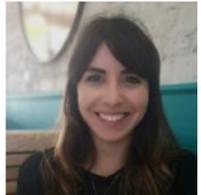


**Celebrates International Women's Day**

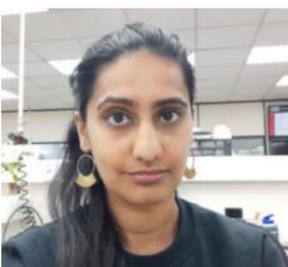
# IN THE FRAME



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No 25 | March 2022



## Dear Members...

The Operator Awards season is upon us again and the complex question of what makes for good camera operating will be taxing the minds of the jury members. It's a no win situation for them because, whatever their decisions, cries of "foul play" will inevitably follow- a thankless task for those who voluntarily give up their time to meet, watch and seriously discuss the work of camera operators. I applaud them loudly here and suggest that regardless of who takes the prizes, the big winner will be the art and craft of operating. It's important to keep this in perspective, although I appreciate that it's difficult to remain magnanimous as a nominee when you don't make a podium finish. In this situation, circulating at awards night is the best policy, when one can always find a table with a sympathetic ear and enough wine left to drown their sorrows.

Seriously, there is a lot of top quality work being produced by operators at the moment, making it incredibly difficult to pick a winner. But the more important issue is to demonstrate to production that, by using a good operator, their on-screen production values look so much better. I believe showcasing all of the talent we have as operators is the real purpose of awards night.

Knowledge is power, as they say. This is certainly true when it comes to being aware of the dangers we face as camera operators and how to deal with them. Statistically, when it comes to injury and fatality, camera operating has been identified as being more dangerous than stunt work... Maybe we should demand a danger payment, like stunts, every time we take part in a stunt scene. Of course, this won't happen and nor should it be necessary if full safety checks are carried out and we are sensitive to our own on-set situation. The danger can come from the most unlikely and innocuous situations.

I can remember being by the camera on a shoot when a small bolt from the lighting rig above landed a couple of feet from where I was standing. It had been dislodged by an electrician working above. It had fallen 30 feet and would surely have caused me serious damage had it landed on my head. To this day, I always vacate the set if anyone is working or craning equipment over the top of camera, no matter how urgent the need is to line up a shot. I always flag it with the 1st AD so that it's logged with the person entrusted with H&S on set.

To this end, I appeal to all of our members to take the online Health and Safety passport on the Mark Milsome Foundation website. If we have a knowledgeable department, aware of how to stay safe on set, not only will we ensure that we make it home unscathed at the end of the day, but we will show production that we can't be fobbed off with poorly organised and dangerous working conditions.

I've mentioned the stalwart work of the Operator Awards committee but equal praise must go to Danny Bishop who bows out with this current publication as newsletter editor. Danny has almost single-handedly developed the newsletter from its early beginnings into today's eagerly-read publication. It's really not easy getting copy and content together from contributors who are busy operators. It's even more impressive that Danny has managed to do this given his own hectic work schedule and family life.

A big thank you Danny and good luck to Tanya, Dan, Akhilesh and Sven who take over as editorial team. To all of our members, if there's anything you feel you would like to contribute to the newsletter, please get in touch with editorial.

Stop press: As we go to print, the awards have now been handed out. Danny didn't get one for editing the newsletter- that's a shocker- but he did get one for Operating. Well done Danny and all of the other winners at the BSC awards.



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## INSIDE...



*Finally a grip that listens!*

# ILANA GARRARD ACO/ASSOC BSC



Ilana Garrard & Max Harwood



I received the Craft Award at the Women in Film and TV awards in December. The Craft Award is given to someone who has excelled in their Craft- in this case Camera Operating. The criteria for the award spans across all departments and has previously been given to women who work in costume, production design, lighting and others. The Award was presented to me by Max Harwood, who plays Jamie in *Everybody's Talking About Jamie*. We worked together on the Bafta-nominated film in 2019, a portion of which was screened at the awards.

I was thrilled to receive the award. It was particularly touching to be recognised by my fellow women at an event that is such a wonderful celebration of women's achievements. I never imagined I would be receiving any kind of award in my career,

so stepping up to do a speech in front of 750 people was incredibly nerve-racking. The room was full of so many insanely talented and cool people, which made me even more nervous!

The imposter syndrome was extreme all day but it was so lovely to have my work and achievements celebrated like that. I was told about the award back in September and wasn't allowed to tell anyone, so I sat on it for quite some time!

I was away last year shooting Working Title's movie *The Swimmers*, as well as completing *Anatomy Of A Scandal* for Netflix. This year I'm starting a show called *The Gold*.

Thanks!  
Ilana

## ACO MEMBERSHIP NEWS 2022

### FULL MEMBERS

- Emillio Schlappi
- James Anderson
- Derek Carlow
- Peter Wilke
- James Chesterton
- Mitch Dubin
- Piers Lello

### ASSOC TO FULL

- Christopher Kechichian
- Barney Piercy
- Jem Rayner

### ASSOCIATE

- Dan Shoring
- Benjamin Eeley
- Stephen Brand
- Tanya Marar (New ACO Chair of Editorial)
- Laura Van De Hel
- Heather Crompton

### FRIEND TO ASSOC

- Catharine Brown
- Hannah Jell
- Ashlea Downes
- Kate Eccarius

### FRIEND

- Megan Powell
- Kasia Serafin
- Isabel Fewing
- Chloe Harwood
- Kristi Gilligan
- Tim Morris
- Aaron Champion
- Pippa Griffiths Jones
- Emmanuel Holcroft
- Matt Boreham
- Todd Pacey
- Christina Nowak



# THE WITCHER

## JAMES FRATER ACO

Upon reading the scripts for *The Witcher* Season 2, I quickly realised that visually, Season 2 was going to be grander in scale; bigger, better, and packed with a lot more action than Season 1.

Jean Philippe Gossart, block two DoP and a returning DoP from Season 1, had suggested I was the right guy for the job because of my history with the show and my existing relationship with the cast. I got the call from Production asking if I would have a meeting with the first block DoP, Romain Lacourbas. He was to shoot blocks one and four, kicking Season 2 off with a bang.

Originally, pre-pandemic, the production was planning to shoot in a few different countries. Obviously with the pandemic, this changed. Our base studio was Arborfield studios in the UK. We shot in forests around Surrey, a few weeks up north in the Lake District and some amazing locations in Yorkshire like Fountains Abbey. It was very tough with lots of rain, mud and challenging terrains to navigate. About 70% of the show was either on stage or on the backlot. Production designer Andrew Laws built the most magnificent sets for us to shoot.

Naturally, I find the first week of any shoot nerve-racking. I seem to get the same nervous feelings I had on my very first job, 24 years earlier. (I guess if you don't go into a job with some nerves, there's a problem.) We started in the middle of winter in a wet forest in Surrey, with various location moves, powering through thick mud with Steadicam, and night shoots. It would be an understatement to say the first week was a challenge.



*"From having spent a few months on The Witcher with James Frater, what has really amazed me from day one is the way he moves. His rig is a part of him and each move is fluid, controlled and thoughtful. His intuition toward framing is second nature. He has been a great collaborator and a wonderful dancer in those intricate fight scenes."*

**Jean Philippe Gossart**

Left to Right: James Frater ACO; 1st AC Adam Coles; 2nd AC George Fox

Thankfully, we had a very strong camera team, with some of the crew from Season 1 and a few new faces. 1st AC on A Camera with me was Adam Coles, who also operated the C Camera. Eric Bialas ACO was on B Camera but unfortunately couldn't finish the show so Pete Batten ACO stepped in to replace him. Rene Adefarasin was 1st AC on B Camera.

The show was shot in 4 blocks with 4 different directors and 3 DoPs. Each DP/Director has their own way of doing things and it's important to be able to adapt and give each director what they're looking for, but at the same time, to keep in line with what the DP is achieving with his lighting.

Although I hadn't worked with Romain before, I had worked with Block 1 Director Stephen Surjik in the past, and the three of us hit it off, making it a very collaborative style of shooting. We set up a very stylised look for Season 2 with a lot of camera movement and a wide and close feel, drawing the audience into the characters' world.

For Block 2, Jean Philippe Gossart was the DOP and Sarah O'Gorman the Director. The dynamic shifted a little and I worked more closely with JP Gossart. Jean Philippe (JP) and I had worked together on Season 1 and have a very good working relationship. JP enjoys pushing the medium with the camera and isn't afraid to use super wide angles when it's called for, further adding to the style of the show.

I unfortunately was less involved in Block 3 as it was double banked with Block 4, so Sean Savage ACO came in to operate the A Camera on that unit, while I stayed with Romain to shoot Block 4 and the finale of Season 2.

Over the two seasons, I had built up great relationships with the principal cast. This is easy when working with someone so friendly and professional like Henry Cavill.

He really did make things a lot easier for me as he is so in tune with what the camera is doing. It's also great working with an actor that insists on doing all of his own stunts; this way we can add story beats into the action, instead of shooting around a double.

Considering the size of most of the sets and the epic aspect (2:1) of the show, Romain felt shooting in a large format was the right way to go. Also, being able to compose wide shots with a lensing that would bring the subjects closer was a very attractive idea.

It was his first time shooting narrative in a large format. He assumed the Alexa LF's sensor would behave like the "traditional" Alexa. Also, Romain had been quite impressed with the F55 and F65 on past projects- the ability of Sony in handling colour contrast & separation, and in particular with the amount of colour remaining in low light. So he decided to test both the LF and the Venice. I suggested the Rialto mode as a great tool for some of the fight and horse scenes, which Romain was receptive to.



*Left to Right: James Frater ACO;  
DP Romain Lacourbas ASC, AFC;  
and 1st AD Sean Guest*

Once in the grading room, it was quite obvious that the Venice provided better colour separation, not only in low light but pretty much in all lighting situations. It has a tendency to be sharper than the Alexa LF, but Romain knew he could easily soften it with filters. Seeing both sets of footage side by side, he realised the LF was giving a different type of depth- hard to explain, but in his words: "It was like if the volumes had more layers, and therefore its restitution was more cinematic."

In terms of lensing, Romain was looking to get closer to vintage glass as he thought it would be a better fit for our world. He was also in search of something that had imperfections, distortions and surprises, and wanted to stay away from lenses that were too crisp and clinical. But because of the nature of the show, which was supposed to take us to a multitude of locations (way before Covid!) and the necessity to supply 2 units, Romain chose to remain on the newer side of "vintage style" lenses. So we tested a bunch of series (Primo 70, Panaspeed, System 65, Arri DNA, Signature). The DNA felt like the most interesting ones when it came to imperfections and the nature of the bokeh. He was also intrigued by the de-tuning possibilities, but it turns out that it was not so efficient, and rather hard to manage on several sets. Overall, they had something sexy and pleasing with skin tones.



As the DNA was somehow a reduced set (starting at 21mm), he thought having a full set of Signatures would give us the option to treat certain scenes differently, as well as allowing us to have wide lenses. The 15mm for instance is just amazing as it doesn't distort the verticals, as another similar wide lens would. So it turned out that with a little bit of filtering, the wide Signatures slowly became part of our main package while we mostly used DNAs.

There is a lot of camera movement throughout the show. We had a mini scope hydroscope 20', 32' and 43' with us throughout the show and brought in the 50' and 70' Technocrane when needed. I found the mini scope 3 meter arm exceptionally useful on the smaller sets. We were lucky to have Paolo Frasson as our key grip, making it possible to execute technically-complicated crane shots throughout the series, especially under the pressure of a tight schedule.

The Steadicam with the MKV AR along with the crane were my "go to" tools for the big set builds, forest locations and most of the fight scenes. In episode 2, Director Stephen Surjik masterfully put together a sequence where Geralt fights a Leshen- a ferocious tree-like creature that uses roots and vines to attack and kill. I shot the majority of the sequence with the AR. It starts with us following Geralt through the castle hall and into a basement lab where he encounters the monster. The camera tracks around him while he fends off vines, using the AR's ability to go from high to low mode within the shot. There is a moment in this scene when he rolls over a table. I thought this would be a great opportunity to use the AR's 360-degree roll function. I set the speed to which I wanted the roll to happen. It's very quick, 360 degrees revolution in 1 second. At the moment Gerald begins his roll, I had our loader trigger the AR. It worked really well and added great energy to the fight.

Season 2 is packed with fight scenes, whether it's against monsters or humans. Adam Horton- our stunt coordinator- and his team came up with great fight sequences which they would pre-vis. I had access to this so could familiarise myself with the shots a few days before shooting. I would also give some feedback to Adam and decide what tool would be the best for that shot in the sequence. The main challenge shooting Season 2's big fight sequences was the tight schedule coupled with it being extremely VFX intensive. Everyone has got to be on top form when you are yanking the lead actor across the set on a wire.

A great example of it all coming together is in episode 7 where Henry's character takes on four bad guys at once. The pre-visual made by the stunt team and passed onto me had fast wrap-around moves, with the camera traveling from high to low at certain points. I had been shooting most of the fight scenes throughout the series on my MKV AR, giving quick stable moves and the ability to go from high to low mode in shot. Unfortunately, it is a big rig when it is horizontal, and the set had some pillars and tight spaces to navigate. Luckily, there was a Stabileye nano available which I had got in for a test. It was perfect for what we needed.

Every shoot has its challenges, whether it's budget or tight schedules, but by far the most challenging thing on *The Witcher* Season 2 was the pandemic. We had to shut down 7 weeks into the shoot. Thankfully, Netflix didn't give up on the show or the crew; we were one of the first shoots to be up and running after lockdown was lifted, and headed into the unknown- different zones for crew, PPE and social distancing definitely hindered the show from running smoothly.



Season 2 comes to an end with an epic finale in which Netflix really went all out- a massive VFX undertaking with portals, monsters and huge set extensions. We had all our usual equipment, Steadicam and full range of hydroscope cranes. We also brought in a bolt high-speed motion control and the techno dolly to help achieve some of the trickier VFX shots.

Romain and I had to fight for the Bolt shot as it was going to take 2 days to achieve, which would make any series producer nervous. We ran the Bolt down about 30' of track, laterally tracking past the Witchers as they are attacked by shards of an exploded Monolith. We shot on the Alexa LF at 144 fps. On the first day, when we setup the track and the Bolt, we had the stunt team as stand-ins for the actors.

We plotted the camera move and then rehearsed with all the elements: camera, stunts, wind machines, and flying debris. The next day when the cast were in, we showed them the camera move and they rehearsed. When they were ready, we made the final camera position tweaks around changes the cast made. And once 1st AC Adam Coles set the final focus marks, we were ready to shoot it. I'm glad Romain stuck to his guns as the end result was truly worth it.

Long shoots can be very challenging for various reasons and I feel it's really important as a Camera Operator to maintain your mental focus over such an extended period. I'm used to doing long shoots and keeping mental focus over such long periods. This is achieved by being as involved as I possibly can; an Operator should never leave the set. I work out as often as I can to stay strong, physically and mentally- whether its cardio, high intensity workouts or Brazilian jiu jitsu. They all enable me to keep doing long Steadicam shots, take after take, and still be able to discuss the shot in between takes.



# James Frater ACO

# Creative. Space. Reimagined.

**Creative Space reopening; you are invited to join us:**

**Date** Thursday 24<sup>th</sup> March 2022

**Time** 17:00 - 23:00

**Address** CVP | ARRI Creative Space  
81 Charlotte St  
London W1T 4PP

**Find out more**

**Email: [creativespace@cvp.com](mailto:creativespace@cvp.com)**

**Tel: +44 (0)208 380 7400**

**2022, brings an exciting new chapter for CVP | ARRI Creative Space, with the inauguration of our fully updated 'Luminary' membership program and a beautifully refurbished event area.**

Creative Space is an exciting collaboration between CVP and ARRI. Since its inception in 2018, it has provided the creative industries with unique access to not only latest in production solutions but also technical expertise, networking events and workshops.

Luminary Membership is available by invitation only and is being offered with no joining or membership fee. Joining provides a wealth of benefits to both individuals and industry organisations making it easier to utilise the space and actively engage with the community.

To present Luminary, we invite you to join us at the official reopening on Thursday 24<sup>th</sup> March from 17:00 where we are providing an evening of delicious food and drinks, great entertainment, excellent company and of course the opportunity to learn more about this distinctive space and how the new Luminary membership can work for you.

We are planning a fantastic events programme for 2022, so whether this is your first opportunity to experience the space or you are a regular visitor, we hope you can join us for the reopening event and look forward to welcoming you throughout the year.

# UNCOVERING THE CRAFT

BY CLAIRE PIE

This time last year, I got a message from DoP Matt Wicks who asked me to do B Cam for him in his next TV series project for the BBC. After spending, like most of us, a pretty chaotic year in between short form projects or dailies and large homeschooling chunks, this perspective came as great news. At the time, I had only just drawn a line on camera assisting. Lockdowns and school closures allowing, I was working on as many projects as I could, but as mentioned already, short form. I was really questioning myself on how I would be able to improve my skills while having such erratic periods of shooting time.

There is only so much you can read about or film in your own kitchen. And obviously, when shooting and/or operating on music videos, documentaries, short films etc. both budget and time are meagre; just in terms of shots and camera movements, your options are limited. You don't have access to dollies, cranes, remotes heads or tracks, and most of the time not even grips themselves. It is absolutely brilliant for creativity but you quickly get eager for more.

***"So how will I progress as a Camera Operator? How do I get good at my craft? What IS the craft? Getting a job is a good start."***

Working with Matt was amazing. Not only is he really talented but he was generous with suggestions and easy to talk to, which helped me find my feet. It gave me the real taste for camera operating and a new understanding too. I kept going.

The more I was gaining experience and knowledge, the more it unfolded how much work ahead there was to do. The learning path is endless if you want it to be! Suddenly, the realisation that you can, and will, be acquiring more and more knowledge and skills for the rest of the days you are operating is a pretty beautiful feeling. It was- it is- both exciting and empowering. Maybe a teeny tiny overwhelming at times. Just keep going.

I was lucky. Through support from friends, I got to work on amazing shows: the *Game of Thrones* prequel *House of the Dragon* as C Cam, where I eventually became part of the team; *Gangs of London* season 2 as B Camera on their 3rd Block; and some other great opportunities working with amazing DoPs. Witnessing them working on programs of this magnitude was a lesson in itself as they have so much to think about, deal with, and manage. In that sense, it is important to be the least demanding possible, especially as C Camera, D, E etc. It is often where you find the "diamond in the dust".



It is a great place to be as it provides a degree of freedom. But it can also make it tricky to know when to ask for support, which at times is needed. I have felt hesitant on occasion to do so as I did not want to feel I was in the way, or stepping on someone else's toes, or simply to appear as not competent enough. But communication is key and a great tool for finding solutions. Ultimately, the goal is not just individual but a common one.

I have been working with truly amazing operators and DoPs. My experience is that they will always show support or advice when they can and especially if they know you are newer to the profession. By expressing questions, issues and doubts to make a shot work, a more experienced Camera Operator understands where you are coming from. This can be extended, of course, to your camera team and your grip. Their experience is of great value. I am a big advocate of being part of a team. I have learnt and I am not shy to admit when I don't know.

I have my own taste, preferences, instinct, and all the millions of images which have influenced and shaped my eye since I started going to the cinema as a kid in rural France- all those elements that guide me along the way like a compass. Nevertheless, starting as a Camera Operator is meeting a constant flow of challenges. But isn't it true to say that being a Camera Operator is also absolutely that? It never stops to be challenging once you begin to progress. It excites, it daunts, it is incredibly difficult and beautifully rewarding when overcoming the struggles.

This has been a great realisation for me and an electrifying one.

***"And the beauty that, you are not alone in it."***



# THE OPERATORS AWARD

## 2021



### Feature Film Award: **WINNER**

#### Mitch Dubin SOC & John "Buzz" Moyer SOC

"It is our sincere honor to be considered for The Operators Award Team of the Year for *West Side Story*. Being witness to the level of passion and remarkable skill of the cast and crew of this project was a daily reminder that operating a camera is inspiring, emotional, difficult and ultimately a most rewarding profession that we all endeavour upon. Please accept our deepest gratitude to be included in this elite group of camera operators."

Mitch Dubin SOC  
John "Buzz" Moyer SOC

#### Last Night in Soho

### NOMINEE

"Working with Edgar Wright and Chung Hoon Chung was a gift for any operator and this particular film had a number of choreographed Steadicam sequences that were a real pleasure to shoot.

The truth is, we were afforded more than the odd rehearsal day to get it right on the day, which took a lot of pressure away from camera.

I had a great team with me: Will Morris 1st Ac; Ali Youssef 2nd Ac; and Greg Murray was gripping.

It's obviously a real honour to be nominated for this and to be among the other names and films that are also nominated. Good luck to everyone!"

Chris Bain

#### No Time to Die

### NOMINEE

"Working on *No Time To Die* was an absolute career highlight- one which was made all the more special by working with an amazing crew. Our DoP Linus Sandgren ASC FSF is incredibly talented and he and our brilliant director Cary Fukunaga challenged me on a daily basis to become a better Operator. I feel very lucky to have had the opportunity to work on such an iconic film and am honoured to be nominated for the Operators Award."

Jason Ewart ACO

"Wow! What can I say?! It was a privilege to work on *No Time to Die*. The crew were amazing! I'm extremely thankful to have been given the opportunity. Shooting on IMAX was quite something. The physicality of these cameras, especially using them handheld, was a really interesting challenge. It's thanks to Linus Sandgren that we had the opportunity to experience this. His drive and creative ability were truly inspiring. It's an honour to be nominated and this wouldn't have happened without the amazing camera and grip crew."

Ossie McLean ACO

#### The King's Man

### NOMINEE

"*The King's Man* was my third film as Camera Operator with Director/ Producer Matthew Vaughn and my 15th collaboration with Ben Davis BSC. I was fortunate to work with an exceptional team: Sam Renton (B Camera Op); Dave Cozens and Leigh Gold (1st ACs) and Kevin Fraser (Key Grip). This film is a prequel to the highly acclaimed *Kingsman* spy/comedy action movies, exploring the origins of the world's first independent secret intelligence service, set against the backdrop of World War I. Matthew loves to move the camera, choreographing complex developing shots combining crane, dolly and steadicam. He has an extraordinarily keen attention to detail, so every frame and the precision of every move had to be flawless. The process was demanding but exhilarating, only possible with the support of a versatile, talented cast and crew. Sam & I are flattered to have been nominated by our peers and honoured to be in the company of such esteemed nominees."

Julian Morson ACO & Sam Renton

#### Cruella

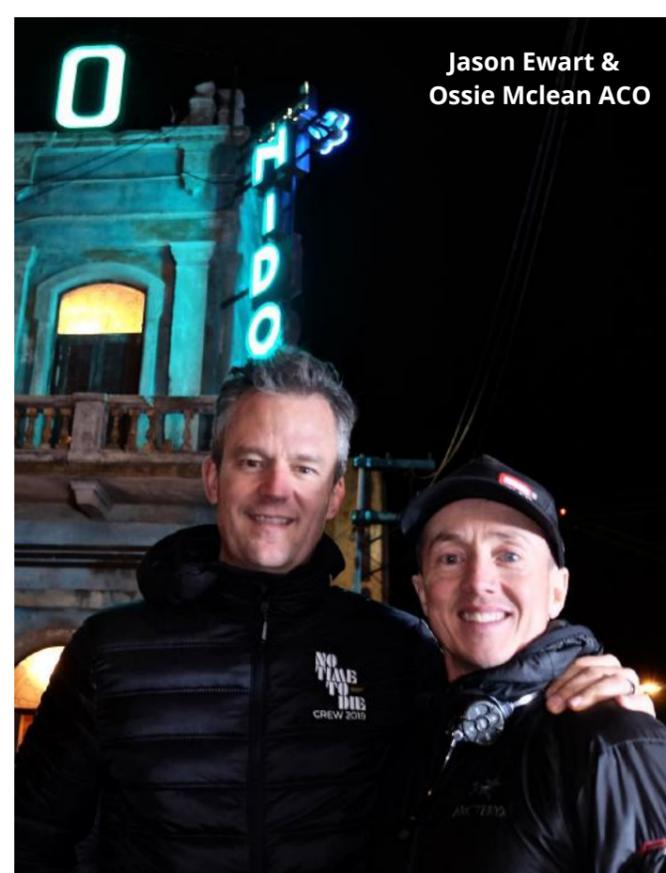
### NOMINEE

"*Cruella* was an interesting film in which we adopted two very different shooting styles- one for each of the two main characters. The Baroness, played by Emma Thompson, was deliberately shot using dolly, track, cranes and Steadicam, using a lot of symmetry and central framing. Cruella, played by Emma Stone, was predominantly shot handheld or on Steadicam in a progressively chaotic manner, as her character developed during the course of the narrative."

Pete Batten ACO

"Working on *Cruella* was a fantastic experience both creatively and narratively due to the script's energetic storyline and director Craig Gillespie's dynamic vision. I operated a lot of Steadicam for Craig as he really knows how to use its flexibility to create a fast-paced experience for the audience. It was a pleasure to work alongside DoP Nicholas Karakatsanis and A Camera Operator Pete Batten- two wonderfully talented individuals. As a department we are all very proud of the film's success. A huge thank you to everyone for the nomination!"

Jess Doxey ACO



Jason Ewart & Ossie Mclean ACO





## 2021 TV Category WINNER: Danny Bishop ACO, *Your Honor* Ep 1

"I was so pleased to be nominated alongside this year's nominees. There is such a group of different styles and genres so it's a real badge of honour just to be nominated. I can't begin to say how proud I am to win! So thanks for voting! And thank you to MKV for their generous support.

I have worked with Edward Berger on three occasions and he is a Director who pushes you and your style of operating to the limit and consistently makes you think outside the box. I had two months prep in New Orleans with Ed and the DoP James Friend BSC | ASC and by the time we came to shoot, the first three episodes were completely shot listed.

The first episode is all based around a car crash with a motor bike and I like to think it looks incredibly realistic, despite being made up of so many components. That scene, which is about 10 minutes long, took two weeks to film in the most hot and humid conditions I've ever worked in. We had three cars: one that could be driven from a stunt man on the roof; one car that I could sit in and film handheld; and one car that didn't have a roof so we could get unique shots. The process of shooting in America feels pushed in scale by 100% and we carried everything grip-wise with us by the excellent Key Grip James Selph. We wanted to give a very unique style to shooting in vehicles and tracking vehicles, which hopefully you get a look at through my videos. It was so cool to have all the options in order to help Ed and James realise their vision. What I like about working with them is that they push the limits, never compromise, and always go for the best possible shot. I loved the fact that we shot symmetrical compositions and centre-framed the cast. With an actor as amazing as Brian Cranston, it was a privilege to be sat on the dolly looking at him through the viewfinder. Thanks. The real hero is my wife; I was in America for 8 months and as we all know, that time away isn't easy!"

Danny Bishop ACO Assoc. BSC SOC



The Nevers Season 1, Episode 1

"The Nevers' opening episode was directed by Joss Whedon and DoP'd by Seamus McGarvey with high production values and a notable chase sequence shot in Chatham docks. We had two cameras: myself as A Camera Operator and Rodrigo Gutierrez on B Camera. Oona Menges provided C Camera and 2nd Unit. The story produced by HBO is a sci-fi thriller starting in the Victorian era and time-travelling into the future. It's about a group of women who have developed extraordinary powers through contact with an alien invasion force, "The Galanthi", that arrives in 19-century London. There were five further episodes in the first series."

Peter Robertson ACO Assoc. BSC and Rodrigo Gutierrez ACO Assoc. BSC

The Witcher Season 2, Episode 8

"Working on *The Witcher* Season 2 was definitely a career highlight. To be able to work with such an amazing crew and talented DoPs is always such a great learning experience. The creative collaboration with our DoPs Romain Lacourbas ASC AFC, Jean Philippe Gossart AFC and Terry Stacey ASC, has helped me grow as an Operator.

Being nominated for The Operators Award is a dream come true. Especially alongside such incredible Operators. Good luck to everyone!"

James Frater SOC ACO

The Mandalorian Season 2, Episode 3

"Thank you @aco\_uk @bscine @thegbct for the nomination! As with all shows, it's very much a team effort. So, many thanks to the DPs, other Operators, Camera Assistants, Dolly Grips and Crane Techs that help make this show possible...

Operating on *Mandalorian* has been one of the most gratifying and enjoyable jobs of my career. This has been, and continues to be, a truly once in a lifetime experience that I'm definitely not taking for granted. I consider myself very lucky to be working and learning alongside Cinematographers David Klein ASC, Dean Cundey ASC, Paul Hughen ASC and A Operator Simon Jayes. Many thanks to the ACO for this nomination and good luck to all the nominees!"

Chris Murphy & Simon Jayes ACO SOC

It's a Sin Episode 2

"It's an honour to be nominated alongside such a talented group of Operators and in particular for this show. It's a story which needed to be told and I'm happy to help bring it any additional recognition. There was a very collaborative approach from our fantastic Director Peter Hoar and talented DoP David Katznelson BSC DFF.

Peter was full of energy and drive and took us all along with him from the very start. It was wonderful to work with him and David. Ultimately, we were all incredibly passionate about making something special."

Dan Nightingale ACO GBCT



ORIGINAL THEATRE COMPANY  
PRESENTS

# THE SYSTEM

WRITTEN AND PERFORMED BY  
**EMILY HEAD**

DIRECTED BY  
**GUY UNSWORTH**



## A 72-Minute Continuous Steadicam Take

*The System* is a theatre/film hybrid play, written and performed by the talented Emily Head, best known for her portrayal of Carly D'Amato in Channel 4's *The Inbetweeners*. The show, unlike *The Inbetweeners*, holds a much more serious tone. The play follows the stages of a murder investigation, introducing the audience to a wide variety of characters, who are all played by Head herself. Directed by the fantastic Guy Unsworth who, with the coupling of Guy's vision and Emily's script, dives headfirst into the very complex topic of dissociative identity disorder.

I first met Guy on the production of *Being Mr Wickham* which he was directing with the same production company that put on *The System*: The Original Theatre Company. Guy approached me about a potential project that he had coming up about dissociative identity disorder, and how he wanted to do something different with the show. He introduced the possibility of using Steadicam to do it. A month after *Being Mr Wickham*, Guy and I met for lunch. Here he pitched the idea of shooting the show in one continuous take to portray the idea that all the identities lived within the same person. The continuous take would also allow the audience to feel present at each moment of shot throughout the entire show. Obviously, I was apprehensive at first. It would be the longest take I had ever attempted by far, with the added pressure of it being streamed live to an audience to keep the theatre aspect of the show. Further pressure was added through the sheer physical requirement of taking such a shot. But after some talking about run times, moments and the plan of the show, I agreed to give it my best shot... literally. It was certainly an opportunity that I could not pass.

Due to the lack of availability and budget constraints, rehearsals were not on the generous side in relation to the complexity of the project. The week before the live stream, we were given two and a half days in a rehearsal space, which only had a taped outline of the set. In addition to this, none of the camera equipment was provided so it was not a possibility to start feeling some of the segments out. Day 1 included work on the blocking of the show, making notes on the script, and taking rough photos of particular shots through Artemis Pro.

Day 2 went straight into full run-throughs. This was the first time I had fully seen the show running at its pace. I walked around the floor layout of the set with the script in one hand, and Artemis recording the show, my iPhone in the other (lets just say not very stable). Within two days, we managed three full run-throughs of the show, which was full of working out kinks, changing the blocking and camera movements in areas while trying to keep Guy's original thoughts and look intact. We left these rehearsals feeling optimistic, but still fully aware that we had a lot of work to do in the few days leading up to the live stream that was scheduled the following week.

The three-day production week was split into a tech, rehearsal and shoot day. This took place in The New Wolsey Theatre in Ipswich, where the show was being streamed from. The first day started with setting up the rig, walking the space and looking for any potential issues with the set and space. We also covered the first looks of walk-throughs on camera- an attempt to get through as much of the show as possible, learning how the space worked with the rig, and how framing looked best with the set and lighting. In doing so, we also checked for shadows and anything else that would cause a problem on show day.

*"Day 2 continued with the walk-through of the show, alongside a more detailed look into some of the switch changes, where Emily would change which character she was playing on camera. This involved trying to get the camera movements, lighting and sound cues to all line up perfectly as it was all going out live. After taking a break, which included fuelling up with possibly too much coffee, we gave the first and only full dress run a shot."*

We purposely planned to only have one full camera run-through, so as to not completely destroy me before going live with the show. However, I can safely say that this choice was coupled with immense anxiety which both myself and Guy lost sleep over. We also chose to record this take as a backup in case of an incident which would have led to the full stream going down. With all that said, the first run ended up being a roundabout success. We all survived, the set stayed standing and somehow so did I, albeit with a limited amount of feeling in my legs. I remember Guy asking me how it was and laughing at my response of: "At the 40-minute mark, it kind of turned from this uncomfortable feeling you always get when you wear the rig for too long, to more of a pain and then turned into nothing." This was followed up by Emily mentioning that she was wondering why I kept prodding my leg near the end- something I made sure not to do on the day. But yes, all in all everyone was pleased with the initial outcome. The day concluded with Guy and I heading for a much-deserved pint where we discussed what we wanted to clean up and perfect before heading into the show day.

The day of the show started early with a clean-up of the moments where the camera drifts in and out of the eye line. This responsibility was held by the show caller, Ashleigh Shuttleworth, who gave me a countdown into my ear for when and where to move, and very particular words of dialogue. This was again cued up with subtle lighting and sound, so missing the moments would have been very noticeable. After this, we got Emily in for the last time before the show, and ran through some of the more complicated segments with camera to make sure that we were as clean as possible. Then, once again, some food and possibly too much coffee, before heading into the show. I suggested changing the opening of the show from the back of stage to the top of the stairs at the back of the stalls, to give more of a grand look over the set before heading into it and starting the show- why wouldn't I want to add a quick stairs element to the top of the show hours before going live?



So, with this alteration to the set, I rigged up, apologised to my body for what was about to come, walked to the top of the stairs, and waited for the countdown to come.

The show went, as far as we were concerned, perfectly. Every cue was nailed perfectly, moments of magic were captured between Emily and myself by complete luck, no knocks with the set, absolute pinpoint sharps by the wonderful Harry Coleman, and just a beautiful performance by Emily Head herself. On reflection, as far as I know, there isn't much that I would change about how I operated the shot. There's always going to be some problems with it that I will always see, but as a complete piece of work I am unbelievable happy with it. With this being said, I would say that I would have to do more thinking before blissfully agreeing to do another take like this again in the future, perhaps negotiating a seat of some sort for moments would be nice.

When it came down to concerns about how I was going to physically be able to do this shot, the main solution came in the form of cutting as much weight as possible. Starting with the camera set up, we chose to capture the performance on the Arri Alexa Mini LF, paired with a 50mm Leica R TL Rehoused lens. We chose to go down the Alexa route as this gave the best look for the colours and feel, while also being available in a smaller body option. The decision was then made to go large format and shoot open gate as we settled upon a 4:3 aspect ratio to further push the idea of the characters being stuck in a box (metaphorical police questioning room). Paired with a C-force RT Motor, Teredek 500 TX and a Cini mini RF, it left the weight of the camera package coming in around 5 kg.

My go-to sled for the take was my Tiffen M-2 Volt. To start with, the sled is incredibly light and compact, but the best advantage was to have the integrated volt that the M-2 offers. Having the volt helped massively on the project as it allowed me to fully concentrate on the framing, instead of the building pain in my legs. It also assisted with the horizon, which came in especially helpful when squeezing the rig through the bars of the set. An additional benefit that proved to be rather useful for a few moments during the production was the ability to set the tilt. There are a few very critical moments when the camera needed to swing into a top-down view of Emily. The ability to set the tilt of the sled and then concentrate on moving round the table in the slow and stable manner that was required of that part of the shot was extremely freeing.

As for the choice of vest, I luckily had some options through my recent purchase of a new Walter Klassen Flex Vest. Up until this point, I had been using the Tiffen Exo Vest, which I purchased when I became a Steadicam Operator two years prior. With the design of the set leaving very little space for me to be able to slip through the bars to get out of the cell, front mount would have been the best choice as it allows me to keep a narrower footprint. However, knowing how the Exo Vest feels after using it for pretty much my entire career, I believed that it would have been a push to go the full distance of the show in it. I had only about two weeks of experience using the Flex vest prior to walking into the camera rehearsal days. However, due to it being a custom-made vest and back mounted

I felt that the weight distribution through my body was far better than other vests I had previously tried. And so, it came down to making myself as commutable as possible versus the practicality of the tight set. I decided to use the Flex Vest for the rehearsals to see how getting through the set walls and doors would be. After a few knocks and repaints to the door frames, I felt confident enough to use it for the live take. Personally, I'm very happy that I chose this vest and so glad that it came in time as, on reflection, I believe that I would have physically struggled a lot more if I had used any other vest.

The show contains a fair few lock offs where the rig is settled into a position across the table from Emily, and plays the role of the policeman who Emily addresses right down the barrel of the lens. This resulted in the position of the rig being in a rather awkward position near the bottom of boom range of my arm, resulting in my gimbal hand being near the bottom of my reach and not in the most comfortable position for the extended lock offs. This is where I began finding one of the main problems with the rig. Because I had stripped as much weight as possible and compressed the length of the rig in order to be able to fit it through the set easier, it left me with a lack of inertia in the rig. Coupled with the awkward lock off position, I found that I was over-operating the shot and adding more movement into the image. So how to solve this? Ideally, it would just be in low mode as the camera would then have been sat at the perfect level without the arm booming at all. However, this proved impossible as the shot required a lot of standing and above head-level shots. With this being ruled out, a suggestion was made in putting the MK-V AR on, which I had mentioned to the production team early on before I was aware of it being shot in one take. I quickly shut this suggestion down as it would have made the shot so much harder to do and most probably impossible for me. Therefore, there was no other alternative but to do the lock offs at the bottom of the boom range of the arm in high mode and figure out how to not over-operate it. The best solution that I found for me was to just stop operating. I ended up taking my hand off the gimbal completely in these moments, which allowed the sled to settle into a resting position and allowed me to concentrate on keeping the boom as stable as possible. This actually worked remarkably well and paired with the Volt- which was just giving me the confidence in the horizons, especially with all of the vertical lined elements of the set- the lock offs ended up being fairly good, even at the 70-minute mark.

Overall, I had one of the best experiences in my whole career working on this production. The entire team that worked on it were so passionate about it, however it did turn in to a labour of love and a push of the limits for Emily, Guy and myself. Premiering it live for the first time was absolutely terrifying and the anxiety was huge, especially taking into account the limited rehearsals and only one full run-through. It did, however, give us no option but to nail it as there was no opportunity for second chances or resets. Additionally, the feeling of completion as soon as the stream went to credits was like nothing I have ever experienced before. I even forgot to go and put the rig down for a few minutes while myself and Emily celebrated the moment.

However, I would never want to just do the one live show again. I would have loved to have had a few more takes on this one and to have just seen if I could have cleaned some parts up a bit and possibly had a better take. But saying this, I am still unbelievably happy with the final result- just a thought to have in mind if I ever am crazy enough to give another one a go. So yes, I am extremely proud of the take and I can't say thank you enough to Emily for being my incredible partner in that cage and to Guy for trusting me to deliver his vision of this fantastic story.

72  
MINS!



# Who Is Operating On What?

## WENDY SCHNEIDER

### ENTERTAINMENT AGENCY

**Michael Heathcote:** Currently on *Creed III* for MGM, shooting in Atlanta.

**Christopher McGuire:** Currently on *Guardians of the Galaxy Vol. 3* for Marvel. DOP is Henry Braham.

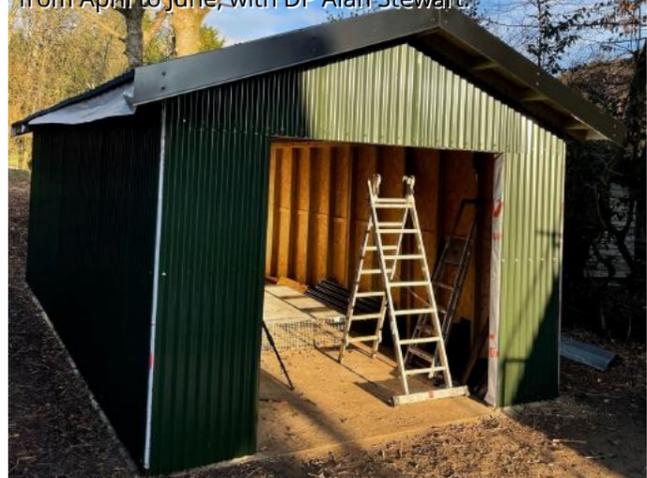
## ARRI CREW

Having recently completed eight months on the A Camera of Lucasfilm's *Willow*, **Matt Poynter ACO** joined the Main Unit of *Indiana Jones* for the last six weeks as B Camera Operator.

**Peter Cavaciuti ACO** has recently finished as A Camera Operator on *The People We Hate at the Wedding* with DP Oliver Stapleton and is now in very sunny Glasgow on the A Camera for *Batgirl* with John Mathieson DP until early April. Having just finished on *Argyle* Splinter Unit with DP Peter Talbot, **Barney Piercy ACO** has joined *Wonka* 2nd Unit as B Camera/Steadicam Operator until March with A Camera **Pete Batten ACO** and Director/DP John Sorapure.

**Iain Mackay ACO** is starting on *Damsel*, a Netflix film with Larry Fong ASC as DP and Hannah Jell on the B Camera. Before Christmas, **Hannah, Associate ACO**, finished on the B Camera/Steadicam on Netflix drama *Half Bad*.

**Chris Plevin ACO**, on the other hand, has been building a shed prior to starting on *Our Man from Jersey* from April to June, with DP Alan Stewart.



**Tom Wade, Associate ACO** has been expanding the Marvel Cinematic Universe alongside DP Matt Windon on *Secret Invasion*, 2nd Unit.

**Jason Ewart ACO**, having just finished on the A Cam/Steadicam of the feature *Luther*, is about to start as A Camera/Steadicam on Disney's *Snow White*, with DP Mandy Walker. And last- but by no means least- **Shaun Coble ACO** is currently on the B Cam/Steadicam with DP Dariusz Wolski, on Ridley Scott's *Napoleon*.

## SARAH PRINCESTONE

**Junior Agyeman ACO** Camera and Steadicam Operator is shooting as C Camera Operator on the Sci-fi feature *Meg 2: The Trench* for Warner Bros. The director is Ben Wheatley and DP is Haris Zambarloukos BSC.

**Simon Baker ACO** Camera and Steadicam Operator is filming *The Crown S5*, directed by Benjamin Carron and produced by Left Bank Pictures for Netflix. The series stars Imelda Staunton as Queen Elizabeth II, alongside Lesley Manville, Elizabeth Debicki and Dominic West.

**Cosmo Campbell ACO** Camera and Steadicam Operator is filming *Extraordinary*. The TV Series for Disney+ follows a young woman who lives in a world where everyone has a superpower except her. The production company is Sid Gentle Films and the writer is Emma Moran.

**Michael Carstensen ACO** Camera and Steadicam Operator has completed shooting *Red Gun*, the prequel to *Game of Thrones*. The series is being shot at Leavesden Studios and the DP is Fabian Wagner. The production company is Cross Planes Production Limited.

**Matt Fisher ACO** Camera and Steadicam Operator is prepping *In the Land of Saints & Sinners*. Matt will be A Camera Operator & Steadicam on this feature starring Liam Neeson and Ciaran Hinds shooting in Donegal with DP Tom Stern ASC, AFC for director Robert Lorenz.

**Rob Hart ACO** Camera and Steadicam Operator has recently been shooting dailies on *Culprits* with DP Philipp Blaubach BSC. The Disney+ heist series stars Gemma Arterton.

**Tony Jackson ACO** Camera and Steadicam Operator has been shooting 2nd unit on the Amazon project *Emerald*, starring Sharon Horgan, with DP Ollie Downey BSC and director John Hamburg. Currently shooting dailies on *Luther*, starring Idris Elba with DP James Friend BSC, ASC.

**Tony Kay ACO** Camera and Steadicam Operator has recently been shooting dailies on *Culprits* with DP Philipp Blaubach BSC.

**James Layton ACO** Camera and Steadicam Operator is shooting the Apple TV+ series *Wool* from the *Silo* series of novellas by Hugh Howey. Rebecca Ferguson will star, Morten Tyldum will direct and the Cinematographer is Hagen Bogdanski.

**Nic Milner ACO** Camera and Steadicam Operator is filming *The Continental*, directed by Albert Hughes. The TV mini-series stars Mel Gibson, Peter Greene and Colin Woodell. The production company is Lionsgate Television.

**Dan Nightingale ACO** Camera and Steadicam Operator has been shooting dailies on *Extraordinary*. The TV Series for Disney+ and Stonehouse with director Jon. S Baird. Now in prep for the Sid Gentle/BBC/HBO series *Rain Dogs* with DP Carlos Catalan, shooting in Bristol.

**Peter Robertson ASSOC. BSC/ACO** Camera and Steadicam Operator has completed working on *Wonka* for Warner Bros. The feature film stars Timothée Chalamet as a young Willy Wonka. Peter is now prepping *Apartment 7A* with DP Arnau Valls Colomer and Director Natalie Reika James. The thriller stars Julia Garner.

**Joe Russell ACO** Camera and Steadicam Operator is prepping the Netflix series *The Diplomat* for Exec producers Debora Cahn & Janice William, looking to a spring shoot as A Cam/Steadicam Operator with DP Julian Court BSC.

**Sean Savage Assoc BSC, ACO & SOC** Camera and Steadicam Operator is doing A Cam/Steadicam on the sci-fi blockbuster for Netflix *Straight Shooter*. Written by *Game of Thrones* writers David Benioff and Dan B Weiss with Alexander Woo. DPs are Jonathan Freeman ASC and PJ Dillon ASC. Directors are Derek Tsang, Minkie Spiro, Andrew Stanton, Jeremey Podwesa.

**Fabrizio Sciarra SOC/ASSOC. BSC / GBCT/ ACO** Camera and Steadicam Operator is filming *Wednesday*, a live-action version of *The Addams Family* told from the perspective of their daughter Wednesday Addams. The TV series is directed by Tim Burton with Jenna Ortega as Wednesday.

**Peter Wignall ACO** Camera and Steadicam Operator is shooting as A Camera Operator/Steadicam on *The Interpreter* in Spain. The feature film for Director Guy Ritchie stars Jake Gyllenhaal. The DP is Ed Wild BSC.

**Tom Wilkinson ACO** Camera and Steadicam Operator has just finished shooting A Camera and Steadicam on the next series of the action thriller *Tom Clancy's Jack Ryan* for Amazon Studios. The DoP is Richard Rutowski ASC. The cast includes John Krasinski as the CIA agent.



Michael Carstensen on *Wheel of Time*



Ashlea Downes ACO Associate

## RA AGENCY

**Ashlea Downes ACO Associate** has been busy since stepping up to operating so far, operating B Cam/Steadicam on *His Dark Materials* S3. She completed block 3 with DP David Johnson BSC and block 5 with DP Gary Shaw. She shot the Walkers Christmas Ad on her new Steadicam rig with DP Oliver Schofield and also clocked up some dailies on: *Gangs of London* S2 with DP David Bird on 2nd Unit; *The Power* with DP Ruairi O'Brien; and *House of the Dragon* (The Game of Thrones Prequel) C Cam with DP Catherine Goldschmidt on the Blood Unit.

**Svetlana Miko ACO** has been shooting B Cam on *Ant Man and the Wasp: Quantumania* with the 2nd Unit team. Most recently: operating the Arri Trinity rig on *Gangs of London* S2 with DP Laurent Bares; *Everything I Know About Love* with DPs Arni Filippusson & Phil Wood; and *Good Omens* S2 with DP Gavin Finney BSC.

**Andrei Austin ACO** is currently working as A Cam/Steadicam in Edinburgh on Amazon's *Anansi Boys*.

**John Ballie ACO**: "Last year was good here in Alberta! I operated B Cam on the latest *Predator* movie, now titled *Prey* (the working title was "Skulls"). This one is a period piece in the 1700s, shot mostly on the same native reservation where they shot *The Revenant*. I did a lot of dailies on a TV series called *Under The Banner of Heaven* starring Andrew Garfield and Sam Worthington. I also got to DP some 2nd Unit. And I did the last few weeks of *John Wick Chapter Four* alongside our James Frater! I did 2 weeks in Paris and a week in Jordan."

**Ciaran Barry ACO** is working in Italy on a Netflix series called *Briganti* (Brigands).

**Marc Benoliel ACO** will be doing some Steadicam dailies on the Netflix series *Transatlantic* in Marseille. "Then at my return, some French TV series may come next in the spring."

**Eric Bialas ACO** is currently on block 2 of the feature film *Les Trois Mousquetaires* until the end of April as Camera/Steadicam, with DP Nicolas Bolduc and Director Martin Bourboulon. Production is Chapter 2/Gaumont Pathé and featuring: Vincent Cassel, Eva Green, François Civil, Pio Marmai and Romain Duris.

**Richard Bradbury ACO** is currently in prep for Netflix show *The Diplomat*, working alongside Joe Russell ACO and Julian Court BSC.

**Derek Carlow ACO** is currently working on *Boy Kills World* as A Camera Operator. Director: Mortiz Mohr, DP: Peter Matjasko, Producers: Wayne Fitzjohn, Alex Lebovici, Zainab Azizi.

**Ciro Candia ACO** has been operating B Cam dailies on *The Capture* (DPs Kieran McGuigan & Rasmus Arrildt). He has also operated B Cam on *Mood* (DP Molly Manning Walker) and on the additional photography for *Uncharted* (DP Eric Steelberg), as well as many commercials.

**Richard Cornelius ACO**: "Having finished *Code 404* for Sky at the end of last year, I've been shooting dailies on *Without Sin* for ITV and *Wonka* for Warner Bros before prepping Apple TV's *Ted Lasso* S3 at the end of the month."

**Fares Corbani ACO**: For *Cello*, the last feature film I wrapped, I was working as Trinity/B Cam Operator. "Elie Saab" fashion film (Trinity Operator). "Etisalat" commercial- I was working as Trinity/A Cam Operator.

**Jess Doxey ACO**: "I'm currently writing to you from Sri Lanka for a fashion commercial that has me signing NDAs up to my eyeballs so can't really say anything as of yet. Last year I did B Cam on the English adaptation of *Call My Agent*, and then went onto Second Unit of *Argyle* with DP Tim Wooster.

**Kate Eccarius ACO Associate** has been working on a block of commercials back in Melbourne, Australia with DOP Aaron Farrugia.

**Dan Edwards ACO** is currently finishing off Operating/Steadicam on Block 2 of *Ridley*, a new drama starring Adrian Dunbar. Whilst now in prep for his next job as A Cam/Steadicam Op on *The Pact* for DP Sergio Delgado.

**Jason Ellson ACO**: Working on *Black Panther: Wakanda Forever* as A Cam/Steadicam.

**Simon Finney ACO** is currently working on *The Crown* S5 as A Cam on the Queen unit: "We finish at the end of Feb and then I will be working on *Barbie* on B Cam, from March 21st for 12 weeks or so."

**Lionel Garrote Belizan ACO** just finished *Bridgerton* S2: "I will start a new project in March, also for Netflix but looks like I can't talk about it yet. Ridiculous, right?"

**Julia Green ACO Associate** is loving working with Remi, who is a complete delight: "I'm currently B Cam on *Jambalaya* which Remi Adefarasin is shooting, which goes until early March."

**Paul Hill ACO** is currently doing Camera Op/Steadicam duties on a new drama called *Riches* for ITV/Amazon til March.

**Chris Hutchinson ACO** is A Cam/Steadicam on the Lookout Point/BBC drama *Happy Valley* with James Aspinall BSC and Dale Elena McCready NZCS.

**Simon Jayes ACO** is currently on *The Mandalorian* S3 for Disney+.

**Junior Lucano ACO**: "Right now I'm working on many TVC jobs in China. There were many shooting because of the many holiday celebrations and the Olympics at the same time. By the end of this month I will go back to films, booked for a Chinese film talking about a true story of a PingPong player. Will be 3 months shooting in Beijing."

**Sebastien Joly ACO**: "At the moment I'm working on various commercials, music promo, and in mid March I will shoot a movie with Tony Miller for 6.5 weeks- it's a comedy. I am still working on refurbishing old Steadicam vests to give them a second life and doing some magic to help Operators to tailor their vests to their bodies and make them as comfortable as possible. Developing new parts in partnership with Optical Support for the Arri Trinity, making a plan to do some training in Steadicam and Trinity."

**Sven Joukes ACO** just spent 3 weeks in Belgrade, operating B Cam and Steadicam on *Fair Play* for DP Menno Mans NSC and Director Chloe Domont. Next up is a feature called *Lonely Planet*, B Cam and Steadicam for DP Ben Smithard BSC, shooting in Morocco for 5 weeks.

**Christopher McGuire ACO** is currently working with Henry Braham on *Guardians of the Galaxy Vol. 3* in Atlanta, USA.

**Tanya Marar ACO Associate** is currently shooting B Cam on *The House of the Dragon* at Leavesden.

**Mihalis Margaritis ACO** has been doing A Cam/Steadicam on Action Unit on *The Lark* with DP Terry Stacey ASC. He's also done B Cam/Steadicam dailies on *Trying* for DPs Jonas Mortensen and Greg Duffield.

**Guillermo Moreno Garcia ACO** is shooting in the snowy mountains of Sierra Nevada. It's a new movie about the airplane accident and survival struggle narrated in the 1993 film *Alive*. The Director is J.A. Bayona and the DP is Pedro Luque.

**Rory Moles ACO** was shooting on *The Capture* S2 with Kieran McGuigan and Rasmus Arrildt, and stayed on that until Christmas 2021.

**Martin Newstead Associate ACO**: "I am currently B Cam/Steadicam op on *Good Omens* S2. Working alongside Ed Clarke who is A Cam/Steadicam. DP is Gavin Finney BSC.

**John Piggott ACO**: "I am just finishing up on *Red Gun* S1 for HBO after 8 months and getting ready to start shooting *Treason* S1 for Netflix.

**James Poole ACO**: "I fly out to Saudi Arabia to begin a 6-month project called *Rise of the Witches*- a 10x60min series, produced by MBC Studios, being shot By Stuart Brereton."

**Dale Rodkin ACO**: "I have wrapped on *Beast*. Director Baltasar Kormakur, Cinematographer Philippe Rousselot, with Idris Elba and Sharlto Copely. A Camera and Steadicam. I am currently shooting on *The Woman King*. Director Gina Prince-Bythewood, Cinematographer Polly Morgan ASC with Viola Davis and Lushana Lynch. A Cam (Colin Anderson and myself were the operators. Colin could only do the first 4 weeks as he has other commitments.)"

**Joe Russell ACO** has just finished shooting as A-Cam/Steadicam on *House of the Dragon* and is mixing dailies and family time ("just had a 3rd boy, eek!!") before starting on a new series in April called *The Diplomat* for Netflix, with DP Julian Court.

**Stefan Stankowski ACO**: "I've just started work on Ridley Scott's *Napoleon* epic, which shoots until June."

**Peter Taylor ACO**: "In 2021 I had a nice job as Splinter unit DP on *The Nevers* (HBO)- a mixed bag of pick ups and some VFX work which kept me busy from July to the end of December, some 25 weeks. It was based at Titan studios at Park Royal, and we also had sets at Langleybury, and some other locations."

**Roger Tooley ACO**: "At the moment, Roger Tooley is either shooting dailies or sitting on the sofa reading to his miniature schnauzer."

**Peter Wilkes ACO**: "Starting in April, I will be the A Cam/Steadicam operator on *Fast & Furious 10*, working with Stephen Windon ACS.



Fares Corbani on Etisalat



Tom Wade with DP Matt Windon on Secret Invasion

## SARA PUTT ASSOC

**George Amos** is currently working in his native South Africa. **Andrew Bainbridge ACO** has been working Steadicam dailies on *Riches*.

**Jon Beacham ACO** is operating on *A Town Called Malice* for Vertigo Films and Sky.

**Danny Bishop ACO, Associates BSC, SOC** has recently wrapped on *Tar*, which shot in Germany and stars Cate Blanchett. He is now working on dailies.

**Ed Clark ACO** is working on the second series of *Good Omens* with DoP Gavin Finney, which stars David Tennant and Michael Sheen

**James Frater ACO, SOC** is prepping on *Invasion*, which will start shooting for Apple TV later this month.

**Ilana Garrard ACO** has been busy working on dailies and has just been confirmed to work alongside DoP Stu Bently on *The Gold*.

**Zoe Goodwin-Stuart ACO** continues her work on *Wonka* (which stars Timothee Chalamet and Olivia Coleman) and will start on the new series of *The Witcher* as B Camera Operator in April.

**James Leigh ACO** is due to start on the new series of *Doc Martin* on location in Cornwall.

**Will Lyte ACO** has wrapped on *Polite Society* and been busy working on commercials.

**Vince McGahon ACO, Associate BSC** is working on the new series of *The Crown* which will wrap next week.

**Julian Morson ACO, Associate BSC, GBCT** has started on *Kraven the Hunter*.

**Aga Szeliga ACO** has just wrapped after nearly 10 months on *House of the Dragon*.

**Tom Walden Associate ACO** is on location in Romania working on *A Spy Among Friends* with Director Nick Murphy and DoP Nanu Segal.

**Rick Woollard ACO** has operated on commercials for McLaren, M&S and Qatar Airways.

Edd Wright ACO & McQuoid ACO  
Shooting *Doctor Who*

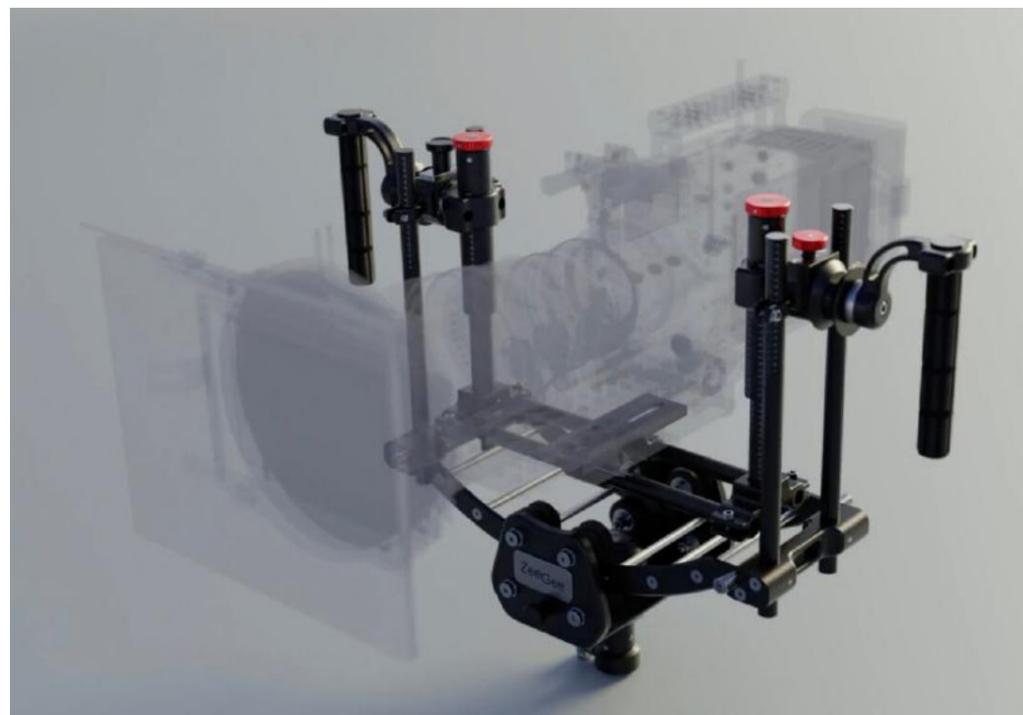


*"In my 15 years of Steadicam, the last 5 have been the most creative thanks to the MKV AR. Being able to break the vertical constraints of Steadicam and play with heights has opened doors I didn't think were possible. There simply isn't a system out there that works as well as the AR. Time and time again it's proven itself with all payloads and every application it's thrown at."*

Matt Allsop

MK-V





# THE ZEEGEE

A New Way of Handheld Operating

***Often, new camera-carrying devices are stamped as being "game changers". Almost as often, this turns out to be more marketing speak than actually holding any truth. In the case of the ZeeGee, we think the term was never used, but this contraption holds quite a bit of potential to actually be game changing.***

The idea of finding a way to get the handheld camera off his shoulder and onto a mechanical supporting device first came to Charles Papert in the early 2000s, when the first digital Super35 cameras appeared. Remember the Panavision Genesis, ARRI D20 and D21, and the Sony F35? Not only were they very heavy and bulky, but also, instead of a 400ft magazine, they would now hold digital memory that could run up to 40 minutes. Directors quickly discovered the phrase "Keep rolling!", effectively draining Camera Operators' stamina. This resulted, of course, in less stable footage after a few takes without cutting.

Charles, being an ace Steadicam Operator (check out his shots in *American History X*), built a prototype of what would eventually become the ZeeGee, which would be carried on a Steadicam arm and vest. However, around this time he was transitioning from Operator to DP and the prototype ended up collecting dust in his garage. Cut to a few years later: he's selling off his Steadicam gear and in walks his friend, Camera and Steadicam Operator Neal Bryant, picking up some bits and pieces. He sees the dusty prototype, takes it with him and starts experimenting with it. He takes it on a show and it immediately catches on with the Director and DP. When Charles hears of the response to his invention, he decides it's time to put the thing in other people's hands. He teams up with Adam Teichman of Cinema Devices and they develop the production ZeeGee, as it is now available. Mechanically it is far more advanced than the prototype in that it now has user-friendly balancing options, a quick-release camera mounting platform, ergonomic operating handles and a docking stand.

Apart from the obvious advantage of relieving the Operator of the weight of the camera and the strain of long takes or no cuts, there was the added bonus that, put on a Steadicam arm, the range of height the camera could work in expanded drastically. You could now seamlessly transition from the waist to above eye-level, all with a handheld look.

Neal and other early adopters started experimenting and looking for other ways to use the ZeeGee. It quickly became clear that it doesn't have to always be body-worn. With the standard 5/8" receptor, it can basically ride on any pin available: You can mount it directly on a light stand, just above the ground on a baby pin; hard mount it to a dolly, rickshaw or tracking vehicle with a Steadicam arm to absorb shocks; or even undersling it on a bungee cord or Easyrig. Hard-mounted, with a Steadicam arm, it sort of becomes a 3ft three-dimensional slider, where you can not only go left and right, but also fore-aft and up and down. With a good dolly grip on hand, the ZeeGee barely came off the dolly on Neal's most recent handheld-heavy AppleTV+ show, *The Afterparty*. By the time they were shooting the last episodes of the season,

the DP and Director were already devising shots with the extended handheld abilities of the ZeeGee in mind.

In terms of camera builds and possible camera/lens combinations, there is virtually no limit. In comparison to a Steadicam, the ZeeGee prefers a shorter/higher camera to a longer/lower camera. Because it is operated mostly in front of the body, you want a shorter camera, so you don't have to stick it out too far. Hard-mounted, this is of little importance, of course. Ideally, you would mount a little monitor on top of the camera, anywhere between the top handle and the matte box. It is best to mount the monitor to the camera and not to the contraption. Because the system gimbals around the camera (especially on higher speed shots), it would become difficult to watch



the monitor if it were mounted on the ZeeGee itself. Furthermore, it is important to mention that we're dealing with a completely passive mechanical system, which requires no power or any other cables coming from or going to it. There are standard ARRI rosettes on both sides to mount the standard handles, or compact handles that shave about 4 inches off the width of the ZeeGee, especially helpful when passing through a narrow door (your fingers will thank you). If necessary, one could also attach a zoom controller to either of the handles. A number of accessories are already available for the ZeeGee (including a Mitchell to 5/8" pin adapter or the "Shovel Handle") and more are being added as Operators come up with more things they need to make their lives easier.

The learning curve for the ZeeGee is very short. Seasoned Operators will be up and running with it in a matter of hours, compared to the months or even years to get proficient with a Steadicam. Setup is very straightforward; you have to balance the camera left/right and fore/aft, as well as up/down in the cradle. All of these controls are easily accessible and executable. Next, the ZeeGee can be docked in the docking station and it is ready to go.

Inventor Charles Papert, now a working DP in Los Angeles, says there will of course always be room for traditional handheld either because it is required by the Director or DP, or because there simply is no time or practical use for the ZeeGee (e.g. documentary work, where you have to react very quickly or working as a one-man-band). However, it definitely has a lot to offer in the world of modern narrative production, where there's often a lot of pressure on the Camera Operators because of tight schedules and long shooting days. It offers help both physically and in terms of storytelling.



For Operators who own their own Steadicam kit, the addition of the ZeeGee would appear a logical step to completing their arsenal, since they already own the vest and arm. Non-Steadicam owners could decide to buy just the ZeeGee "head" and start using it hard-mounted. Asked if it could be offered by rental houses, Charles doubts if they would be interested in making the additional investment in Steadicam vests and arms. If or when the ZeeGee becomes a household name in terms of handheld operating, this might change of course. He himself started a boutique rental company that offers the ZeeGee as a package to Operators and productions.

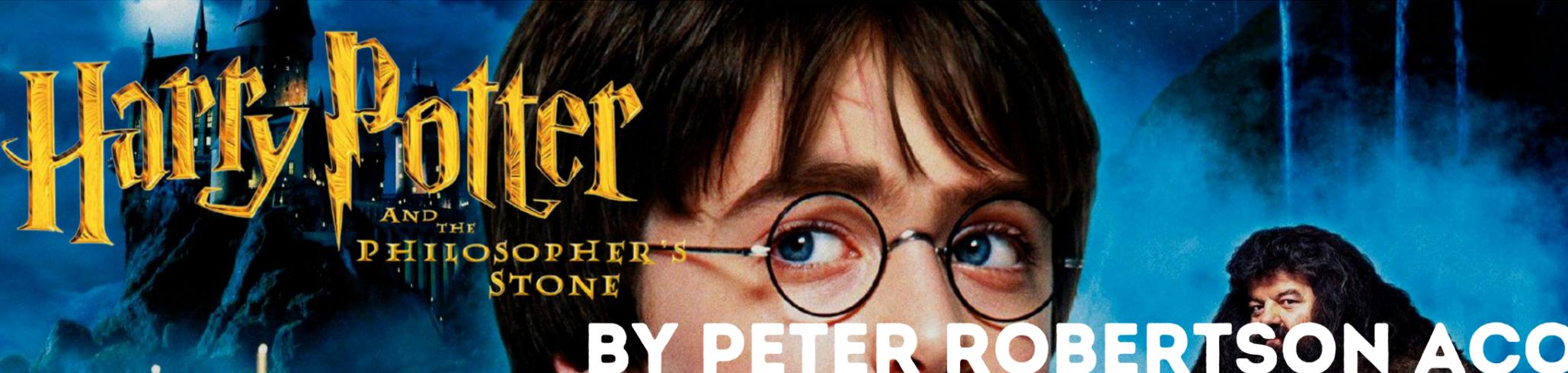
At the time of our talk, Cinema Devices were still debating whether they would be attending the BSC Expo in April. They are thinking of getting a rig over to Europe for Operators to test. If we hear more of that, you will be the first to know through our channels.

The ZeeGee can be purchased through Charles' website [www.thezeegee.com](http://www.thezeegee.com)  
Visit [www.ZGRental.com](http://www.ZGRental.com) for US rentals.  
Find them @the\_zeegee on Instagram.

***ZeeGee, as in Z.G./ Zero Gravity.  
Charles' initial outset:  
Looking for a device that  
allows for "Zero Gravity"  
handheld operating.***



# Back To School - Celebrating 20 Years of Harry Potter Films



BY PETER ROBERTSON ACO

To celebrate 20 years since *Harry Potter and The Philosopher's Stone* was released, In The Frame asked an ACO Operator from each film to relive, and share, their memories of working on these seminal films.

It was an exciting prospect working on the first ever Harry Potter movie, although we had no idea at the time how big the Potter franchise would become. I was told at initial meetings that it was a speculative effort with a limited budget and wage negotiations should proceed accordingly. How I wish I knew then what I know now!

When I first told my wife that I had been asked by John Seale (DoP) and Warner Bros. to operate the A Camera, along with my old friend and ACO colleague, Peter Cavaciuti on B Cam/Steadicam, she pointed out that the film was based on a book that was all the rage at our children's school. I assumed therefore that it would be a one-off kids movie; I had no idea that the story would inspire generations of children and adults alike. My son, Callum, is the same age as Dan Radcliffe and he still has fond memories of visiting the set to meet all the Potter kids. Both he and my daughter grew up in step with each new Potter book and movie.

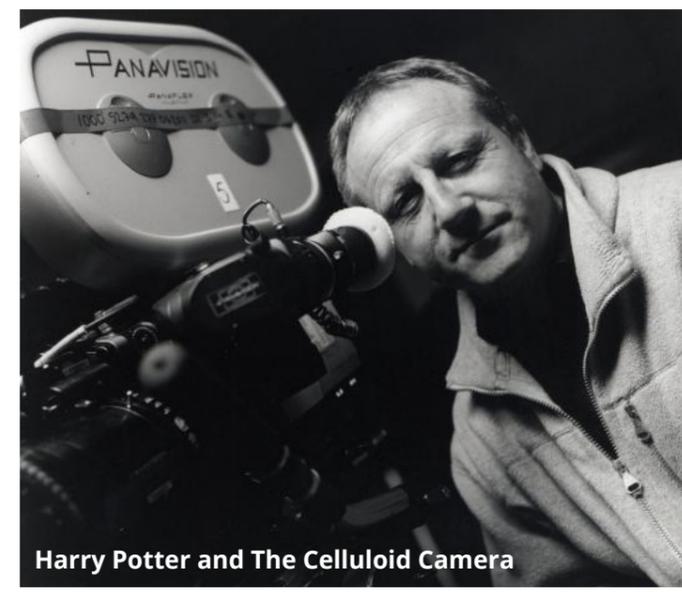
In the days before tight NDA restrictions, I had pages of storyboards that I would take home for them to colour in.

Today, as I drive in to work at Leavesden Studios on my current job, *Wonka*, passing the Potter

.....  
museum and multi-storey car park, I reflect on how basic the studio was back in 2001. It was essentially a derelict aircraft factory with an overgrown runway which provided for crew car parking. I remember not so fondly having to fix punctures on my van in the dark after a long day's work because the runway was littered with construction debris from previous shoots.

The shoot itself was a voyage of discovery, trying to set the tone for the look of future productions, sometimes successful, other times not. We were using the Panavision Millennium XL lightweight cameras for the first time, which, after sorting out a few teething problems, proved groundbreaking for lightweight, modular super 35mm film cameras.

Working with kids, many of whom were untrained actors, created obvious issues. We had limited time on set with them and limited expectations for them hitting marks. John Seale's plan was to shoot three cameras. This included hiding from each other in the most ingenious ways. I remember once shooting through a hole in the Great Hall set, looking directly at another camera, trying to disguise my camera between two library



Harry Potter and The Celluloid Camera

books. The chances of operating in such a limited space whilst keeping a lively pre-adolescent child in frame were depressingly poor but we had to make it work, often to the detriment of good shot making. It was this kind of improvisation that ultimately made the job fun but frustrating, in equal measure. Years later, when the museum was opened, it was nice to see that I had been rewarded with a magic wand named after me in Olivander's- rather appropriate for a Camera Operator, I think.



Photo Credit: Peter Mountain



# Back To School - Celebrating 20 Years of Harry Potter Films



BY PETER TAYLOR ACO

I was lucky to have worked on two of the Harry Potter movies: *Chamber Of Secrets* and *Goblet Of Fire*. Looking back, they were both very enjoyable experiences. Although I had worked with DP Roger Pratt before, *Chamber Of Secrets* was my first big film with Roger, and we developed a great working relationship. As was his way, Roger set up a great camera team, with Simon Hume on Focus, Rob Palmer 2nd AC, and Pat Garrett Camera Grip. And quite honestly, we were all a very happy family.

Obviously there were constraints for shooting time available with the young cast, but instead of reaching in with long lenses, we tried to shoot close ups on fairly wide lenses to open up the backgrounds and make sure we saw Stuart Craig's lovely sets.

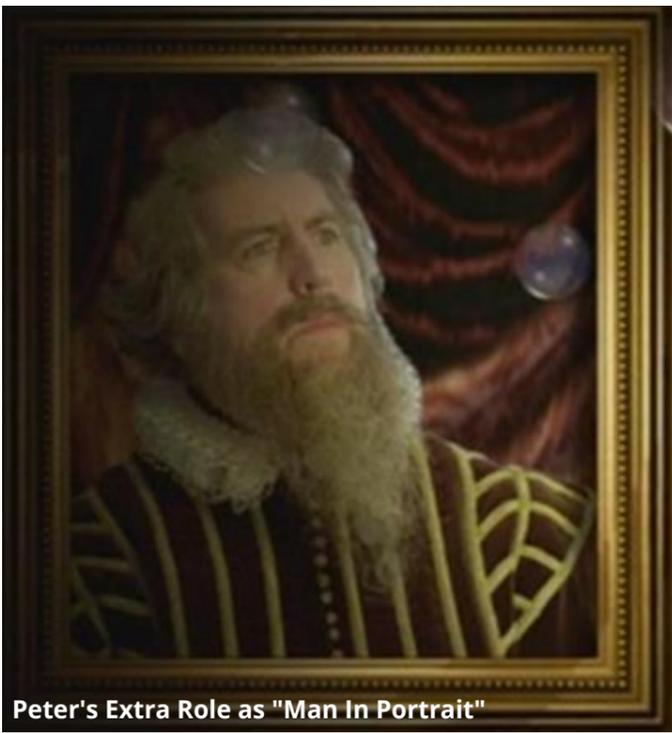
The kids were easy to work with and there was always a good atmosphere on set, even if your mobile went off in the middle of a dialogue scene, which mine quite often did. I would just deny all knowledge of it and say it wasn't mine, to the amusement of the kids.

In those days, Leavesden was not a modern studio by today's standards, with water dripping through roofs and pigeons flapping around- generally not very nice. But it was what it was: a quirky sort of place to work, with big generators blowing in hot or cold air depending on the season.

Alf Tramontin and myself quite like playing guitars, so if there was some downtime we would set up some guitars and amps, and make some noise. Nowadays, health and safety would probably put a stop to that!



**"Chris Columbus managed to get me a proper SAG actor's deal, and I still get small checks to this day!"**



Peter's Extra Role as "Man In Portrait"

Chris Columbus was great at getting the performances he needed with the young cast. I remember him saying "Good job Danny, Good job" quite often. One day he said "Hey Peter, how would you like to be in the movie?" and I said "Yes, why not?" Anyway, after some beard, wig and costume fittings, I eventually ended up in a picture on the large staircase with the three main characters in front of me. It's where I uttered the now famous line: "She's right you know!", at which point Harry and Ron look at me as if I'm mad and walk off. Chris Columbus managed to get me a proper SAG actor's deal, and I still get small checks to this day!

There were some interesting sets- like the bathroom entrance to the Chamber, with moaning Myrtle on guard- and it was usually fairly easy to find an interesting setup when required. The Chamber Of Secrets itself was a very important set for the end sequence and my camera and Trevor Coop's B Camera would find nice places to be, through water or over statues for good angles. Alf Tramontin's excellent Steadicam was used for chasing Harry, and for the beastly Basilisk's point of view, down moody dark tunnels- all in all a good combination, which was also put to good use on *The Goblet of Fire*.

They were a very good crew: standbys, props, stunts, and all departments worked well together. This included, as usual, many VFX shots and plates for the many effects to be put together, complete with silver balls. Although we shot on film, I seem to remember one day a team of boffins brought a digital camera to the studio for our attention. As we stared at it, I remember it being described as a computer with a lens that collected information, which I suppose it is really. And now look how far we've come!

I believe that all the films in the Potter series were extremely well shot and put together, and a credit to British crews.



# Back To School - Celebrating 20 Years of Harry Potter Films



BY ALF TRAMONTINACO

I was first asked to work on the *The Philosopher's Stone* by Gavin Finney, who was DP'ing the second unit. One day we were shooting a scene as Second Unit but the Main Unit Director, Christopher Columbus, came and directed the sequence and he loved my work. He went on to direct *The Chamber Of Secrets* with DP Roger Pratt, so I was invited to work full-time on this film, something I have always avoided. Chris had me shooting everything, which Roger wasn't too happy about. This was my favourite of all the films as I shot so much of it.

As I had done so much on the second film, when Alfonso had come in to direct the third I was often called in to do additional Steadicam. They had a B Camera Operator doing Steadicam on the job but eventually he left, so when it came to doing the "time-turner" shot, they called me up. They wanted me for the rehearsal the day before the shoot but I couldn't make it, so they booked someone else and showed me the rehearsals on video.

The sequence starts with a two shot of Dan and Emma in a hospital set. I moved around them with my Steadicam in a 180 degree arc and eventually pushed as close as possible to the time turner, a pendant/necklace which Emma was wearing.

Alfonso loved the 18mm lens and used it for most of the film. I begged him to change to a longer 21mm lens, as I couldn't get as tight as he wanted without causing a shadow or bumping into Emmas head.



There was a huge matte box we needed to leave on the camera to prevent flares from the lighting effects, which were to come later in the shot, but Alfonso insisted on the 18mm.

I then slowly pulled out from the time turner to a loose mid shot and had to hold this for a couple of minutes. During this time, special effects created the illusion of time travelling, by moving lamps up and down outside the windows on cranes and hydraulic jacks to create night and day lighting effects. I had to be completely motionless during this part of the shot.

After a couple of minutes standing absolutely still, I suggested another push in and 180 degree arc to Alfonso, just so that I could get some feeling back into my legs before chasing Emma and Dan down the corridor at full speed. Just to make it difficult, they ran up a few steps through a doorway and into the corridor.

There wasn't much of a gap to get myself through the door with the rig, but I couldn't take it carefully as I would have been left behind as Emma and Dan were on the flat floor well before I was. I just had to go for it at this point- negotiate the three steps and if I had hit the door frame, we would have just had to go again. Caution at this point wasn't an option.

We then all ran down the corridor, Emma and Dan peeled off to the left and I carried on towards the clock and stopped just in front of it. This is when visual effects took over and made it look like I had run through the clock.

See the shot here:

[http://www.steadishots.org/shots\\_detail.cfm?shotID=274](http://www.steadishots.org/shots_detail.cfm?shotID=274)



"I just had to go for it at this point- negotiate the three steps and if I had hit the door frame, we would have just had to go again. Caution at this point wasn't an option."



# Back To School - Celebrating 20 Years of Harry Potter Films



BY TREVOR COOP ACO

*The Goblet of Fire* was my second foray into the wizarding world of J K Rowling, having worked on *The Chamber of Secrets* two years before. The setup was similar: the lovely Roger Pratt at the helm; the lovely, not to mention, award-winning Peter Taylor on A Camera; myself on B Camera; and Alf Tramontin on Steadicam and bass guitar. I also had my brilliant regular team: 1st AC Graham Martyr and 2nd AC Sacha Jones.

The early Potters were not like any normal film, at least not until the child performers were over 16. There are huge restrictions on how long you can have them on set consecutively, plus the compulsory schooling they have to attend as it can't be ten minutes here and there; it has to be in minimum half hour slots. When we were shooting the sequences in the great hall for instance and we had 300 of them on set, it took half an hour to marshal them down from the green rooms or school cabins. This would give us 45 minutes at best to shoot a shot we had rehearsed earlier or even the day before. 3 or 4 setups a day was good on those days. Fortunately we had a wonderful 1st AD in Chris Carreras, who was a logistics genius, otherwise it would have taken us 3 years to shoot each movie, instead of a mere 12 months.



Waiting For Actors to be Schooled



The Whole Crew in the Christmas Great Hall

*Goblet* would see a third different Director in the series- Mike Newell. I had worked with Mike twice before: on his first ever feature project, Norman Rosemont's *Man in the Iron Mask*; and on his two episodes of George Lucas's *Young Indiana Jones* in the early 90s. It was a very easy yes for me- 12 months' at Leavesden, just a 20-minute drive from home, 5 days a week with virtually no overtime, and lots of lovely people. Having worked on *Chamber*, I also quickly got into the mindset needed to cope with the long breaks off set, waiting for our adolescent performers to be schooled. It was difficult at first, as we had to stay as focused as if we had just finished the last rehearsal, so most days we saw more of the inside of the camera car than we did the set. Much to my wife's chagrin, I developed a love which I still have today, for crosswords and sudoku. Also, whilst we were on location at Durham cathedral, I invested in an acoustic guitar. Sadly, although encouraged by various crew members, I never achieved the skill levels to be able to give up the day job.

Now in their 4th episode of the franchise, our principal actors were developing into very accomplished thespians, and, starting young enough not to have already developed egos, they were picking up very good technical skills- always useful as an Operator or Grip as you could reasonably expect them to do the same thing every take.

*Goblet* was interesting as it revolved not only around Hogwarts, but two other schools, all of whom would contest the Tri-wizard competition: a Ladies Academy, Beauxbaton, headed by a 9ft tall Frances de la Tour, much to the delight of Hagrid; and Durmstrang, a team of muscle-bound teenage boys under the jurisdiction of headmaster, Igor Karkarof- a gruff, Rasputin lookalike. The girls, led by head girl Fleur Delacour (played by Clemence Poesy) and her team of nubile young women certainly turned the heads of Harry, Ron and most of the other Hogwarts boys, not to mention some of the younger crew members.

Working again with Roger and Mike was a joy as they are both very generous and rely heavily on their Operators, so we felt we had a lot of creative input, which is always very satisfying. Long live Harry Potter.



# Back To School - Celebrating 20 Years of Harry Potter Films



I was asked to operate on the fifth Harry Potter film, *The Order of the Phoenix*, by David Yates- a director with whom I had been working with for the preceding five years on all his television work. Some of that work had won or been nominated for prestigious awards both in Directing, Cinematography and other categories, and David was riding high as a "one to watch". Naturally, I jumped at the chance to work on part of what was becoming an iconic series and would be a well-financed film.

David had decided to work with Polish DoP Slawomir Idziak- someone whose work I was aware of on such films as *A Short Film About Killing*, *Three Colours Blue* and of course, *Black Hawk Down*. He brought his own B Camera Operator Wojciech Staron and B Cam 1st AC Henryk Jedynak, but otherwise took on the camera crew that David and I had been working with. There was a definite sense for us of joining the Harry Potter "Family" and being made very welcome.

The prep period was about 4 weeks, involving recces, previz meetings, storyboard discussions and camera and lens testing. David was very engaged and sometimes amazed by the huge toybox now available to him through the very sophisticated Harry Potter machine that had gradually been built up over the previous four films. Likewise, there were really no limits to what could be asked for, providing the end justified the means. That was an exciting prospect for us both.

Day one brought its challenges in the form of some software, created by Lester Dunton, that allowed the prevised character of the giant Grawp to be superimposed on the Operator's monitor to accurately shoot the crane move, starting low and moving up and around him- not something that I have used since. It was remarkably successful and I think groundbreaking at the time. Creatively there was a lot of freedom for me in my Operator role. David and I had a close working relationship and enjoyed the planning and execution of challenging shots, always knowing that we had the backup of the immense machine that was behind the movie. No matter how big the challenge seemed, it was always executed and amazingly quickly. A 12 meter high, 40mx40m platform, double-boarded and capable of taking a fifty foot Technocrane, to be built on the side of Hagrid's hill for a couple of fairly brief scenes was no problem- to name but one! We revelled in the ability to move the camera fluidly and without limits, using the full range of Technocrane models and Steadicam depending on the size of the set.

The Great Hall was always a challenging space to film in, requiring constant reference to its scale. I was able to score many years worth of brownie points with my twin daughters when they worked as extras for a few days in some Great Hall scenes requiring hundreds of children. The challenges of working with a young cast were numerous: not least the few number of hours that they were actually allowed to be on the set, working with two units and their break and education requirements. The schedule was extremely generous and flexible to allow that, something like 150 days for a two hour twenty minute film. The rules around the young cast were absolute and scenes had to be broken down, coverage agreed and everyone prepared to move as quickly as possible during the times when they were available to us. The discipline of shooting on film was certainly a positive part of the process. They were a great bunch to work with, incredibly appreciative of their fellow actors and the crew, and increasingly knowledgeable about the process of making the film.

The year following the commercial success of *The Order Of The Phoenix*, David Yates was again asked to direct, for *The Half Blood Prince*. Again, I joined him along with DoP Bruno Delbonnel. The process of making the film was similar but somehow made easier by the familiarity of having worked on the fifth film. We recced Durham Cathedral for some scenes but it was decided that it would be more economic to build the whole cloister area on the backlot, rather than take the entire unit to Durham! It was at times like that when we were reminded of the ambition and skill of the various departments involved and what a giant creative factory had been built over the years.

A memorable sequence from this film was the "Dark Lake and Crystal Island". The lake was within a cave and had no light source except for a moving flare. The flare was CGI but there had to be an interactive lighting element provided by a china ball on the end of a fifty-foot Technocrane, operated by Bruno Delbonnel. Moving across the island was achieved with a handheld camera on a ride-on crane. The scene ended with impressive visual effects fire, again with interactive light as the creatures were overcome- hard to describe but very engaging to watch.

My overriding memories of the two films was their craftsmanship, because we shot on film and largely single camera as digital filmmaking was still in its early days. There was the need to consider and ensure that every shot really counted; it was essential to the storytelling. It was an honour to have worked on such an iconic part of film history.

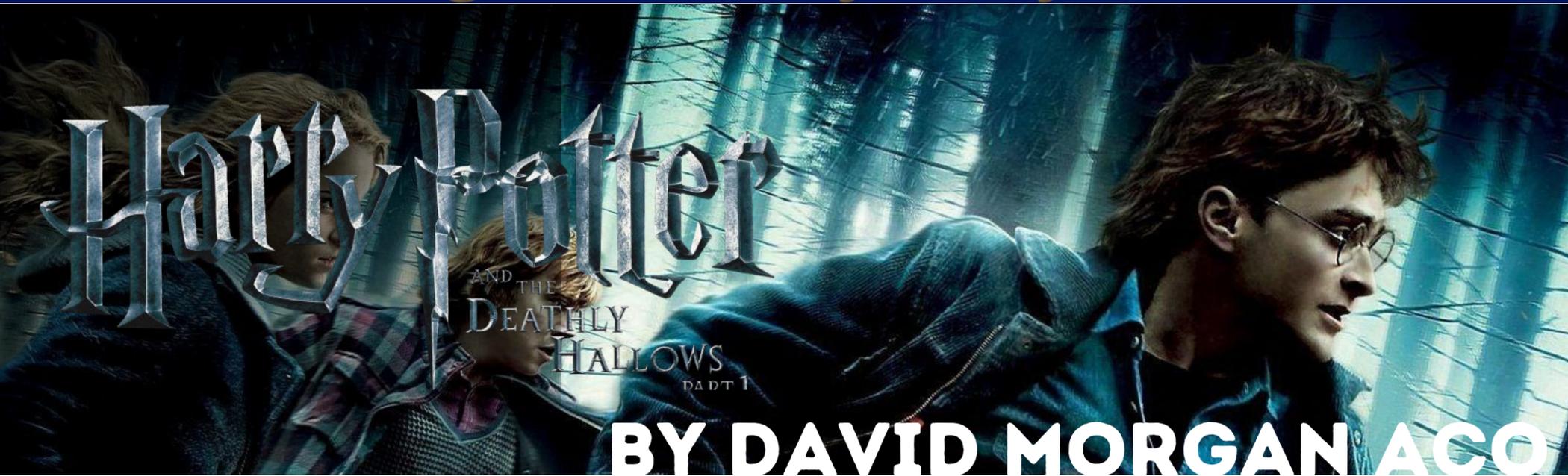
**"No matter how big the challenge seemed, it was always executed and amazingly quickly."**



A Bluescreen Day on Hagrid's Hill



# Back To School - Celebrating 20 Years of Harry Potter Films



I got the call to join the Harry Potter team in January 2009. Mike Proudfoot was the A Camera Operator and asked me to take up the role on B Camera. Mike and I are great friends and I had worked with him for over 20 years as a Focus Puller, and then as his B Camera Operator. Mike has retired now but was one of the best Operators I have ever worked with, and it was a pleasure doing 18 months on this project with him.

The Director of Photography on *The Deathly Hallows* was Eduardo Serra. Mike and I had worked with Eduardo before on *The Wings of the Dove* so I was extremely pleased to collaborate with him again.

I had been the B Camera Operator on *Prisoner of Azkaban* Second Unit, so had experience of the Harry Potter machine. I knew a lot of the crew and actors already so it was wonderful to return to what felt like a big family. As soon as you walked onto one of Stuart Craig's exquisite sets, you felt that you were part of something magical- a production like no other.

From a camera department point of view, the budget unlocked access to whatever we needed: from the range of lenses, to cranes, Steadicams, motion control and wire rigs etc.- a dream come true for a camera crew.

Whilst the A Camera would often cover the big, wide shots, I had the freedom to find alternative angles and shots for the sequence. When it was a one-camera (A) set up, I would often shoot tests or VFX shots. I remember shooting the wide master of the "Polyjuice Potion" sequence, where six of Harry's friends turn into clones of Harry to confuse the enemy. The shot was a big 360° pan with Mad-Eye Moody as he doles out the potion to the six friends. The shot ends over Harry's shoulder, revealing the lineup of friends who have now all morphed into Harry.

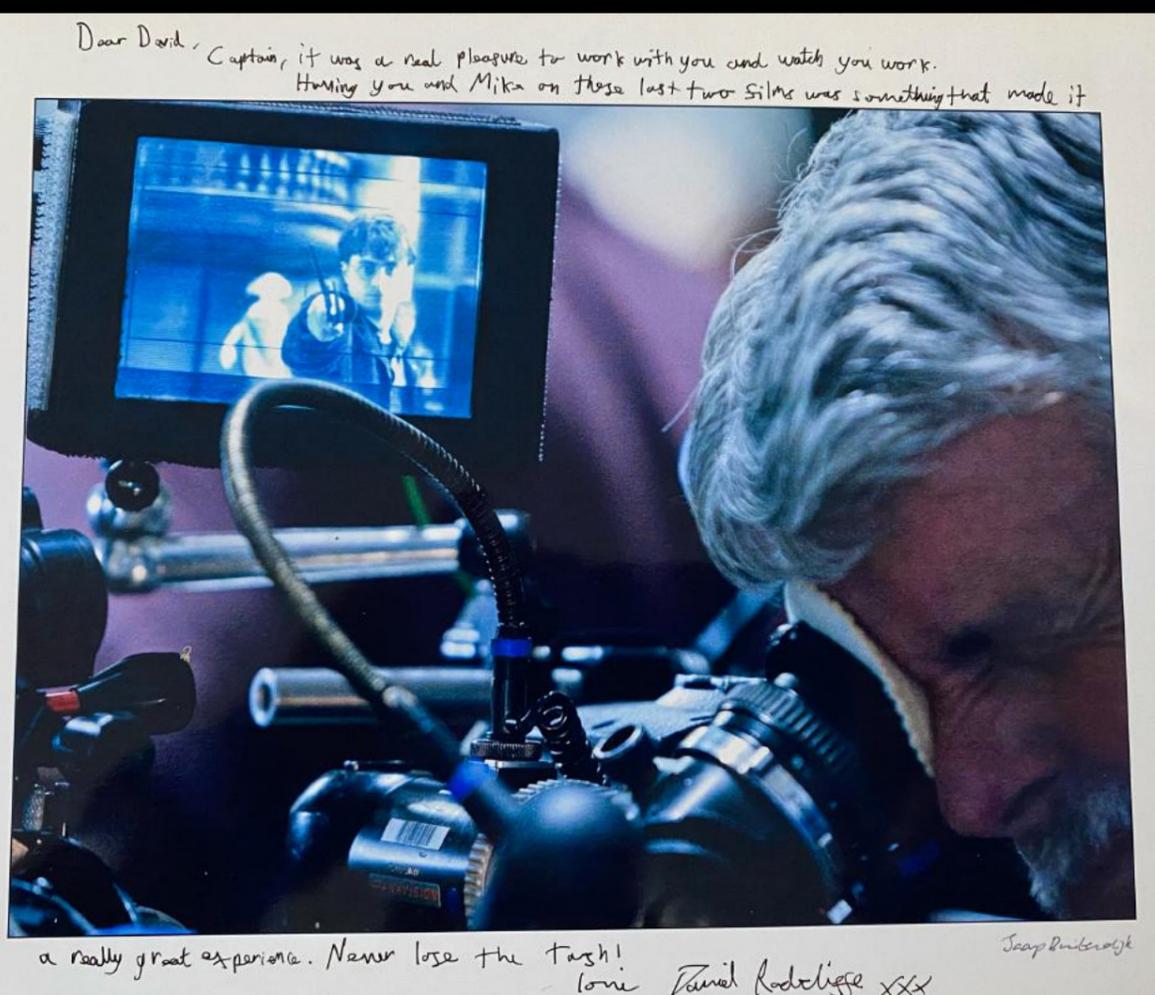


**"As soon as you walked onto one of Stuart Craig's exquisite sets, you felt that you were part of something magical- a production like no other."**

We shot this on a 21mm lens with the camera on a motion control rig. Once we had the selected take locked in, the move could be repeated by the rig multiple times, with Daniel taking the position of each actor for each pass. The shot worked well and was a fun sequence to capture.

One of the more challenging scenes to shoot was Dobby's death at the end of *Part One*. We shot on a beach in West Wales and were fighting the incoming tide. We used handheld cameras and had the talented Chris McGuire on Steadicam, so that when the tide reached us we could move quickly. It was an emotional scene that was constantly being disrupted by the incoming tide, so the actors kept being uprooted, to change location further up the beach. I was impressed by how they always managed to get back into character despite the constant interruptions, particularly Daniel who was holding Dobby as he died. I formed a great bond with the cast, particularly Mr. Radcliffe who nicknamed me "Captain" (Morgan).

I feel lucky to have been part of the Harry Potter family, particularly now I have retired, and have grandchildren who are now discovering the series for the first time. I am taking two of them to the Harry Potter Experience at Leavesden Studios next month and I'm as excited as they are to be returning.





# Back To School - Celebrating 20 Years of Harry Potter Films



BY CHRIS MCGUIRE ACO. SOC

After the pivotal opportunity to demo the MK-V AR on a few occasions to Mike Brewster and Peter MacDonald on *The Chamber of Secrets*, the seed had been sown for the introduction of a stabilised Steadicam head. I got the chance to operate on *The Order of the Phoenix* for David Yates and Slawomir Idziak, and this was the beginning of my operating relationship within the world of Harry Potter.

The scene in *The Order of the Phoenix* began with Bellatrix being chased down by Harry into the Ministry of Magic. I used the AR to easily boom up and down to keep the lens below the eye-line.

The meat of the scene was to be a constant 360 around Harry as he holds the wand out to attack, but this is also when Voldemort makes his big entrance into the Ministry. In a moment of sheer subjective operating, I panned off Harry into space to make room for Voldemort's arrival. I'm happy to say David Yates loved the decision I made and morphed Voldemort into the scene ahead of the camera, actually landing on him. It was a moment that I'll never forget- total apprehension for a dress down by the Director, but thankfully he saw the moment as I had hoped he would!

Then *Deathly Hallows Part One* called for the AR to be used in the fight between Harry and Nagini, after the snake morphs out of the witch living in the cottage. The cottage was an incredible set built in Leavesden, but didn't have much room for the contemporary usage of Track and Dolly or even a Technocrane. So I was going to shoot the scene with the AR to enable me to get the camera into tricky places and still be stabilised. Using my GPI Pro-Arm was also incredibly important as its smooth boom and range enabled the slick adjustment of heights and movement in the cramped space.

Dobby's death scene on the beach after the kids morph required the camera to be distorted yet able to change modes quickly. I adapted a Preston Motor and hard-mounted it onto the gearing of the AR, to enable the AC to rock the camera from side to side to produce a disoriented look, around the cameras nodal setting. We were being chased up the beach by the tide, so working quickly and effectively was important; I don't think I put the rig down much while we were being chased by the sea.

For the finale of *Deathly Hallows Part 2*, I was lucky enough to work in tandem with Alf Tramontin for the scene in which Voldemort has what appears to be a dead Harry Potter being carried by Hagrid. He delivers a speech in which he claims victory over Hogwarts. Because Ralph Fiennes (Voldemort) was going to be 120% in the moment, David Yates wanted to be sure that Steadicam would be rolling with him all the time. So that meant Alf and I would have our 400Ft loads and would take over the take as soon as loads were about to roll out, therefore enabling Ralph to deliver his performance without having to cut.

These are just a few examples of the photography I was involved in and I'm so happy and proud to have been a little part of the Harry Potter family.



Daniel Radcliffe and Chris McGuire with the MK-V AR

"It was a moment that I'll never forget- total apprehension for a dress down by the Director, but thankfully he saw the moment as I had hoped he would!"



Out on Location for *Deathly Hallows Pt. 1*: David Yates and Daniel Radcliffe



## ASSOCIATE MEMBERS USING "ACO" CREDITS

Dear members,

It has become apparent that there may be some confusion about the eligibility for using the credit "ACO" after your name on websites, publicity and screen credits. The rules of the ACO are quite clear on this. See the paragraph below for clarification:

Associate Members shall be permitted to use "Associate Member of the Association of Camera Operators" or "Associate ACO" in correspondence or email, but not as a screen credit. They are not permitted to add the letters "ACO" after their name in either correspondence or screen credits since this is reserved solely for the use of Full Members.

The ACO board would like to ask all Associate members to check that they are following the rules which exist to protect the integrity of the ACO and the authority of being a full member, which most associates will actively become in the fullness of time. The consequence of ignoring the rules may result in the suspension of membership. Many thanks for your co-operation.

The ACO Board



# OPTICAL SUPPORT



Dan Edwards ACO  
Operating Steadicam on the  
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For over **25 YEARS** we have been supporting Steadicam and Camera Operators. Providing the highest level of rental, sales and service. Specialising in camera stabilisation equipment and lenses.

"Optical Support are more than a sales and kit hire house. The team behind OS are as passionate about our industry as I am. My relationship with Optical Support continues to grow and they look after me, with as much care as the Jackal and Steadicam Rig."

Dan Edwards ACO

 @opticalsupport

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 BSC expo 2022 STAND 305

# FROM SCRIPT TO SCREEN

BY JOHN PIGGOTT ACO

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## What attracts you to a script?

As a Camera Operator, when I read a script I am excited by strong storylines which provide the chance to be visually creative.

The scripts I have been attracted to in recent years range from high end fantasy pieces like *House of the Dragon*, to classic period work like *Poldark* and *Bridgerton*, to historical fiction with a lot of action like *The Last Kingdom*.

Each script demands and inspires something very different, but all have in common bold stories and a chance to tell a strong visual story.

## What is your reaction on first reading the script?

I always visualise the shots- I can't help doing that, and I make a heap of notes. It's a good starting point.

If the script is for a first season, I like to see the cast list so I can start to visualise with the attached actors in mind.

## What is your process after you've read the script and are well-versed with it?

Automatically, I start to formulate ideas and while I make some loose notes about specifics, it's more important to develop more general ideas about a camera style from the script and take those into a meeting with the DoP.

## As an A Camera Operator, what is your input when you meet the Director and DoP to discuss the script and the recce process?

Generally the DoP and Director will have had some prep time before I am on board; they will have an initial framework of ideas.

I think it's important that an Operator doesn't disrupt this process but works to integrate their own ideas where they are appropriate.

Directors and DoPs will always provide reference material, mood boards etc. and these are really important.

I always take the time to study these and I try to find examples of those kind of references in other work.

## What advice would you give to new Operators regarding interpreting a script?

I would say: Try to visualise the characters, try to understand their journeys within the script and take time to really bring your own input to the process. Think of the shots you've done before that have stood out and would be suitable or reference a style or single shots from similar drama pieces.

Try to think about whose story you are telling. Think about the genre, the tone, and ultimately the emotions the Director wants the audience to feel. It's rewarding when you have ideas which contribute in this way but if the Director rejects your ideas, don't take it personally!



What was the best advice you were given in your career as a Camera Operator?

"Adapt, persist and believe in yourself"

# BRIGHT TANGERINE™



*Bright Tangerine has released their new Cine Tape Rangefinder Bracket for the Misfit Kick, Kick 360 & ARRI LMB matte boxes.*

*The Rangefinder mount provides a pivoting base to support optical measuring devices like a Cine Tape, CineRT Focusbug or ARRI UDM-1.*

*Optical measuring devices require line-of-sight, which typically places them in front & above the matte box. This creates an issue when filters or lenses need to be changed as the assembly becomes an obstruction for the Assistant Camera and needs to first be moved.*

*When returning the assembly, if the sensor is not returned to the same position, it needs to be recalibrated to ensure accurate readings, taking up critical time on set.*

*To solve this issue, a pivoting base allows for the rangefinder assembly to swing away for clear access to the matte box. The sensor assembly can then swing back to its original position, removing the need to recalibrate.*

*The knurled locking knob secures the base, with indents at every 45-degrees for quick alignment.*

*The carriage has a 3/8-16" anti-twist mount and is compatible with the ARRI LMB accessory rail (K2.0013014) & ARS range of rails for mounting to the top handle or cage, making it an essential item in any Camera Assistant's tool box.*

*Installation of the rail only requires two bolts, connecting to the upgraded top flag brackets on the Misfit Kick & 360. This means it can be installed & removed without dismantling the matte box. The mounting points spaced wide apart minimises any flex and increases the stability of the bracket.*

*Safety stops on each end prevent the bracket from sliding off accidentally.*

*Featuring Bright Tangerine's famous ruggedness, quality and finish. They're a proud bunch of British engineers and inventors who will always stand behind everything they make. If you're familiar with Bright Tangerine, you'll know they never cut corners, and their support is second to none.*



# Magnificent 8

## 1) What was it that got you into operating?

I am the only one in my family that works in the film industry. My mother wanted me to be a doctor and my father wanted me to be a footballer.

I started by making short films on which the Director, the Editor and the crew were all me! I worked on friends' projects as a Camera Operator and later got a job on an Italian TV network. From there, I moved on to documentaries, TV commercials and music videos.

I discovered the Steadicam on a short film and immediately fell in love with it. A couple of years later, I got work as a Steadicam/B Camera Operator on a film and haven't looked back since.

More recently, I have been operating the Trinity, becoming the first Trinity Operator in Asia.



## 2) Which films/film-makers inspired you when you were younger to pursue a career as a Camera Operator?

Films were always great entertainment in my family when I was a child. I never imagined that I would be a part of the industry.

I studied the films of Directors such as Federico Fellini, Sergio Leone, Stanley Kubrick, Orson Welles, Martin Scorsese, Steven Spielberg and many others on my own.

Initially I didn't notice the technical side; I was just hypnotised by the stories. But after watching them over and over again, I started to notice the camera movements, the lighting, the framing and the choreography between actors and the camera.

I learnt by constantly asking myself: "how did they do it?" Asking this question helps me to this day.

## 3) What do you enjoy the most about being an Operator?

I enjoy being in the thick of the action with the actors, witnessing the evolution of the story, and especially capturing those magical moments with the camera.

I enjoy the adrenaline that comes with the creativity of trying to achieve the perfect shot without making mistakes.



## 4) Tell us about the DoP-Director-Operator Triangle in China.

The dynamic is pretty much the same as everywhere.

I'm lucky to be working with good Directors who have a very clear idea of what they want and with DPs that have a good eye and understand the gear thoroughly.

## 5) Describe a particularly tricky shot.

Each project has its own challenge but the one I always remember is on the first film I used the Trinity on.

In 2017, I was the C Camera/Steadicam Operator on a film by Jiang Wen- a very famous director and actor here in China.

I became good friends with the DP Xie Zhengyu, who encouraged me to bring the Trinity I had just bought on set.

He always gave me time between scenes to practice the Trinity and check how my progress was.

One day, the director Jiang Wen saw me training and doing some camera movements. He chose to use that camera movement on the next scene- a simple low mode to high mode walking forward.

Although I didn't feel 100% ready, I just put all my energy and concentration on doing my best.

Luckily, everything went well and from that day onwards the Trinity was used almost everyday for the rest of the shoot.

I'll always be thankful to Director Jiang Wen. He was never satisfied with just a "good shot"; he always demanded perfection.



By Junior Lucano ACO



**7) What's Next?**

In 2021, I was on a 6 month shoot for a war film that ended up being a big blockbuster hit here in China. After that, many projects came my way. And in 2022, I've got two big feature films lined up that will be shot in Beijing, China.



**7) Tell us about a memorable shot and how you achieved it.**

It's hard to choose just one because I did many with the Trinity... I ran and went up with a crane. I ran on the roof in some old buildings.

I used the Segway and got off it to follow an actor. I did some long takes entering and getting out of small corridors. I walked on ice and did 360° turns, in the desert and the rain.

I feel this is the beauty of this job: every job is different and there are always new challenges. Each challenge is memorable and has a special meaning for me.



**8) What is the best advice given to you as an Operator?**

"Enjoy what you are doing. Never stop learning. Be flexible and adapt. Creativity always comes under pressure so don't stay too long in your comfort zone."



# Thank you!

from Danny Bishop ACO

I could not have imagined when Pete Cav told me: "you can do it!", where the next 4 years would take me, running and designing the editorial for the ACO. My stance has always been: What would I like to know; what would I like to see and hear about? The most important thing has always been to try and make it as diverse as possible and include all styles of shows and films.

The reality is: the ACO includes some of the best Operators in the world and they are people who, when I was younger, I looked up to and tried to emulate. Being part of the board and the editorial has really made me feel included in our organisation. I have made some great friends, and found people to lean on when I needed advice, as well as people who needed my advice- isn't that such a great resource to have?

Seeing all the issues I have done below, I feel really proud of the newsletter and it's great to see the evolution of how I learned how to design and work it. It has been a real labour of love, especially getting in from work and sitting there for hours working on it. I remember on *John Wick*, sitting by the pool designing on my laptop during my day off in Morocco, drinking Margaritas in the sunshine, so it's not all bad! It's simply fantastic learning first hand what other Operators do on their jobs in order to get the shot, get it right and what they'd do differently



Sat in the mud with key Grip Matthew Budd, on Netflix's war movie *All Quiet on The Western Front*.

It's so exciting to witness the new team of editorial who will take over and run with it. I'm looking forward to seeing- under the helm of Tanya (good luck): Dan, Sven and Akhilesh- where they will take *In The Frame* in the next few years. Please help and support them. They are a great team. Thanks also to Sham, who is the absolute rock of the ACO and who has been my sounding board to rant to over the last 4 years. She's simply awesome. Of course, I must thank Peter and Sean as well; it's not easy being president and they've both been very helpful to me. Lastly, thanks to the board who, everyone should know, do such hard work to keep this great organisation running. Thanks, I'm going to miss it. I'm going to leave you all with my favourite quote...

Danny Bishop ACO

"And above all, watch with glittering eyes the whole world around you because the greatest secrets are always hidden in the most unlikely places. Those who don't believe in magic will never find it."

-Roald Dahl

