Kate McCallum



Dave Levisohn, SOC on the set of DANCING WITH THE STARS. Photo courtesy Dave Levisohn, SOC

Dave Levisohn, SOC is this year's recipient of the SOC Lifetime Achievement Award Camera Operator Live & Non-Scripted and it's super obvious why. Levisohn has had a very successful career in television for 50 years, has been nominated for Emmys 54 times, and has been the winner of 19 Emmy Awards for Outstanding Technical Direction, Camerawork, Video Control for a Limited Series, Movie or Special. That must be a record!

Camera Operator: Congratulations on receiving the SOC Lifetime Achievement Award for Camera Operator Live & Non-Scripted, Dave. Can you share a bit about your background? How you get started in your illustrious career?

Levisohn: I was born in the Bronx, New York and spent my teen years in Massapequa, Long Island. I took a lot of photos when I was growing up in public school, and was the kid who used to operator the projector for all the classrooms.

After one year of college at Michigan State University I left there to go to, RCA Institute in New York City and enrolled in a six-month course in the basics of television production.

I actually got my first break into operating when I was in the Army.

Before I was drafted, I could not get into the business. I spent two years operating at Fort Bliss, Texas.

CO: Where you truly got to start following your 'bliss.' How appropo! How did you end up on camera in the Army?

Levisohn: When I was drafted into the Army I had an interview... maybe the third day I was in. They asked what I did as a civilian. I said I was schooled as a camera operator. Lucky for me—they needed one at Fort Bliss, Texas, so after basic training, I was assigned to the Fort Bliss Educational Network.

Fort Bliss was a missile school for the Army and foreign countries. I basically just shot a lot of classroom stuff. Not that exciting, but better than the alternative at the time.

CO: Did you have mentors who helped you along the way towards breaking into Hollywood?

Levisohn: After I got out of the Army, I moved to Los Angeles and got a job working at Video Tape Enterprises. At the time, it was the only independent mobile unit in Los Angeles. There I met Dean Hall, a freelance camera operator, who had worked at ABC. He took me under his wing, and today is still a good friend.



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Other colleagues who helped me out were camera operators who I worked with when I was at CBS Television City. All had worked on "live" television. Going back to *Playhouse 90's* and many of the great variety shows, at the time.

In 1969, I became member of Local 659. At that time, I was one of only 10 freelance "Electronic Operators" in the Union.

CO: What happened next? And what have been some of the most memorable projects you've operated on?

Levisohn: In 1971, I started working at KTLA until 1973, when I went to work for CBS. During my time there I worked on shows such as; Sonny and Cher, Tony Orlando and Dawn, All in the Family, Maude, the pilot for The Jeffersons, One Day at A Time, Welcome Back Kotter. Also NFL Football and NBA Basketball. I left CBS in 1977 and worked on the TV movie Once Upon a Brothers Grimm. Since then, I've been an operator on 100's of TV episodes, and numerous longform MOW's, specials, documentaries, and high-profile award shows such as the Emmy Awards, the Academy Awards, the MTV Music Video Awards and the Grammy Awards.

Some of my most memorable projects have been operating on classics like: *Don Kirshners Rock Concert, All In The Family*, and *Sonny and Cher*. Working on the live version of the movie *Fail Safe* which George Clooney produced, Stephen Frears directed, and John Alonzo was the DP, and the live version of the movie *Grease*, which was another standout moment in my career. And—so many great moments happened on the Grammy Awards.

CO: Do you have any advice for camera operators wanting to break into "live" television and non-fiction TV?

Levisohn: Breaking into TV as an operator? That's a hard one. Especially if you want to get into the "Variety" genre. But nowadays doing sports and reality is the only way to get started.

The days of network, "summer replacement" are gone. That's where a lot of training took place.

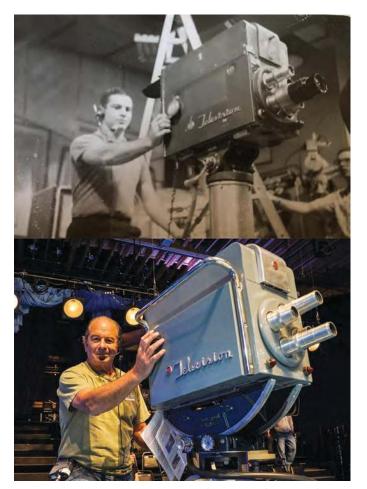
CO: Can I ask you a personal question? 19 Emmy Awards? Where do you keep them all? Please tell...

Levisohn: I keep them in a back room. Not that I am not proud of receiving them. But would be a little ostentatious to have them out. But my *SOC Award* is out for everyone to see. It means a lot to have received an award from your peers.

CO: What are you working on currently, Dave?

Levisohn: Right now, I keep doing what I always have—live television events and variety shows. Every once in awhile, I fill in on sit-coms.

I really enjoy what I have done and still do. But most important is the camaraderie and friends that I have, and get to work with. Been a good ride.



Top: On camera circa 1962. Photo courtesy of Dave Levisohn, SOC Bottom: On camera circa 2019. Photo by Chris Haston



DAVE LEVISOHN, soc

David Levisohn, SOC has had a very successful career in television for 50 years. Levisohn has been nominated 54 times and has been the winner of 19 *Emmy Awards for Outstanding Technical Direction, Camerawork, Video Control for a Limited Series, Movie or Special.*

Photo courtesy of Dave Levisohn

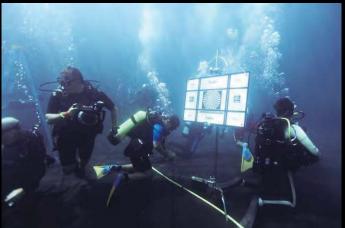
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MOTHERLESS BROOKLYN

Same Place, Different Time

an interview with Craig Haagensen, soc by Kate McCallum



Motherless Brooklyn is a 2019 American neo-noir crime film written, produced and directed by Edward Norton, based on the 1999 novel of the same name by Jonathan Lethem. Set in New York City in 1957, the film follows a private investigator with Tourette syndrome, who is determined to solve the murder of his mentor. Norton also stars in the film, along with Bruce Willis, Gugu Mbatha-Raw, Bobby Cannavale, Cherry Jones, Alec Baldwin and Willem Dafoe.

Camera Operator: You've worked on some great films such as Jacob's Ladder, 12 Monkeys, and Carol to name a few. How did you get into camera operating and how did you get hired to work on this film?

Craig Haagensen: During my 12 or so years as a 1st AC on commercials, I had the good fortune to work with a few companies that primarily used British directors and DP's such as Nick Roeg, Ridley Scott, and a host of other British commercial directors. I often worked with Ian Wilson, Adrian Biddle, Peter Biziou and others. Peter was hired by Adrian Lyne to DP 91/2 Weeks and asked me to be his focus puller. Adrian needed an operator and asked me for recommendations. Adrian impressed upon me he didn't want someone too far set in their ways. With this in mind, I gave him two names. One was just beginning as a feature operator, could be molded a bit, and had the added advantage of operating Panavision's version of Steadicam. The other operator was experienced, but no stick in the mud. He was a risk taker and open-minded—heck, he even flew his own helicopter! Adrian asked a few questions, listening carefully. A week later I got a call from Adrian. He had spoken to the two operators I had suggested, and a bunch of others, and had decided to ask me to be his operator. Peter was not happy that I had been poached! Larry Huston was brought on as out 1st AC, and he was perfect for the job. Operating wasn't something on my radar. It took me two weeks to decide to do it and I really thought it would get boring fast. Boy, was I wrong!

As to *Motherless Brooklyn*, just as I was finishing my time on the Ben Stiller production,

Escape at Dannemora, I got an email from Dick Pope, a DP I knew of but had never worked with. He was arriving in NYC and wanted to meet while he was there. Nothing unusual here, as DP's would occasionally call just to have a chat, not related to any work offer. Dick operates the films he DP's, so I didn't think of our meeting as an job interview. It was a refreshing conversation with a world class DP, and after three hours time to split. Only then did he broach the subject of working together, with me as A operator, and Dick operating as occasional B camera. Dick is a master of lighting simplicity and has a great sense of humor to boot, which helped carry us through a couple of rough patches!

CO: Who made up your production team?

Haagensen: My team consisted of 1st AC, Eric Swanek; 2nd AC, Mike Guthrie on A camera; 1st AC Bobby Mancuso, with 2nd AC Justin Mancuso on B camera. The guys interchanged occasionally, as we did do a lot of single camera work. The trade-offs were smooth a silk, to be expected having two extraordinary A camera teams on board. DIT, Patrick Cecilian provided the anchor for our film's look

CO: I read that this was a passion project of Norton's ever since he read Lethem's novel in 1999, and that the film took nearly 20 years to go into production. The book is set in contemporary times, but Norton felt that setting the film in the 1950's would create more of a noir feeling that would better suit the plot and dialogue. Where did you end up shooting the film and was it difficult to find locations from that era?

Haagensen: We filmed between Manhattan and Brooklyn. Brooklyn offered the old-

er-looking street brownstones of Harlem that Manhattan now has largely seen refurbished. The Harlem Jazz Club was the real deal from of the era, where jazz performers working in the clubs of Midtown and Downtown Manhattan went to meet, relax, and jam. Other Manhattan locations gave us Moses' office, our late-night diner, the Depression Era pool exteriors, Washington Square, and various other virtually unmodified interiors. The pool scenes, in particular, blended a Lower Eastside Depression WPA pool exterior with the a beautifully tiled Depression Era pool located in the Bronx.

We didn't do stage work until the end of the show, primarily the fight on the Harlem fire escape, and the grand interior of the longgone original Penn Station. Razed by the city to "modernization," the art department got original blueprints from the Museum of New York to recreate Penn Station's wonderful interior to exacting scale. Only the the benches in the waiting area, and banks of lockers were physical props. A staircase at the far end painted green provided the framework for VFX. We shot this at the repurposed Long Island Grumman Aircraft plant, now transformed into huge film stages. Dick used open faces 20Ks high to one side of the set to replicate sunlight piercing thru windows, and the smoky cigarette atmosphere so prevalent then.

CO: What camera and lens did Edward Norton as director, and your DP choose to use to get the look and feel for the era?

Haagensen: Dick Pope's lens choice were the new Cooke Classics. They are same optical design as the Cookes we used in the 60s and early 70s. Back then, the set of 25,

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BTS: Lionel Essrog-EDWARD NORTON, director of photography, Dick Pope, Mike Morini on dolly, and camera operator Craig Haagensen, SOC. Photo by Glen Wilson

35, 40, and 75mm all fit in one case small enough to perch on a 14x8 platform on the rear of the Movieola dolly. The new incarnations have many of the same anomalies as the originals—mild internal flaring, vignetting in corners, small optical aberrations, but barreled for today's camera systems. In other words, they have character and look great. Our cameras were Alexa XT and Alexa Mini.

CO: Were you using any other special equipment on set that made your job easier?

Haagensen: The overall thought was to avoid the most modern tools of filmmaking (Steadicam, Gravity, stabilized heads, drones) as much as possible, and use that which fit the time period, and the style of that time.

We did have a few days of 50' Technocrane, tracking back from a door knob and leading the sprint down the hallway by the Giant. Our key grip, Dave Stern, measured carefully and placed a 12-foot platform for the crane's base that provided just enough space between the stage wall and arm counterweight to squeeze a deck of cards between.

I always order an extended cable for the EVF, 5' or 6' long. This allows me to get the view-finder off the camera and do shots not possible with the finder or a monitor mounted on the camera. With the EVF in the hand, I'm able to do a 180 plus degree pans while stuffed into the back seat area of our vehicles without moving around with the camera as it rotates. Of course, this can be done with a wireless remote head, but that would have

TRIVIA: Edward Norton met and consulted many members of the Tourette's Association of America to prepare for the role. The film has received approval from the organization as well.

called for a follow vehicle and a communication method that would have been burdensome and time-consuming to arrange. We had lots of driving to record, and key grip Dave Stern built a clever X-Y system of sliders in the backseat area of our period cars that gave great mobility to our camera. We could quickly reposition the camera for two shots, French overs and the like. It left scant room, or comfort for the operator, but it had the great advantage with the director and key actor, and that made communication, often on the fly, a breeze. For instance, when in one setup, Edward is driving slowly down a Brooklyn street when he spots Gugu Mbatha-Raw, and Cherry Jones walking on the sidewalk against his flow. I was able to easily see the approaching women outside my frame and, on my own cue, timed my pan off Edward to pick them up, and follow their progress through the side windows and bodywork, and then continued tracking with them through the rear widow as Edward continued driving past them. We could



BTS: Lionel Essrog-EDWARD NORTON; Paul Randolph-WILLEM DAFOE; and Craig Haagensen, SOC. Photo by Glen Wilson

easily communicate between us that the shot was still working, which cued Edward to pull to the curb, and with a smooth stop while we see the women ascend distant brownstone steps and disappear inside.

We hadn't planned that the shot would hold together that long, and 1st AC, Bobby Mancuso, who was pulling focus remotely on the Mini, was taken by surprise but maintained calm...and focus...throughout. Now, a remote head would have worked, but not seeing the women outside my frame would have required optimal timing, rehearsal, and cueing with cumbersome comms. It's a wonderful shot, smoothly telling the story in one continuous take. Edward's driving, and trust that things were still working, helped make the shot.

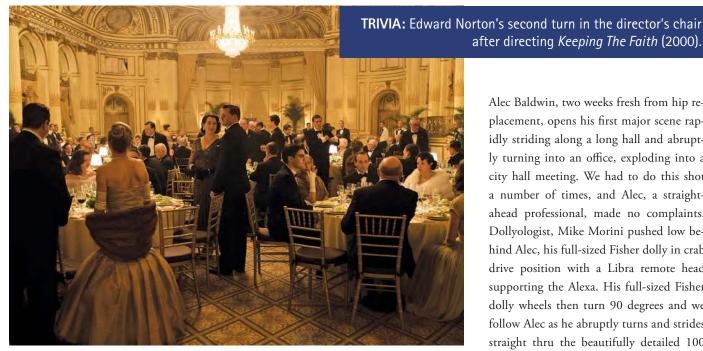
CO: Norton was both the lead and director, and he played a character with Tourette's? How'd he juggle these roles and how did you and the production team work together to support him behind and in front of the camera?

Haagensen: I can't speak to how Edward juggled his roles as director and leading man, but add to this, producer and writer, as well. Genius and careful preparation works, but I was most impressed with his calm demeanor despite what must have been a stressful grind for 45 days.

Edward had scouted extensively prior to any of us coming on board. He had used his locations scout, producers, and himself as a stand-ins for iPhone shots to be recorded as a sort of storyboard used for our first few locations days of filming. Dick and I would carefully analyze the photos for equivalent focal length, distance and perspective, and match the frames for Edward. I would set up the camera to replicate the shot as envisioned in our quiet conversation while Dick sweetened the light. We'd then offer this up to Edward, who in the meantime would have been in conference with the actors for the scene. And—he would always seemed quite ready himself. This took a good deal of pressure off Edward and let him focus on other matters, especially on our first days of shooting. Day one had Edward, Bruce Willis and co-star Ethan Suplee working a complex stakeout with three other featured artists that leads to a car chase. Our use of these photos and later, drawings of the storyboards faded over a couple of weeks as Edward grew to depend on Dick's lighting skills, and our combined framing tastes to tell the noir story as he envisioned. Dick would sometimes operate a second camera if he saw any possible additional coverage the editor might find useful.

What proved very helpful was Dick insisting I join in scouts for the few weeks leading up to filming. We, as operators, can offer our thoughts and experience, but it's the director's vision we must adhere to. I've never felt that showing up on day one of shooting helps us to do that. Having time with a director prior to the first day's work is a very valuable investment. As operators, we have differing opinions about why so many

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The Grand Ballroom at The Plaza in New York City. Photo by Glen Wilson

projects see DP's operating the show. But, from my point of view, directors may feel that the DP, at his side through weeks or months of prep, now sees his vision clearly, and if the DP is able to operate a camera, let the DP supplant a skilled operator. What the director may not realize is a skilled camera operator's role is much more than simply following actors. An experienced operator will have seen many more sets than any director will, and that experience results in a look-up book of solutions to problems and, hopefully, a sense of style and taste that enhances the project.

CO: Norton had to get rather vulnerable to embody the qualities of a person with Tourette's. Do you know how he prepped for this and how did you work in your role as the camera operator to key into his gestures, etc.

Haagensen: I have no knowledge of the process Edward employed preparing for his character as Lionel. I'm sure every artist has their own special practices they've established over time and experience. As to how we shot Edward's performances, it was important to allow his character, Lionel space—as his hands were performance features. For instance, you can decide on

focal length and frame for Edward's desk with a finder, but when Edward enters our frame and sits down, minor adjustments may be called for, or better yet already factored in with "guestimation," because a stand-in is not going to move A to B with the Tourette's driven motions Lionel would express. Edward's simply had confidence in his team, and never proofed or checked his work with playback before we moved onto the next set-up.

CO: You had such a strong cast of talented actors to work with. Any stories to share about working with them? Bruce Willis? Willem DaFoe? Etc.

Haagensen: This was my fifth film with Bruce Willis and it was a treat to work with him again. I find him to be easy for camera, very helpful, and a kind and professional artist. He was a great supporter of Edward's project, and Edward has spoken about Bruce's important contribution over many years towards getting the project made.

Alec Baldwin, two weeks fresh from hip replacement, opens his first major scene rapidly striding along a long hall and abruptly turning into an office, exploding into a city hall meeting. We had to do this shot a number of times, and Alec, a straightahead professional, made no complaints. Dollyologist, Mike Morini pushed low behind Alec, his full-sized Fisher dolly in crab drive position with a Libra remote head supporting the Alexa. His full-sized Fisher dolly wheels then turn 90 degrees and we follow Alec as he abruptly turns and strides straight thru the beautifully detailed 100 year-old, wood-framed doors of the 42nd Street Library's President's office, to disrupt the Mayor's meeting in progress. Dick and I did several scouts with the grips, resulting in assurances we'd not be thrown out on our ear if we hit that aged wood. I worked with camera scenic, Charles Kern to mitigate the dolly's crash over the door threshold with a layered showcard ramp painted as granite floor. Alec understood the mechanical challenges and was a trooper.

CO: Do you have any thoughts about the future of film and how it's being distributed now? Where do you think we're headed?

Haagensen: Hey, I thought these questions would be easier! I've read about struggle theater owners and streaming companies are having, particularly with release windows. Streaming companies are new, brash, and boldly spending gobs of money on producing product, and upsetting the status quo. That's okay, as Hollywood needs a shake-up once in a generation.

Challenges such as the early television revolution hurt theater attendance but brought

TRIVIA: A newspaper headline identifies "The Lindbergh Palace Hotel" as the setting for the subsequent scene—a fictional hotel also found in *The Royal* Tenenbaums. Clearly, this is a sly tribute to the many Wes Anderson movie credits of most of the principal actors.

us 1:85::1 and then 2:35::1 wide screen to successfully challenge the "TV Pumpkin" format. Now TV is widescreen, sort of, but still nowhere near the challenge your eyes have scanning something like *Ford v Ferrari* in a darkened theater with chest-thumping sound versus a "home theater" with sound unmatched (too big/too small) to the picture size and table lamps reflecting in the screen. Maybe it will be VR? But—that's not really a group endeavor like TV or a big screen theater. Wherever things go, there will still be gems made, regardless of distribution methods. It's the future writers I worry more about.

CO: You've also worked in television. How would you speak to the differences of working on a series versus feature films?

Haagensen: Ha! You ask good questions! Quick answer, smaller screen, less attention to detail. Also, opportunities for the operator to contribute fully can be somewhat limited by both show ethos and the current episode's director. There can be resistance to break from the "normal" day's work, what with repeating locations and sets. For Mr. Robot (Season 1), I was so pleased to have a free hand to express Elliot's unease with framing. Prior to the start of production, I was informed the producer/writer, Sam Ismail enjoyed the frames in Ida, a 2015 nominated foreign film shot in 1.67:1 on a 4:3 chip Alexa with very little wall adornment. This format was once called "TV Pumpkin." Mr. Robot, however, was to be a 16:9 wide format show. I searched my film library and presented a series of frame pulls suggesting how I envisioned the frames for Mr. Robot, and hoped we might go beyond them. Later, I had several operators comment of those first season's frames, sometimes negatively, as in they were "very unconventional" and "disquieting"—just as Elliot felt. Objective achieved. Sometimes life is good!

CO: Any advice to television camera operators wanting to work in features or vice-versa?

Haagensen: Well, Peter Biziou gave me excellent advice when I was starting out. That was to understand the genre you would like most to work in. He said if you do your job well, you'll do well in any genre, but being good at one that's a hit will likely suck you into more of that genre. Order your life early on in your career so you can afford to say "No" when you should. Always ask to read the screenplay before to saying "Yes." There's more to this, but these two points are a good start.

As to TV versus features, a feature operator going to TV can be a great enhancement to the show, provided they've learned to take command of their job prior. On the negative side, some TV shows resent change from their norm. Pull a wall? Have the set scenic tape and/or paint a problem? Dress or modify set dressing? Expected on a feature, often not so much on a series. Some series definably reach feature-level quality. Peaky Blinders and some of Jack Ryan (Season 2) come to mind, but it is usually director driven. A feature has the same director throughout. A series may not see a really good director twice in a season. A good showrunner or producer can guide this, but there are reasons why directors are episodic. For a feature operator, it can be daunting. For a TV operator jumping onto a feature set, having the tools of scenics, props, set dressers, special grip and camera gear coming and going, not just at your fingertips, but demanding your attention, can be challenging, as well! There are few "same old thing" days on a good feature.

CO: What are you doing next?

Haagensen: Short term—some things you must suspend doing when 12-hour days and 2.5-hour lunches a week occupy many of your months.

Long term—hopefully impart some of what I learned over the years about operating. Enjoy the *SOC Lifetime Achievement Award* night. Bike. Kayak. A bit of writing. Hang out with my wife.

TECH ON SET

Alexa XT & Mini in 4K;

Cooke Classic lenses;

Libra Wireless Remote

head; and 50'

Technocrane



CRAIG HAAGENSEN, SOC

Craig Haagensen, SOC camera operator, Motherless Brooklyn, has a long career working on multiple projects with Adrian Lyne, Ridley Scott, Tony Scott, Terry Gilliam, James Gray, Jonathan Demme, and DP's Adam Greenberg, Harris Savides, Tak Fujimoto, Adrian Biddle, Darius Khondji, Peter Biziou, Roger Pratt, Richard Yuricich, and Bruno DelBonnel. Some of his favorite past projects include Jacob's Ladder, 12 Monkeys, Carol, and Mr. Robot (Season 1). Haagensen has DP'd several features, and is also a DGA member, having acted as director/DP on sequences for Black Rain, The Interpreter, The Next Three Days, and We Own the Night. His most recent project was working with director, Joe Wright and DP, Bruno Del Bonnel on Women in the Window.

Photo by Michael Tackett

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STAR WARS: THE RISE OF SKYWALKER

The Force Will Be With You...Always

an interview with Colin Anderson, soc by David Daut



Daisy Ridley is Rey in STAR WARS: THE RISE OF SKYWALKER. Copyright: 2019 Lucasfilm Ltd. Photo by Jonathan Olley

42 years after it began with George Lucas's *Star Wars*, the "Skywalker Saga" reaches a conclusion in its ninth entry, *Star Wars: The Rise of Skywalker*, produced and directed by J.J. Abrams who co-wrote the screenplay with Chris Terrio. The film stars Daisy Ridley, Adam Driver, John Boyega, Oscar Isaac, and Carrie Fisher, and sees the heroic Resistance forced to contend with the mysterious return of the evil Emperor Palpatine.

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TRIVIA: When George Lucas originally laid out plans for 12 episodes, then reduced it to nine, he said that C-3PO and R2-D2 would be the only characters to appear in all nine. This proves to be true: Anakin Skywalker and Obi-wan Kenobi, the only other characters to appear in every movie of the original and prequel trilogies, did not appear in the sequel trilogy. Anthony Daniels is the only actor to appear in all nine episodes.

Camera Operator: To start, tell me a bit about what it's like to work on not just one, but two Star Wars movies. And not just any Star Wars movies either—you got to both reintroduce this series to a new generation with The Force Awakens and now help put the final punctuation mark on this trilogy of trilogies. I bet that's pretty surreal!

Colin Anderson: Let me start by saying that I'm on record for declaring that my life would never be the same upon completion of The Force Awakens. It was a singular moment in my career and one that I was convinced would never be replicated. The feeling of excitement and anticipation was palpable, and indeed so was the responsibility. It had somehow escaped me prior to shooting just how important these films were to so many people, and as it dawned on me, the pressure to deliver a film that met the incredible expectations of the fans grew and grew. I never thought that in the course of my career I would play a part in the rebirth of this storied franchise and also get to close it out. This is the stuff of dreams!

The Rise of Skywalker was in a strange way an even weightier responsibility, as it had to work in itself, and also punctuate the trilogy of trilogies. There is no greater magnifying glass than the one that is on Star Wars, so to play a part in preserving this unbelievable legacy is one of the highest honors I can think of; something we all dream of being a part of and are immensely grateful for having had the opportunity.

CO: You've been working with J.J. Abrams now for his entire feature directing career, starting on Mission: Impossible III back in 2006. And with the exception of Super 8, you've worked alongside Dan Mindel as your director of photography on all of

these films. How did those professional relationships start, and how have they evolved over time?

Anderson: I met Dan Mindel on The Skeleton Key in 2005, and when Dan was asked by J.J. Abrams to do Mission: Impossible III in 2006, he offered me the operating job. It was the first time either of us had worked with J.J.and talk about a career defining moment! J.J. has to be one of the finest directors to work with. His insight, humor, loyalty, wit, and talent are second to none. There is no set that I'd rather be on, and coupled with the way Dan uses and trusts his operators, it makes it a dream position. One of the enormous benefits of doing six films with J.J.—and nine with Dan—is that you become incredibly close to each other in terms of knowing or anticipating what has to be done. I have learned J.J.'s style over the years which has led to a wonderful shorthand way of working. That applies to Dan as well so you end up with this efficient, collaborative, symbiotic relationship, which hopefully translates to the screen. I'll forever be indebted to Dan, firstly for his continued employment of me, and secondly for introducing me to J.J.

CO: Tell me a little bit about J.J. Abrams as a director. What kind of energy does he bring to set and what is he like as a collaborator working with you and Dan Mindel?

Anderson: When you operate on a J.J. Abrams film you have to prepare yourself to be challenged to the limit of your ability. There are times when we are shooting the first shot of the day and it's so hard that by the time you get it, it feels like you head is about to explode—and it's only the first setup. Having said that, he couldn't be more understanding of the challenges we face and is constantly apologizing for making a shot

difficult. He has incredible energy and his sets are fun and collaborative. Because J.J., Dan, and I have done six films together I feel that he trusts us implicitly, and whenever Dan or I voice an opinion, I really believe he trusts our input.

CO: It feels like the audience has an almost instinctual understanding of what Star Wars is supposed to look like, but the reality is that the technology and equipment has been incredibly varied over the years. You have the original film shot primarily on Panavision PSR 35mm, you have Attack of the Clones which was really the first production of that scale to shoot entirely on digital using Sony HDW-F900s, and then more recently Episodes VII and VIII had select sequences shot with massive IMAX 65mm rigs. What kind of equipment did you use on The Rise of Skywalker and what went into finding the look of this film that aims to not just wrap up a trilogy of films, but a saga that's spanned over 40 years?

Anderson: While tipping my hat to the digital world, I was thrilled when the decision was made to shoot The Rise of Skywalker on film. Having said that, it did not come as a big surprise as both Dan and J.J. have become champions of shooting on film. Even though Attack of the Clones on digital was the exception, I think it was really important to honor the previous films and continue in that tradition. For a film of this size we had a relatively modest camera package on the main unit. There were 3x Panavision XL bodies and an ARRI 435 for high-speed work. Dan Sasaki, the lens guru from Panavision, had adapted the C-Series Anamorphic Primes to what he dubbed "retro" C's. This involved softening them slightly and adding a bit of warmth. The basic rule of thumb was to use these lenses on the Resistance as they had the softer more forgiving look. The First Order on the other hand got the Primo Anamorphic lenses which were sharper, more contrasty and less forgiving. The two series of lenses lent themselves well to the

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environments of the protagonists, as the Resistance had a forest base with an earthy organic feel, and the First Order were primarily on the clean, sterile, shiny Star Destroyers. Rounding out the basic package were an AWZ, 10:1, 11:1, and 3:1 dubbed the "Hubble."

CO: A few years back when we talked to you about working on The Force Awakens, you discussed some of the difficulties of shooting the Jakku sequences in the Rub al Khali desert. When you found out Abrams wrote another desert planet into this script—this time the Wadi Rum valley in Jordan standing in for Pasana—did you preemptively start sweating, or did you feel like an expert at desert shoots by that point?

Anderson: Nothing can prepare you for the heat that we had to deal with in the desert on *Force Awakens*, but this time around, because we were between seasons, the temperature was positively benign. Despite the normal challenges of working in the sand, especially

with film that can scratch, I think we coped really well. There were logistical challenges getting the gear in and out of some of the more inaccessible locations but our camera crew, who were also on *Episode VII*, handled it beautifully. I have to confess that it was a bit of a thrill shooting in the same locations as *Lawrence of Arabia*!

CO: In terms of style, Abrams' pair of Star Wars films breaks a bit from tradition by having most of its big starfighter battles take place in atmosphere on planets rather than in the void of space. They're shot a bit more playfully too; The Force Awakens has that snap zoom during the Millennium Falcon chase on Jakku, and in the battle with the Sith fleet over Exegol there are a handful of whip pans and similarly "punchy" camera work. Were any of those achieved practically, and how did you strike that balance between honoring the legacy of this institution while also expanding upon its cinematic vocabulary?

Anderson: There is no doubt that J.J. has a cinematic style, but I believe that it is inherent in him and manifests itself in his entire body of work. The fact that his two Star Wars films have been so successful is a testament to his style, and not something that he has developed specifically for these films. He absolutely has a playful element to his film making which is what makes his films so appealing and is perfect to connect with the broad age range of his audience. J.J. also uses his playful style in amazingly creative ways. He takes pride in achieving so much in camera even though his films appear to be visual effects heavy. At times he will insist on staying on the existing sets so as not to add a visual effect shot. Films with these size budgets often demand gimbals for all the flying sequences but most of the time J.J. prefers to use a poor man's process where the actors will all pitch one way while the camera dutches in the opposite direction to simulate a turn. Add in camera shake, by J.J. grabbing and shaking the magazine, and you have a



very realistic flying sequence! This leads to his other preference of shots developing: we will seldom shoot a master and then do traditional coverage. He prefers the camera to set the scene and then without cutting, the camera will follow the action as the scene unfolds. It can become incredibly complicated and appear to take a lot of time to set up but the payoff is getting a dynamic exciting scene while biting off a big page count. This naturally increases the pressure on the DP, operator, 1st AC and dolly grip but that's exactly why we do it, to be challenged.

CO: Star Wars films have always helped to pioneer new filmmaking technology and techniques, and these most recent films are no exception. In Solo: A Star Wars Story they set up a whole projection system surrounding the Millennium Falcon cockpit set in order to better simulate the lighting of a space battle in-camera, and on The Last Jedi, Steve Yedlin used ARRI SkyPanel LED soft lights to create diffusion over

the entire set. Were any of these techniques borrowed for *The Rise of Skywalker* and was there anything you did on this film that you've never done before?

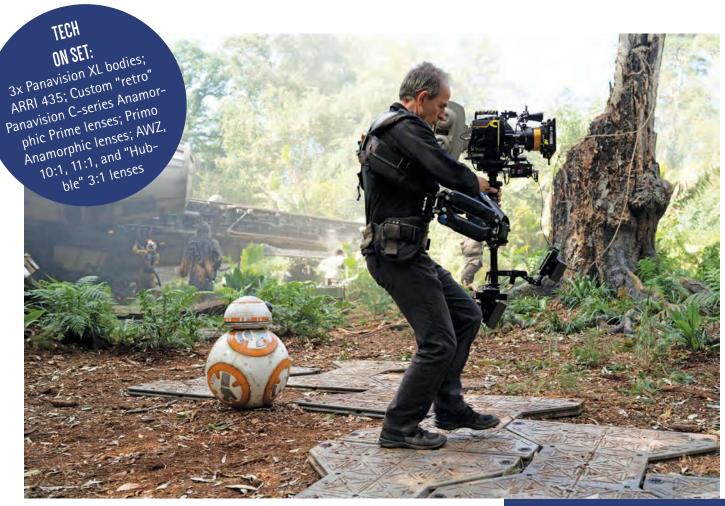
Anderson: During pre-production there was a discussion to shoot the film as "old school" as possible. We had a traditional camera package and kept things fairly simple in a nod to the early films. Although we used cable-cams and drones and a 75-foot Technocrane for some sequences nothing was particularly innovative or groundbreaking. Dan Mindel for example only used "old-style" lighting on the actor's faces eschewing LEDs and saved them for lighting the backgrounds. Of course there are always exceptions—the interactive lighting on the actors faces while flying in the Falcon was from content on LED screens surrounding the cockpit.

Carrie Fischer was an essential part of all the previous films and it was imperative to have her close out the trilogy of trilogies. J.J. came up with the idea of using unused existing footage from *The Force Awakens* and work it into the fabric of *The Rise of Skywalker*. It required a lot of mental gymnastics for J.J., Dan, and Roger Guyet (visual effects supervisor) to take that footage, map it for motion control and then work it into the new sets, matching lighting, tone and story content. There was no face replacement used and I think it's a testament to their skill that it blends in so seamlessly.

CO: Right. Obviously VFX and editing are a big factor in the end result, but as you point out, there are a ton of considerations that need to be made on set to make that as believable as possible. Could qyou describe a little bit more the process of shooting those scenes that Carrie Fisher would be added to after the fact? Was there a stand-in for the actors to act against? Did you have the archival footage to refer to on set or was that all planned out in advance?

Anderson: When we did a scene involving Carrie we had a stand-in to line up the shot

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Colin Anderson on the set of STAR WARS: THE RISE OF SKYWALKER.. Photo by Jonathan Olley / Lucasfilm Ltd.

and also to give the other actors in the scene someone to play off. The stand-in was dressed in costume, and hair and make-up got her as close as possible to look like Carrie, but in reality no part of her was used in the final movie. Visual effects cut out Carrie's face from *The Force Awakens* and put her onto a digital body in the new scene. We had the archival footage on set for reference purposes. If the scene demanded a moving shot the data that had already been captured on *Force Awakens* was fed into the motion control rig and applied to the new shot.

CO: This film takes Rey and Kylo Ren's connection through the Force established in The Last Jedi (and I believe lovingly dubbed "ForceTime" by Rian Johnson) and expands on it in really interesting ways to the point where these characters can engage in entire lightsaber duels while each is physically in a separate location. Can you talk a bit about the challenges of

making those scenes work and how that effect was achieved?

Anderson: From a photographic and style point of view it was important to make the "ForceTime" lightsaber battles between Rey and Ren as visually arresting as possible. To make it as impactful as it needed to be, the two locations had to be as visually contrasting as possible to sell the idea that they were in two different places. When Rey was in Ren's quarters it had pure white walls and floors creating a stark, sterile, bright environment. When the shot cuts to Ren on Kijimi it's at night, with snow flurries, brown walls and pockets of darkness. Our stunt coordinator Eunice, working with J.J. would choreograph the fight so that when one of the actors spun through the foreground, the editors would be able to cut from the one environment to the other on the body wipe. Another gag that helped sell the separate locations yet also connect them at the same time was the bag of red berries that gets slashed on Kijimi and then spills across the floor in Ren's quarters on the Star Destroyer.

CO: The epilogue of this movie sees Rey visit the Lars homestead on Tatooine—where Luke grew up in the original film—making that the only location to appear in each of the three Star Wars trilogies. Did you return to the original shooting location in Tunisia for those scenes, and what was the feeling like on set during that shoot?

Anderson: We shot the Lars homestead on Tatooine in Jordan—and coincidentally on the last two days of production in Jordan. There was obviously an enormous amount of secrecy involved with that particular set. We all knew the importance of this scene—it was a defining moment: the end of the film, the end of the trilogy, and I have to admit we were all feeling the pressure. Most of it was shot at magic hour and with there being quite a few shots it required careful planning. While we

were waiting for the right light we mapped out every shot with the lenses and dolly positions for each camera. When the light was right it became an almost military operation, an intensely focused and disciplined set. It's in stress filled times like these that you realize the importance of knowing and trusting the people around you, and when the sun set and we knew we had it, the relief and sense of accomplishment was amazing.

CO: Last question: now that you've been able to leave your mark on this storied

franchise, what are the things you hope people will look back on in *The Force Awakens* and *The Rise of Skywalker* and take inspiration from 42 years from now?

Anderson: It's almost impossible to quantify the responsibility and privilege it's been having a part in the making of these two films. The fact that it has meant so much to so many people made the desire to satisfy them enormous. I hope when all is said and done and people look back over the years they will say we did it right. Personally for me, when the script crawl starts on the screen and John William's iconic score swells, I know I've played a small part in what is to come, and I'm filled with gratitude for the incredible opportunity that was handed to me!



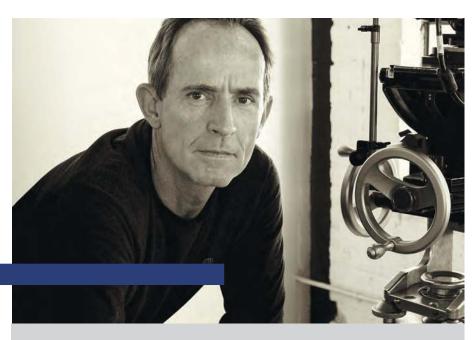
Zorii (Keri Russell) in STAR WARS: THE RISE OF SKYWALKER. Photo by Jonathan Olley



DAVID DAUT

A writer and film critic for close to ten years, David Daut specializes in analysis of genre cinema and immersive media with bylines at *Lewton Bus, No Proscenium*, and *Heroic Hollywood*. David studied at the USC School of Cinematic Arts and currently works as a freelance writer based out of Orange County, California.

Photo courtesy of David Daut



COLIN ANDERSON, SOC

Born and raised in South Africa, Colin Anderson had a love of photography instilled in him from an early age by his then news photographer father. Upon joining the film industry he worked his way up through the ranks for 10 years before he moved to the United States. Based in Los Angeles, he started camera operating in 1995 as well as specializing in Steadicam. To date Colin has worked almost primarily on feature films with notable directors such as J.J. Abrams, Paul Thomas Anderson, and Ben Affleck. His collaboration with J.J. Abrams includes all six films that J.J. has directed, including Mission: Impossible III, both Star Trek films, Star Wars: The Force Awakens, and the latest Star Wars: The Rise of Skywalker. Some of the other titles he has worked on include There Will Be Blood, Good Night, and Good Luck, The Town, Argo, The Master, Phantom Thread, and the Martin Scorsese film: Silence.

Colin was the recipient of the 2020 SOC Camera Operator Lifetime Achievement Award, has had four nominations for the SOC Camera Operator of the Year Award and one win, and has been nominated once by the BSC for Camera Operator of the Year.

Photo courtesy of Colin Anderson

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THE IRISHMAN

I Heard You Paint Houses

an interview with P. Scott Sakamoto, soc by Kate McCallum



TRIVIA: "I heard you paint houses" were the first words Jimmy Hoffa ever spoke to Frank "The Irishman" Sheeran. On *The Tonight Show*, Robert De Niro remarked that the term, along with "I also do my own carpentry work," refer to both the hit and the clean-up.

Dipping bread in wine, known as Intinction, speaks to the shared Catholic traditions of Russell Bufalino (Joe Pesci) and Frank Sheeran (Robert De Niro). Photo courtesy of Netflix

The Irishman is an American epic crime film directed and produced by Martin Scorsese and written by Steven Zaillian, based on the book I Heard You Paint Houses by Charles Brandt. It stars Robert De Niro, Al Pacino, and Joe Pesci, with Ray Romano, Bobby Cannavale, Anna Paquin, Stephen Graham, Stephanie Kurtzuba, Jesse Plemons, and Harvey Keitel in supporting roles. The film follows Frank Sheeran (De Niro), a truck driver who becomes a hitman involved with mobster Russell Bufalino (Pesci) and his crime family, including his time working for the powerful Teamster Jimmy Hoffa (Pacino).



TRIVIA: Al Pacino said that, to him, the process of filming *The Irishman* was how it felt filming movies in the 1970s.

Above: P. Scott Sakamoto, SOC on the set of THE IRISHMAN with Robert De Niro.

Below: P. Scott Sakamoto on the set of THE IRISHMAN. Photos by Niko Tavernise



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Camera Operator: What a line-up of talent. Powerful actors and a dramatic story. How did you get hired to work on this film?

P. Scott Sakamoto: This movie was in the making for a long time. I was a good friend with the late Zoran Veselic, first assistant cameraman, who was DP Rodrigo Prieto's long time assistant. We had just finished working together on *Black Panther* and Zoran recommended me to Rodrigo for *The Irishman*. Rodrigo and I had only a two-day prior working relationship, but with Zoran's push, I believe that was enough for Rodrigo to offer me the operating job. Being a Marty Scorsese movie with these actors, I felt like it was a bucket list of movie jobs. I truly feel quite fortunate.

CO: Yes, what a great opportunity. Classic. Who made up your camera team?

Sakamoto: Unfortunately, Zoran could not do the job due to illness, so Rodrigo selected Trevor Loomis to be the A first AC with Anthony Coan his second. Ethan Borsuk was the B first AC with Brendan Russell 2nd AC. Matthew Selkirk was DIT, Carrie Wills film loader, and Ross Citrin the digital loader. And we had still photographer, Niko Tavernise on set. Trevor and I have had a long relationship but the New York crew was new to me. With our diverse backgrounds and experience, we had the best of both coasts, which made for an excellent camera crew.

CO: What equipment did you use on set? New tech?

Sakamoto: Being a movie that spans over 50 years, Rodrigo chose to shoot film with its natural grain and soft palette. We used the Arricam ST and LT. For the de-aging VFX scenes Rodrigo and ILM decided a digital format was a better choice. Our digital camera consisted of an array of three cameras on one platform. The main taking camera was a Red Helium with two Alexa Mini's on either side working only as witness cameras. The Mini's were recording only in infrared lights so they were equipped with special IR ring lights. Both Mini witness cameras were slaved together and needed their own assistants. We had Bradley Grant, first AC

with Suren Karapetyan, second AC working those cameras. With the unique camera setup, which we fondly called the three-headed monster, it was a learning experience for all of us. For me, that's my best scenario, where I can learn and push myself as an operator.

CO: Speaking of learning experiences... CGI was used for de-aging process, did that effect your work?

Sakamoto: With the size, weight and geometry of the array camera, it always posed a physical challenge when trying to do a simple over the shoulder or even a close eyeline shot. As a rule, I always stay out of the actor's eyeline but the array camera made it very difficult because of its size. From the actor's perspective, they saw three separate lenses focusing on them or six lenses on a two-camera setup. Quite intimidating! Fortunately, with the experience of our veteran actors they overcame the three-headed monster and were able to achieve incredible performances.

CO: Where did you shoot the film? Any unique locations used?

Sakamoto: *The Irishman* was based in New York with most locations being one to two hours north of Manhattan. Being a period movie, the locations were in small towns or on rural roads with little development or modern architecture. We shot well over 100 locations really pushing for authenticity and the look Marty wanted. We built the Villa di Roma and Umberto's Clam House restaurant sets in an old wooden warehouse in Brooklyn. All others were on location. Hoffa would be happy, the Teamsters logged a lot of miles.

CO: And speaking of Hoffa/Pacino; it must have been amazing working with such top actors as De Niro, Pacino, and Pesci. Any anecdotes?

Sakamoto: Having the opportunity to work with Robert De Niro, Al Pacino, and Joe Pesci was such a dream. And...the supporting actors were all incredible—an all-around solid cast. Watching De Niro's eyes in a close-up, seeing his lips tighten, I really felt that confusion that challenged his morals. That

TECH ON SET:
Arricam ST; Arricam
LT; Red "Helium";
ARRI Mini; Cooke
Pancro's; Zeiss Ultra
Primes

single close-up of him in the private plane before he flies out to see his best friend Hoffa was just an amazing bit of acting. You can feel his confliction without one word said.

Pacino was also a pleasure to watch perform. During the union meeting scenes, he would rally the Teamsters (extras) into a frenzy speaking off script and ad-libing. It was amazing to witness. Pescis' performance is a standout and I feel underrated. When he delivers the final order you feel the weight of betrayal. He's a mob boss but also a father figure.

CO: What style were Scorsese and Rodrigo going for?

Sakamoto: The Irishman follows the life of Frank Sheeran from his beginning as a driver to his end of life. Marty's vision was to learn about his friendships and devotion from an observational perspective. We kept the camera moves subtle and let the performers play the wide frame, no big push-ins or zooms. Rodrigo used his degrading of color throughout the movie to help the story reflect the passage of time. Frank outlasts his friends and enemies. The last shot is of him in a nursing home; one eye on a half-open door reflects an end of an era.

Let us hope it's not an end of an era for this team of actors with Marty Scorsese at the helm.

CO: I so agree—one of the greats. What are you doing next?

Sakamoto: Working with Rodrigo and Scorsese was such a great experience; I hope I have the good fortune to be invited to their next adventure. Presently, I'm working with the talented DP Matty Libatique on *The Prom*, here in Los Angeles.

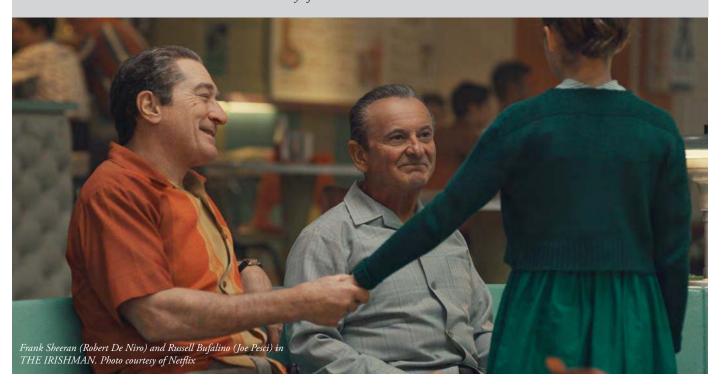




P. SCOTT SAKAMOTO, SOC

P. Scott Sakamoto, SOC, has been operating A camera and Steadicam since 1992, and was the recipient of the 2018 SOC Camera Operator Lifetime Achievement Award. Scott is a Los Angeles native and after attending film school he met Haskell Wexler who became a mentor and inspiration. His credits include: Matewan, Michael Clayton, Road to Perdition, Dark Knight Rises, The Revenant, A Star is Born, and Ford v Ferrari.

Photo courtesy of P. Scott Sakamoto



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BAD BOYS FOR LIFE

They're Back!

by Christopher T.J. McGuire, SOC



Mike Lowrey (WILL SMITH), Marcus Burnett (MARTIN LAWRENCE) prepping their new non-lethal weapons in Columbia Pictures' BAD BOYS FOR LIFE. Photo by Ben Rothstein

Bad Boys for Life is an American buddy cop action comedy film directed by Adil El Arbi and Bilall Fallah, produced by Jerry Bruckheimer and Will Smith and starring Smith and Martin Lawrence. The sequel to Bad Boys (1995) and Bad Boys II (2003) and the third and final instalment in the Bad Boys trilogy, Marcus and Mike have to confront new issues (career changes and mid-life crises), as they join the newly created elite team AMMO of the Miami police department to take down the ruthless Armando Armas, the vicious leader of a Miami drug cartel.

Well, after at least 15 years the ultimate "bad boys" were set to return.

While I was in Hungary shooting with the original "bad boy," Arnold Schwarzenegger, I received the call from the original dream crusher, Barry Waldman to see if I would be interested in operating on *Bad Boys for Life...*!!

PULLING THE TEAM TOGETHER

Interestingly, the studio had hired two unknown directors from Morocco and Belgium, Adil El Arbi and Bilal Fallah, as they had already shot a few credible movies in Belgium and I was keen to check out their work.

The first movie I watched was *Black*, a film that took the form of a contemporary take on *Romeo and Juliet*, very well acted and the pace and visuals were fresh and dynamic. The second movie, *Gangsta*, took a very simple drug deal gone sour story and turned it into high-octane thriller which was beautiful, yet raw in its look.

The DP, Robrecht Heyvaert is the talented cinematographer behind the movies, and could also add *Revenge*, directed by Coralie Fareat, to his list of credits. I absolutely loved *Revenge* as it had that raw, spaghetti western feel to it. Again, a simple story that the visuals took to another level.

Robrecht's use of the camera dynamic was truly fresh, and this totally engaged my excitement for being a part of the project, knowing that this team from deep Europe would bring about an energised third installment of the Bruckheimer and Simpson *Bad Boys* saga.

PRODUCTION BEGINS

The first shot on the trailer for the movie is the reveal of Mike Lowery and Marcus Burnet as they get out of Mike's Porsche GT3.

With the gorgeous Miami sunlight hitting the side lines of the beautiful blue car we tilt up to see Will Smith enter the frame in slow motion, then the camera slides across the front of the Porsche into real time, and the passenger door flies open and hits the fire hydrant with the flustered Martin Lawrence climbing out not so gracefully.

We attained this shot, like many, with the experienced support of dolly grip, Darryl Humber; on the pickle, Mike Howell; key 1st AC, Donnie Steinberg, and myself working together as a team. Using the Technocrane, we were able to swing low across the front of the vehicle and swoop up to the over shoulder of Martin onto Will. The timing of Martin's door hit was the most important thing that had to happen in order to make the gag work, so using the Occulus head (provided by Cinemoves), and nimbly gripped by Darryl, we were able to get into a rhythm, and after a few takes we were in tune with the timing to then work on the dialogue. I'm glad this was first up for everyone to see, as it's a finessed shot that I'm incredibly proud of.

THE DP'S PERSPECTIVE

Robrecht was always in direct conversation with the directors every moment of the shoot, and luckily he was happy to share his overall experience with me here in this article; "From the first conversations with the directors it was clear the camera work in Bad Boys For Life was going to have two sides. On one hand we were fully embracing the stylistic choices made in the first Bad Boys films, and all the low angles, long lenses, slo-motion, and smooth camera moves that come with it. On the other hand, a rawer hand-held vibe would be introduced in certain sequences as the directors did in their earlier features. Finding the right tools, and even more important, the right balance between these two sides was one of the goals during prep and shoot.

Another goal was finding the right rhythm, and make it as variable and funky as the arena where the story takes place—the vibrant city of Miami. The rhythm, being a cocktail of shot

TECH ON SET:

SONY CineAlta Venice
Digital Cameras; Primarily G
Series Panavision Anamorphic
Lenses (which were coated to
give the Miami look).
70 – 200 and 35 – 80
Telephoto lenses.

count, shot duration, character, and camera movement, should have its ups and down in sync with the story beats. We pinpointed moments where we needed the rhythm to slow down and use longer takes, on Steadicam, or Technocrane, and a single camera.

These slower moments should be alternated with fast-paced parts where the shotcount, the camera movement, and the amount of cameras used go up tremendously." —DP, Robrecht Heyvaert

TOOLS OF THE TRADE

We used Steadicam many times as the correct tool for specific sequences and as Robrecht stated, we could control the pace with the tool applied.

As with all *Bad Boys* movies there's always been a sense of movement—always forward, especially with narrative and explanation.

As well as shooting in the beautiful cosmopolitan Miami Beach, we shot most of the movie in Atlanta, downtown and an awesome wrecking yard with old vehicle parts—this leant itself to be an ideal setting for a major shoot out which included some great Steadicam, hand-held, Technocrane and drone work.

After the shoot out in the chop shop, Captain Howard is aggressively grilling Mike Lowery about his terminal judgments, and this was shot as a classic walk-and-talk with the Steadicam.

TRIVIA: This was the first Bad Boys film not to be directed by Michael Bay.

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TRIVIA: This was the first *Bad Boys* movie to be filmed in Panavision (anamorphic) with Sony CineAlta Venice 6K digital cameras, and the first film in the franchise to be shot digitally, unlike the first two which were filmed on 35mm film in the standard spherical format and the Super 35 format. It's also the second *Bad Boys* movie to be filmed in the widescreen 2.39:1 "scope" aspect ratio.

Depending on the situation I'll throw the Betz Wave on for the added benefit of a stable horizon, and this was a good situation for the pace of the walk. Some of the sequence I walked, and some of it was shot off my trusty Backstage Shotsaver Dolly—essentially for leading on longer focal lengths the Shotsaver helps with a consistent pace.

It really depends of how the blocking works out as to whether the Rickshaw or Shotsaver Dolly can be employed—so when deciding on whether to wear the camera or hard mount, of paramount consideration was to keep an eye on the blocking and discuss where the natural cut would be.

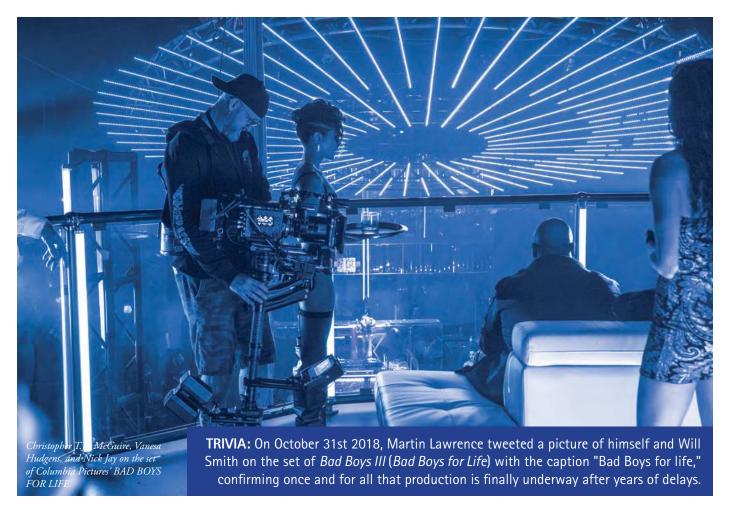
CAR CHASES AND HELICOPTERS

The stunning 2nd unit car chases in the movie, and the amazing helicopter work were choregraphed and captured by some of the best in the business including: Fred North, Henrik Hasen, Spiros Razatos, Hans

Bjerno, Patrick Loungeway, Igor Meglic and each of their specialised crews who made for some excellent *Bad Boys* Bruckheimer action pieces.

As the main unit we punctuated the main actors in the narrative moments of the sequences. One such sequence was on a motorbike with a side car which housed an automatic machine gun. With Mike Lowery ably piloting the motorbike, and Marcus Burnett capably in control of the machine gun, a motor bike chase ensues while the comedy fires thick and fast. Throughout the night, we trawled up and down Ted Turner Drive in Atlanta on the back of a Chapman Leonard insert vehicle fitted with a 30' Scorpio Crane and an Occulus remote head from Cinemoves Atlanta. Will and Martin rode the motorbike and side car on a tow behind the truck, and we used the crane to move around them as they were chased by the motorbike gang. I remember freezing cold nights in downtown 'Hotlanta!!'

As with most movies and TV shows now, I feel it's a healthy time to be using various applications to achieve different shots for sequences that require a specific look-one such sequence in Bad Boys was to be on South Beach, Miami on Ocean Drive which involved most of the cops in the show. The scene had a sense of distortion and confusion, and a 360 was called for to add to the disorientation of the characters. While Steadicam seemed the obvious choice, I felt that the Ronin2 might be the correct tool to use to continually rotate around the crowd and pick off and transition to other players crucial to the scene. Darryl Humber wore the Easi-Rig and with the Ronin2, he was able to maintain pace around the melay and I was able to operate the head on a longer lens to move from character to character. The sequence worked great and the worn head proved itself as a controlled stabilised remote head with which I could concentrate more easily on the transitions.



COMMENTS FROM THE CAMERA TEAM

I've been lucky to work with Tom Lappin as the B camera operator on a few projects and he was able to add his point of view about working alongside me on *Bad Boys for Life*:

"As the B camera operator there is always a challenge of being too aggressive and in the way or being too passive and not being useful. I was very fortunate on Bad Boys 3. We had a DP who was receptive and encouraged me to find fun shots. I was also lucky to have Chris McGuire on A camera. Chris and I have developed a wonderful working relationship over the years, and there is a true sense of collaboration between us. Chris allows me to get close and that enables me to get dynamic shots—not just standard "B" camera long lens shots.

I was also very fortunate to have a first-class team of assistants; with Sean Moe on focus and Zach Junquera as the second we were able to get exciting shots on the fly. Who needs rehearsals!? There was a true sense of cooperation with the crew. We were all moving in the same direction, and working to get our DP and directors the most exciting shots possible. I think we achieved that goal."—B Camera Operator, Tom Lappin

Another great use of the Ronin 2 stabilized head was in a scene which called for a descend through different levels of a building and then detach the remote head and walk backwards with the protagonist.

I have also been able to bring on Steadicam/camera operator, Stewart Smith, to the show for C camera duties, as there were sequences that required an extra Steadicam for when I was operating the Technocrane. Stewart and I had invested in the Ronin 2 and made good use of the system together as a team.

"On Bad Boys 3, I was invited to operate C camera as well as head tech our Ronin 2 (R2) package. With the R2, Venice, and our G series lenses, we had a fairly light-weight camera

package that allowed us to pull off some unique shots. On one occasion we designed a shot that descends through a ventilation fan into a prison laundry room as inmates stab a guard to death. We used a special mechanical disconnect system from Cinemoves to disconnect from the descender rig and lead two other guards pulling their fellow wounded guard away from the prisoners and out of the laundry room. The descender rig's speed was controlled by B dolly grip, Kenny Bolton, while the disconnect and leading run out of the room was handled by A dolly grip, Darryl Humber.

Toward the climax of the movie, Will travels to the ruined Hidalgo Palace to find the shooter that nearly killed him. The interior of the set was a massive three-story spiral staircase, and a glass ceiling atrium with several wings off of each side of the main staircase. We designed a shot with the R2 that brought Will into the set low, scraping over the ground as his feet walk across dusty floor with live rats crawling around, it booms up and over his shoulder into a POV to see the extent of

the ruin above in the atrium, pans around and tilts back down to land on Will as it pushes into a close-up. The shot saw 360 degrees, boomed from three inches off the ground to six feet and involved moving down a small set of three stairs, so we decided to use Cinema Device's Antigravitycam support rig. This rig isolates footsteps and allows all the lens height range of a MK-V AR or ARRI Trinity, but it allows from far more precise framing choices with an operator on the wheels. I operated the Antigravitycam while Chris operated the wheels and talked through the timing of the shot over the HMEs.

It was a pleasure to work on such an action packed and visually stunning film. Using all of the available tools to help tell and enhance the story was a very rewarding experience for me. Thank you to Robrecht Heyvaert, Chris McGuire, and Tom Lappin for having me along for the ride."—Steadicam/Camera Operator, Stewart Smith

As much as the movie called for the skill set of camera operators, also very important was the high calibre of the focus pullers—essential for a lot of the work.

I was happy that my friend Donnie Steinberg was the key 1st as his attention to the overall execution of the shoot is paramount, especially with his ability to organise the crew but also to keep the sharps on some

difficult shots, ably assisted by 2nd AC Matt Haskins and we were all supported by Digital Loader Melissa Porter and Utility Matt Matches.

The classic *Bad Boys* slo-mo wraparound was one of those difficult shots—shooting high speed on a Technocrane, tracking around and booming up as Martin rises up into frame as Will joins him, was the shot that really brought us together as a tight unit—the unit also included Darryl Humber, again as my dolly grip, who was critical in making sure the head was consistent in the move for both Donnie and I to get into a flow to execute the shot. Darryl was keen to remember the nightclub sequence and his thoughts follow:

"The shot I enjoyed the most was the Technocrane shot in the club. Adil, Bilall, and Robrecht are not afraid to push the difficulty scale on the Technocrane and we did a lot of shots that started wide and swooped around before finally ending in a close-up or an over-the-shoulder. This one was no exception. Camera started high to one side of the interior of a packed dance club. There were about 300 background extras and the camera descended among them, then picked up our actors entering the club. We pulled back with them before rising and panning the camera to see the packed room, and then ascending rapidly to a hanging platform

about 30 feet above the crowd. Camera reaches the guardrail, goes over it, and drops down among about 30 extras to a close-up of our bad guy facing us on a couch in foreground with another actor over his shoulder. This was one of those shots where everyone had to be on their game and Chris, Mike Howell on the pickle, and myself were constantly communicating, calling out cues or possible dangers. It's always nerve wracking swinging a Technocrane among actors and extras, so I had spotters keeping an eye on any wayward background. I think it was a very cool use of the crane and fun to do."

- Dolly Grip, Darryl Humber

MOST MEMORABLE MOMENT

The whole shoot was an amazing experience, but my most memorable moment was getting the chance to discuss a choreographed move I was shooting on the Steadicam with a well-known director who was making another of his well-known cameo appearances. He was to appear from a crowd of people, and then I was to pull him onto the dance floor and circle him 360 while he spoke to the crowd, introducing Mike Lowery. I'm glad to say the sequence went off without any explosions or car chases crashing through, and my first experience working with Michael Bay went great, and without the 'Bayhem' I was half expecting...!

CHRISTOPHER T.J. McGUIRE, SOC

Christopher T.J. McGuire, SOC began his career in the UK on various TV shows including: World in Action, This Morning, Dispatches, and Planet Pop, then moved into feature films. He contributed to the early-stage development of what is now called Omega from MK-V, and used it on many productions including Harry Potter and the Order of the Phoenix. As owner and operator of this equipment he was able to open up new possibilities for use in both the commercial and motion pictures worlds, as well as continuing to photograph narrative using all the different platforms available. McGuire's eclectic resume as a camera / Steadicam operator includes: True Detective Season 1, Terminator: Dark Fate, Detroit, American Made, Conan the Barbarian, and Pitch Perfect 1, 2,

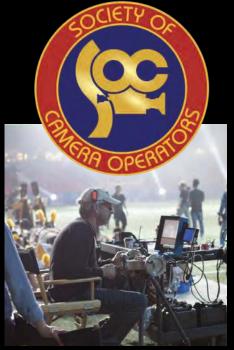


and 3. Chris endeavors to be true to his passion for movie making, commits himself to the craft, and encourages ALL of his colleagues the best he can. With the release of his Steadicam Warriors—carictatures of animals operating Steadicams. The carictatures have a range of graphic designs and he hopes to bring together ALL of his Steadicam / camera colleagues together as a collection of hard-working caricatures personalities. *steadicamwarriors.com*

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— Y E A R S —

The Society offers different levels of membership for individuals and manufacturers in the production community – Active, Associate, Educator, Student and Corporate.

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The 2020 SOC

LIFETIME ACHIEVEMENT AWARDS

by David Daut · photos by Albert L. Ortega



SOC Camera Operator of the Year - Television Nominee Mitch Dubin and LEGION crew plus spouses/partners.

On January 18, at the Loews Hotel in the heart of Hollywood, the Society of Camera Operators hosted their 2020 Lifetime Achievement Awards. Attendees from across the film and television industry came out to celebrate the accomplishments of those whose work defines the very essence of cinema. Following a red carpet reception, the awards show began as the SOC's President, George Billinger, SOC welcomed the assembled talent. Billinger made a point of noting that half of the camera operators shooting the awards show for its simultaneous online broadcast were women and reaffirmed the society's commitment to diversity and inclusion.

As the evening unfolded, heartfelt words were exchanged as awards were presented to respected colleagues and longtime friends. Among the highlights of the night were Jamie Lee Curtis's acceptance speech for the SOC President's Award where she described the professional intimacy and trust shared between actor and operator; Natalie Portman being presented the SOC Governors Award by Mitch Dubin, SOC; Andy Romanoff, SOC conjuring up a detailed image of his good friend as he presented the Distinguished Service Award to Steven Poster, ASC; and J.J. Abrams describing his incredulity at Camera Operator Lifetime

Achievement Award winner Colin Anderson's, SOC impassioned hatred of eucalyptus trees.

The SOC is proud to host this show—the only one of its kind to honor the industry's below-the-line crew. We would like to thank every-one who was able to attend, and for those who were unable to make it, the archived broadcast is available for viewing at *socawards.com*.

LIFETIME ACHIEVEMENT AWARDS:

President's Award Jamie Lee Curtis Governors Award Natalie Portman Distinguished Service Award Steven Poster, ASC

Camera Operator Colin Anderson, SOC

Camera Operator Live & Non-Scripted

Dave Levisohn

Mobile Camera Platform Operator J "Moose" Howery

Camera Technician Heather Norton

Still Photographer Frank Masi

Technical Achievement Award

SONY VENICE Extension System ("Rialto mode")

Top left: Jame Lee Curtis, President's Award. Top right: Presenter J.J. Abrams with Colin Anderson, SOC Camera Operator Lifetime Achievement Award. Center: Steven Poster, ASC, Distinguished Service Award. Bottom left: Natalie Portman, Governors Award. Bottom right: Frank Masi, Still Photographer Lifetime Achievement















THE NOMINEES FOR COY FILM:

Sam Ellison – A Beautiful Day in the Neighborhood

Craig Haagensen, SOC – Motherless Brooklyn

Geoff Haley, SOC - Joker

David Luckenbach, SOC – Ford v Ferrari

Dale Myrand, SOC - Knives Out

AND THE NOMINEES FOR COY TELEVISION:

Chris Cuevas – Watchmen

Mitch Dubin, SOC - Legion

Jim McConkey, SOC – The Marvelous Mrs. Maisel

Jeff Muhlstock, SOC – Mr. Robot

Sean Savage, ACO, SOC – Game of Thrones

Left: Geoff Haley, SOC with his award for Camera Operator of the Year – Film. Right: Jim McConkey, SOC with his award for Camera Operator of the Year – Television.

Below: SOC Awards at the Loews Hollywood Hotel.



ON THE RED CARPET...















Top, L to R: Emcee Andrea Fasano; SOC Camera Technician Award recipient, Heather Norton; Presenter, SOC Technical Committee Chair, Eric Fletcher, SOC with Sony's Dan Perry. Middle, L to R: SOC Technical Achievement Award recipient; SOC Mobile Camera Platform Operator Award recipient J "Moose" Howery; SOC COY-Television Award nominee, Sean Savage, ACO, SOC and wife Karen Savage. Bottom, L to R: Presenter Louis J. Horwitz and SOC Camera Operator Live & Non-Scripted Award recipient Dave Levisohn, SOC; Brian Taylor, SOC - Charity Committee Chair and wife.

Tech Talk

SOC TECHNICAL ACHIEVEMENT AWARD 2020 Sony's VENICE Rialto Extension System



The SOC Technical Achievement Award is given to a manufacturer or technology that has demonstrated superior engineering, advancement of camera operation, and substantial facilitation of the craft. This year's award recipient was Sony's innovative VENICE Rialto Tethered Extension System.

The SOC hosted a full day of demonstrations on October 26, 2019 at the SOC offices, courtesy of Tiffen. Each participating technology was presented by the manufacturers to the blue ribbon jury of SOC judges made up of: Technical Chair, Eric Fletcher, SOC; Andrew Ansnick, SOC; Dave Fredrick, SOC; Lawrence Karman, SOC; Mark LaBonge, SOC; Rocker Meadows, SOC; John Perry, SOC; Manolo Rojas, SOC; and Gretchen Warthen, SOC.

After the presentation to the judges, the companies demonstrated their gear to SOC members. A special thank you to the judges, and all the companies that participated.

Technical Chair, Eric Fletcher, SOC said this, "For the past five years I have been honored to have amazing juries to evaluate the technologies for the *SOC Technical Achievement Award*. And—as everything with progress—the submission and technologies just keep getting better, making the jury's job of determining a winner more and more challenging. With just 20 minutes for each presentation, each of the submitters jampack their time with demo's, information, and answering the jury's questions.

After much deliberation, Sony emerged as the clear choice of the Jury. The Rialto now gives us more choice for where we can place the camera. In five minutes you can take your studio camera and turn it into a small easily mountable sensor module with multiple choices for lens mounts. Need to fit it into a really tiny spot? You can use the native Sony mount and their tiny lenses. Have a bit

more space? Put the PL mount on and use the same lenses that you are using in studio mode. The options we have, and our ability to problem solve just how we can get the camera there are much less limited. Add that you can also remote mount the sensor/lens combo somewhere that it might be a bit too dangerous to have a manned camera, and you have a clear winner."

We congratulate Sony and their Venice engineering team for creating a solution that expands our abilities as operators to deliver the shots that the director and DP previously only dreamed of.

Dan Perry, of Sony was presented with their *Technical Achievement Award* at the *SOC Awards* show, while joining the industry in celebrating the best of the best in production and camera operating. Perry commented, "We are honored to have the SOC recognize the Rialto with this award. I am so proud of our Sony Atsugi engineering team that listened to the voice of the customer and delivered an outstanding tool that is quickly becoming an industry standard."



Congratulations Sony!

VENICE Extension System / SONY

Sony's VENICE Extension System (aka "Rialto mode") provides outstanding mobility for camera operators. Nicknamed "Rialto" mode, the Extension System separates the sensor block from the camera body by up to 18 feet with the same image quality and functionality that has made VENICE a preferred camera. The lightweight sensor block weighs only 4 pounds with a PL mount, ideal for handheld stabilizers and gimbals. And its small size is perfect for tight spaces, such as vehicles, aircraft and VR rigs. Users can switch from VENICE's traditional mode or extended "Rialto" mode in under 3 minutes, allowing for ultimate flexibility on set. *pro.sony/venice*









ADDITIONAL SUBMISSIONS:

Steadicam M-2 / The Tiffen Company

The revolutionary Steadicam M-2 recently started delivering. It represents one of the greatest leaps forward in Steadicam technology in decades. The integration of the Volt technology into the rig provides operators with an assistive tool for operating with more confidence during challenging shots. The rig itself is among the lightest and most rigid Steadicam rigs ever produced with all the features needed to move effortlessly between feature film, television, broadcast and live event applications. And the ability to customize and swap out different elements like top stages and posts offers a flexibility never before available.

steadicam.com/m-2

The Refined Hydraulic Control / J.L. Fisher Inc.

We have taken our existing hydraulic control design and refined it by making over 50 different changes. The results of these efforts have been well received and are proving successful. Smoother, gentler starts and stops on the lift beam, better acceleration, a precise start point for arm movement in both directions, a faster top speed in both directions, and much smoother movement are just some of the highlights of the RHC upgrade. We also have a way to set and maintain a constant, repeatable lift speed in either direction.

jlfisher.com

Ergorig / Cinema Devices

The Ergorig is a compact lightweight body vest system that displaces the weight of a camera from the operator's shoulder to the hips, removing spinal compression and muscular fatigue. In combination with the Undersling for weightless low mode handheld work, there are no overhead structures that would interfere with camera operation, allowing the same width/height footprint and freedom of movement of wearing nothing at all. The system, available in two sizes, is fully adjustable for waist size as well as torso height. It can include spacers to more comfortably accommodate female operators as well as any waist size.

cinemadevices.com/ergorig

CineLight 480 Super Quad / FLOUTEC

The new CineLight 480 Super Quad is a constant output BiColor Tunable DMX LED long throw panel, soft lighting fixture of high-quality pure, white light with interchangeable diffusion, and a CCT range from 2700 K to 6700 K. It features a constant output of pure white light making it the largest and most powerful luminaire on the market; the light output is equivalent to 4 CineLight 120. The great thing about this light is that, unlike the much more expensive competitors, the CineLight 480 Super Quad is a self-contained luminaire that does not need a ballast or power supply.

fluotec.net/cinelight-studio-480-super-quad-tunable

-Insight



PETER CAVACIUTI, SOC, ACO, GBCT, ASSOC. BSC

What was one of your most challenging shot or challenging day in the industry? On 1917, the German Tunnel set, never had so much "Fullers Earth" and rubble dropped on myself and rig, both had deep cleaning after the shot!

What is your most memorable day in the industry?

I guess sitting chatting alone with Stanley Kubrick for an hour in Mentmore Towers, over an evening break, on *Eyes Wide Shut*, many questions answered by Stanley.

The person who helped you most in your career?

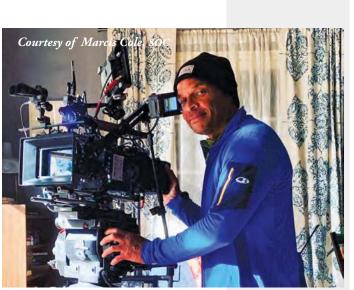
Without a doubt Roger Deakins, we have helped each other out of the recent personal woes of our team Manchester United's fall from grace.

Credits: 1917, Blade Runner 2049, Skyfall, Eyes Wide Shut, Kundun

STEVEN COHEN, SOC

What is your most memorable day in the industry? Way back in the day, I was hired as an additional assistant cameraman on *The Betsy*. When I arrived at the location for my first night of shooting, I was assigned to get into the period picture car, hunker down in the rear seat behind the actors, and pop up and slate the scene when the time came. Upon the director calling "Cut," the actor in the front seat turned to me and introduced himself: "Are you the new assistant? Please call me Larry." It was Lord Lawrence Olivier! I could have happily retired right then.

Credits: *Survivors of the Shoah, March of the Living,* Various Infomercials, *Dot. Com,* various corporate events and concerts.



Courtesy of Steven Cohen, SOC

MARCIS COLE. SOC

What was one of your most challenging shot or challenging day in the industry? Doing a one'er on *City of Angels*. I had to link several stories in one shot as an ER came under siege with many wounded.

What is your most memorable day in the industry?

Doing A camera 2nd Unit on Titanic.

The person's who helped you most in your career? Gorge Paddock, Chris Harroff, Guy Bee, Dave Emmerichs, and James Muro.

What is the job you have yet to do but most want to do?

Working on a Bond film.

Credits: Titanic, Training Day, First Purge

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tiffen.com

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Social SOC

Curated by Ian S. Takahashi, SOC







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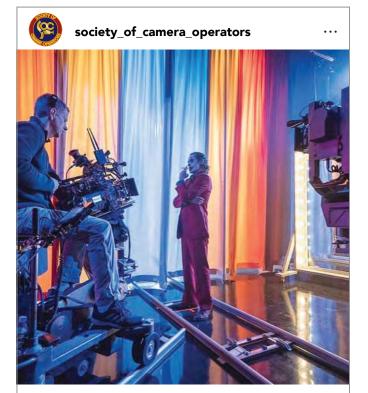
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#bestJobEver #thesoc #cameraOperator #Photographer #Camera #Lens #DirectorOfPhotography #Cinematography #Cinematographer #Videography #Photography #Videography #PhotographylsLife #CameraSupport #CameraAccessories #SOC #bts #movies #film #TheSOC

hugh.litfin That's the darnedest tallest camera riser I've ever seen!

raphpstl Her face says it all





2,138



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Geoff Haley, SOC 2020 winner of the Camera Operator of the Year - Film - @jokermovie

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bjdzyak I don't think Geoff ever has a day off!



Follow the SOC membership on *Instagram*. See iconic photos from behind-the-scenes, on-set backstories, and images that inspire. Join in the conversation! @ Society_of_Camera_Operators





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