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# THE ECHO

**ASD**  
ASSOCIATION of SOUND DESIGNERS



## SHOWCASE: SIX

PLUS 40 years of sound engineering // Interview with Scott Arnold // Employment rights and tax status // Cute kittens!

# THE ECHO

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Contact us at  
[news@associationofsounddesigners.com](mailto:news@associationofsounddesigners.com)  
[www.theasd.uk](http://www.theasd.uk)

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*Six the Musical*  
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# Showcase: Six the Musical



DOMINIC BILKEY

**Sound Designer:** Paul Gatehouse  
**Composers:** Tony Marlow, Lucy Moss  
**Associate Designers:** Charlie Smith (UK), Josh Millican (US), David Tonion (AUS)  
**Production Sound Engineer:** Josh Richardson (UK), Dillon Cody (US)  
**Sound operator:** Sarah Sendell (No.1 London), Will Miney (No.2 London), Josh Millican (A1 New York), Kate Munchrath (A2 New York), Gemma Johnston (No.1 UK Tour), Monty Evans (No.2 UK Tour), Anusha 'Switch' Matthews (No.1 Australian Tour), Ghiovanna de Oliveira (No.2 Australian Tour)

*Six the Musical* 2019, with Jarneia Richard-Noel, Courtney Bowman, Danielle Steers, Natalie Paris, Alexia McIntosh and Vicki Manser.  
(© Eleanor Howarth)

Spending an hour with the wives of Henry VIII might not, in the first instance, make you think musical theatre, but that is exactly the topic of hit musical *Six*: a journey exploring the untold stories of these women. With a cult following and a rapid proliferation of productions opening in Australia, UK and the USA, as well as more in the planning, this is a busy time for sound designer Paul Gatehouse. We caught up with Paul as the production was mid-preview period on Broadway.

## What was your route into theatre sound design?

I became intrigued by sound engineering through work experience at my local theatre, Theatre Royal Plymouth. I was heavily into music and live performance at school and was looking for an outlet to turn that hobby into a career. After initially volunteering at a Hospital Radio service, I then got in touch with Mike Palmer, the theatre's Head of Sound at the time. The theatre used to transmit audio-described performances via an ISDN line – (remember those!?). During testing of that line one day, I

took a punt and asked to visit the theatre to look around, which Mike kindly obliged. I made friends there and gradually worked my way into the fold of the crew, working in all tech departments, but with a heavy focus on audio. Mike was generous enough to let me loose on some light sound design duties and content creation for shows in the studio theatre. The seed was planted.

The TRP was a major producing house and many of the first-class national tours were (and still are) built and co-produced there. This gave me amazing access and opportunities to meet the big gun freelancers and Sound Designers from London, many of whom are close friends to this day.

From Plymouth, I made a conscious decision to relocate to London after interviewing for the No.3 sound position at *Miss Saigon*, playing at Theatre Royal Drury Lane. Over the next few years I followed a natural industry progression of sound operating and freelancing, moving through the ranks. I then branched off in another deliberate direction towards production

work. I was intrigued by all the developing tech and began programming and assisting for Mick Potter after working for him as Head of Sound on the *Saturday Night Fever* UK Tour. This led to a working relationship as his Associate for over ten years, taking me all over the world, involved in hundreds of productions.

My design career developed out of my busy associate work and through a long-standing working relationship with Cameron Mackintosh Limited (CML), I was presented with opportunities to take on new versions of his titles, and from there I've been working as a full-time designer.

#### **How did you become involved with *Six*?**

George Stiles, who I've worked with many times through his writing work with CML (*Mary Poppins*, *Betty Blue Eyes*), approached me with a project he'd become involved with as executive producer. It was an offer that came completely out of the blue. Kenny Wax, another exec producer, sent me an early demo of one of the songs on YouTube and I loved the hook of the song.

There had been two previous iterations, one being the initial student production that the writers Toby and Lucy put on at the Edinburgh Festival with their mates, and then a semi-produced showcase at The Arts. Kenny, George,

and Andy and Wendy Barnes (our third set of exec producers) teamed up, assembled a creative team and fully produced the first UK Tour, which incorporated a run at the following Edinburgh Fringe and a short residency at The Arts Theatre in London.

#### **The show has grown speedily with multiple productions now open throughout the world.**

##### **What was the process in getting here?**

We set about designing the 'staged concert' concept from the brief given to us by Toby and Lucy. It needed to feel like a Beyonce concert, heavily influenced by her *Live At Roseland* show in New York and provide a platform for The Queens to tell their stories. The book and songs were fully formed. We had production rehearsals with full band and sound at Dance Attic in London, before tech'ing the show at The Norwich Playhouse, which was a tight squeeze to say the least! During the course of the run in Norwich, and through to the Ed Fringe, it was clear that excitement was building through social media and a solid fan base was formed, which then resulted in an extension to the tour and a transfer to The Arts, as an official 'West End' run.

##### **How has the show developed since this initial inception?**

As we've grown in size, we've been able to add

more production elements which reinforce the impact of the story telling. Through costume, set, lighting and sound it puts the central characters in a really strong place to get their message across. The biggest change for sound was in the move to Broadway, we were able to uplift the design to an object-based process using d&b Soundscape, with fully tracked vocal objects (using TiMax D4 Tracking) for The Queens. This allows the audience to lock on to whomever is the focal point and also adds dimension to the multi-part harmonies and group BVs.

##### **How did you achieve the show prior to using d&b Soundscape on the Broadway production, and what changes has Soundscape made?**

For the non-Soundscape version I used a matrix of speakers upstage of the band to give instruments a localised element, which we were able to replicate even further with Soundscape, but without needing the source speakers. Vocally, with Soundscape the tracking is a game changer. Your attention is immediately drawn to who is singing or speaking and it again elevates the dynamism of the performance. The moving sound image reinforces their demand of your attention at all times.

When we transferred to Broadway, as part of the Soundscape uplift, we turned the system



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*Seeing a show grow to where it has, in the time it has, is incredible and I feel very lucky to be involved.*

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Paul Gatehouse

into a 360 version and made the addition of surround speakers, which enabled us to widen things out in every dimension again. We use the En-Space algorithm within Soundscape on certain track elements to give them early reflections and depth, and dynamically manipulate objects via OSC from QLab around the room to add extra dynamics to the orchestrations. These would be sweeps, risers, pads, booms, etc. Lots of ear candy and pop production elements that Tom Curran, our Orchestrator, has brilliantly put together.

**What were the biggest challenges for you on this show?**

More of a conscious design principal than a challenge, was to make sure the sound of the show was narrative led, even though we are in a pop concert setting. In other words, get the vocals to have a crystal focus within the high SPL and dense music sound-field. This led to an early decision to use handheld vocal microphones for the whole delivery of the show, which worked in harmony with the pop icon imagery.

The premise of the show is that The Queens compete in a competition to become the lead singer of the group (called SiX) by demonstrating who had the worst experiences during their marriage to Henry VIII. The Queens

address the audience constantly through the fourth wall, so even when they speak to each other we are always being included in the conversation. The use of handhelds reinforces this concept well, as opposed to only using handhelds for songs and other head worn mics for dialogue.

**With a strong design concept based around narrative storytelling with handheld mics, what is your relationship with the directors Lucy Moss and Jamie Armitage like?**

They have really clear ideas about the sound of the show and what their influences were. In truth, it's the same music as I love and listen to everyday, so we really all knew what we were working towards from the get-go. I have a background in studio production and I mix records, so a lot of those techniques and stylistic choices are in the design of the show. Especially in the vocal production which is tight and slick, with layered multi-band and broadband compression from the console and plug-ins. The low frequencies are also really key, I spend a lot of time working on the management of those key aspects.

**Can you tell us a little about the shows dynamic and the sound that you have created for the show?**

It has a great arc. It opens out from pre-show

music which is made up of contemporary pop songs re-styled in Tudor instrumentation, into an all guns blazing concert opening which introduce the characters. We transition through each Queen's solo number styled on pop divas of the day, moving through many musical styles from Ariana Grande to Emily Sandé. Then we ramp up through to The Queens coming together as a group in the title song *Six* and then pump up the energy again with the *MegaSix*.

**What were the challenges of working with a live band, balancing music and vocals? What about sound effects?**

As we know, when working at high SPL the frequency balance has to be on point, or it won't be able to be loud enough with a sound that the ear perceives to be balanced. As I mentioned before, dynamic and spectral management is what allows you to do this, especially in a relatively small space such as a theatre. By design I have really clean sources from electric drums, Di'd instruments and track so I can sculpt this with a high level of dependency. The handhelds (with DPA dfacto 4018VL capsules) also give me a tight pop vocal sound.

We then have a clear road map of the mix of the show, so once the car is tuned up, the mixer can throw it around the corners with confidence

and add to the dynamic excitement of the performance.

Sound effects are minimal, we don't re-create any sonic environments as we are directly planted into one, the concert world. The four-piece, all-female band are onstage and the audience are our real-life crowd. We see everything that happens in real time so don't need any aural cues to help tell us what might be going on.

There are a couple of accented moments with electronic phone-style FX, when Henry is choosing his latest wife from the Hans Holbein portraits, depicted in a mock Tinder scene by swiping left and right.

**What is your favourite moment in the show?**

My favourite moment is what we call *The Re-Mix*, when the Queens, led by Parr, reclaim their voices from history and realise that competing and comparing themselves is pointless, and they re-write their *Her-story* from that point to the end of the show. It's an electric moment which always lifts the roof.

**Did anyone else work with you?**

We would be nothing without our teams! Bringing a show from the Fringe to Broadway has involved a lot of people mucking in and



Natalie Paris as Jane Seymour  
(© Eleanor Howarth)

going above and beyond in the early days. I can't thank Charlie Smith, my UK Associate enough for putting in a crazy amount of work on the multiple productions that we've rolled out so quickly. Associates cover so many skill bases, drawing, logistics, programming, content creation, mixing, the list goes on. Become a good Associate and you'll never be out of work!

Our New York team, Josh Millican (US Associate Sound Designer) and Kate Munchrath (A2 Audio), did an incredible job of helping me to scale up the show for the biggest version we've done to date. And I have a great team of Production Sound Engineers around the globe, Josh, Kelsh, Dillon, Joe, Alan and David who constantly innovate and refine the process.

Luckily, every person on the team and every sound operator who works on the show really loves it and our creative team, production staff and companies around the world have an amazing family feel. Seeing a show grow to where it has, in the time it has, is incredible and I feel very lucky to be involved. ●

**MORE INFO**  
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# The future of audio?

## It's going to take a village



ZOE MILTON

**The old ways are unsustainable and the future of our industry lies with the people of our village, so says Scott Arnold, managing director of Autograph Sound.**

I sat down with Scott in a coffee shop in Autumn 2019, with the hope of expanding on a throw away comment he made during a panel discussion at PLASA London. He said that theatre sound is working in an unsustainable way, but what I realised as we chatted was that this idea is fuelling a big change in how Autograph approach their position in the industry. I quickly discovered two other things, Scott is a man with true passion, and the conversation was never going to pause long enough for me to grab a coffee! We chatted for hours about his passions; his work, his family and his unshakable belief in Autograph and everything Andrew Bruce has built there.

“I think it's well known that I have suffered with anxiety and panic attacks for years. I am able to

manage my symptoms now, but 20 years ago, I wasn't so well equipped. Andrew saw that and gave me the time and the space to recover. Back then it wasn't OK to talk about mental health, we didn't have the openness that we have now, so Andrew's understanding really had an impact on me, along with the care and understanding of my wife, I was able to pick myself up and carry on. I'd only been at Autograph for a few years when I realised couldn't go on. I'd just moved house and I couldn't leave my room. Andrew recognised something in me and invested in me. Now, twenty years later, he's asking if I want to be managing director. I think it's important for us all to understand that when you invest in people they can go anywhere and be anything. If I didn't have that support and care, who knows where I'd be today. That's why I think it's so important to talk about it, so that people can see; if I can do it, they can too.”

It's Scott's personal experiences that have



focused his approach nurturing his team at Autograph.

“We have seven Mental Health First Aiders (MHFA) on site. It’s easy to say, ‘come and talk to me’, but it’s not always simple to talk to the boss. Talking is therapy: sitting and chatting helps everyone. So we make sure that everyone who comes into the building knows that option is available to them.

It doesn’t have to be a specific mental health issue; it might just be something that’s making you feel uncomfortable. We’ve also provided a dedicated phone number, so our people can call a person and talk, if that’s easier for them. We make sure everyone knows the number.”

“We have close ties with Back Up, the technical charity. They’re such a great organisation. They are there for you if you have a physical injury or illness stopping you from working, but they’re also able to help you if you have a mental health issue that is affecting your work too. It’s amazing to see the difference in people that have had that support, they go from being closed down and quiet, to going off like a rocket. We have to look after each other. We’re at an advantage here because our people are enthusiastic and want to succeed. So, if they are having a problem, they’re more likely to ask for help.”

Scott sees the entire theatre audio clan as a village, not just the employees of Autograph. He is determined to protect and nurture the people of that village.

“The West End and a little bit of New York are our village, nothing can happen really without someone knowing. There’s always a link between us all, someone you know, who knows someone else... There are obviously positives and negatives to that, but I prefer to concentrate on the positives. We are all about our relationships, it’s what I spend my days doing. If I can walk into the warehouse and say hi to a young person, ask them about their day and how it’s going for them, it’s great. It has such a

positive effect on both of us. If six months later, I see them in a theatre, working on a show, then all the better.”

“Autograph is a place where people come to work, and stay for years, which is great because our staff are an important asset to us. But if someone has the courage to see that they’ve learnt all they can and it’s time to leave, then that’s brilliant too. We’re so excited to see our colleagues follow their dreams.”

“We’re all passionate about our industry. The people who succeed in theatre are the people who push to get things done, they stay later than they’re getting paid for, they send emails on their day off and they go the extra mile to make sure that the show goes on. But you can begin to rely on that, to expect that. So no time is allowed for doing the show in a sustainable way. Budgets are being squeezed constantly and that inevitably leads to a squeezing of people.”

How can we protect our teams?

“I think it comes down to communication. Often, the people in charge of costing a show budget have no understanding of why equipment and people cost what they do. It’s down to all of us to be more visual, more present and have those conversations so that we can educate producers and production

teams. If the rest of the teams understood what we were trying to achieve and how our equipment did that, surely there would be more willingness to make the budget available.”

“We have relationships with designers, producers, show staff and manufacturers. We communicate with all of them and we all have our part to play in fixing things for the future. I don’t think we can sit here and say, ‘well, Autograph need to fix this, Producers need to change that.’ It’s not that simple.”

“We’re all working towards making theatre more sustainable in all senses of the word. Manufacturers are developing new equipment, radio mics for instance, they’re taking up less room, physically and spectrally, but we still need to get used to the new pay structures. We’re moving away from single use batteries, the newest transmitters all come with rechargeable, integral batteries, but even this isn’t a smooth transition, we are still explaining that the batteries aren’t free, that they’re an expensive consumable, at least once a day, even though money and resources are being saved on purchasing mountains of AA batteries and licences!”

“It takes all of us, working together, to make the show happen. Autograph are making changes,

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## *When you look at our village, it isn’t as diverse as it could be, it isn’t reflective of our society.”*

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we are involving ourselves with companies like Stage Sight to help educate the next generation of sound engineers, allowing children that have never stepped foot in a theatre the opportunity to work with our fit-up teams all across the country, we’ve had students in Bristol and Scotland.”

“If we have a big, five week fit up in a theatre, we’ll get hold of Stage Sight and they work with the local schools to get applications for work experience in. When you look at our village, it isn’t as diverse as it could be, it isn’t reflective of our society. By teaming up with Stage Sight and trying to employ people based on merit, we’re trying really hard to address that balance.”

“I believe Autograph has an obligation to educate. When you’re in a hire company warehouse, you’re exposed to lots of equipment. You’re learning all sorts, and importantly meeting lots of people, you’re learning how to communicate. Even if you have your sights set

on being a designer, you still need to know how to coil a cable. We’re very lucky to have Jim, he’s so good at mentoring and developing young talent. It’s great to see kids that started off in the warehouse a few years ago out in the West End being Production Engineers and Associate Designers. If you can successfully communicate in that environment, you’re going to get work.”

“We have purposely tried to employ more women at Autograph. We’re still finding negativity for women in some roles. But we’re not taking women on because we’re trying to tick boxes, we’re taking them on because they’re fantastic and there isn’t anyone better for that role.”

It was clear from chatting with Scott that the Autograph team are proud, passionate and planning for the long term. It is going to take more people with the passion that Scott exudes to ensure our industry can sustain itself, grow and develop. ●

# Mini profile

BETH DUKE

## What are you working on currently?

Before Coronavirus I had just put in a show called *One Jewish Boy* at Trafalgar Studios. It's a really exciting piece about anti-semitism in the modern-day world, and one of the most tech-heavy shows I've ever done. Unfortunately, it got shut after the first week... I'm using this time off to work on a few small short film scores and read up more about that area, as well as all those mundane tasks that pile up after a time, such as sorting out laptop storage and hard drives...

## What is the favourite part of your work?

I really love meeting and working with a wide variety of people! This community is so collaborative and vast, and I am so happy to work in an environment that can show off the talents of everyone regardless of who they are. The sound design industry is such a supportive community, everyone is there to help you out and teach you what you want and need to know. There is nobody that I know of that doesn't like giving knowledge if you need anything. I know I could call anybody and they will try to help me straight away.

## What would you change about the industry?

I guess, the normality of 'burning yourself out' constantly, as proof to show you're doing well. Sometimes when I do a show and I feel happy and not stressed, I actually begin to get anxious that something bad is going to go wrong and that I haven't put in enough effort to wear me out. I feel a lot of people are acclimatised to the norm that we must be exhausted 24/7, running around constantly, and if you aren't it somehow feels like you're failing. I

think it's important that for an industry that is very pro-mental health, that we practice what we preach, and start looking after ourselves more. It should be the norm to be happy and enjoy your job!

## What's your top tip?

Communicate constantly and give yourself a break if you need one. Remaining clear with everyone about what's going on in your team eliminates the possibility of letting them down in the future. Also, when tension build-up you cannot underestimate the ability of a 10-minute walk in the fresh air. Being in the dark and dust can heighten tensions, it's important to get outside when there's a break to reset and allow yourself to carry on working at such high quality for a long period of time!

## What are you listening to at the moment?

I've been listening to lots of coding music recently, which is really interesting as it's another way to experiment with composing but without necessarily falling into what sounds best for the ear and traditional composing techniques. I've been really enjoying listening to how bizarre the world is at the moment and using the overwhelming quiet streets and wonderous applause on Thursday's as a chance to record, and also to really listen to how rich and beautiful natural soundscapes are.





# Mini profile

JULIE BLAKE

**What is your current (or recent) project and role?**  
I'm currently working as music supervisor and creative producer for a new musical called *Magdalen*.

**What is the favourite part of your work/process?**  
I love dissecting a script and envisioning the instrumentation and sounds that will best underscore each character's emotional journey.

**What would you change about your work / the industry?**  
At the time of writing, I dream of the day when people are packed into theatre seats again, and preferably enjoying a glass of wine without a face mask on... But it would be great to see more paid apprenticeships to pair emerging talent with highly experienced sound designers.

**What's your top tip?**  
I use Spotify a lot to create audio mood boards, and their recommendation tools are a goldmine for discovering new music.

**What are you listening to at the moment?**  
Nicolas Jaar *Cenizas*.





# A few of my favourite things



NICK POWELL

Nick's work as a composer and sound designer in theatre includes: *The Lehman Trilogy* (also West End and New York – Olivier Award Nomination for Sound Design and Drama Desk Award Nomination for Outstanding Music in a Play) *The Tell-Tale Heart* and *Othello* at the National Theatre; *Julius Caesar* at The Bridge; *Solar* at Klangwolke; *The Ferryman* (Tony Award Nomination for Sound Design and Drama Desk Award Nomination for Outstanding Sound Design), *The Nether*, *X*, *Unreachable*, *Get Santa!* and *The Vertical Hour* at the Royal Court; *Lanark* at the Edinburgh International Festival; *Wolf Hall*, *Bring Up the Bodies* and *Dunsinane* for the RSC; *27*, *The Wheel* and *The Wonderful World of Dissocia* for National Theatre of Scotland and Edinburgh International Festival. Nick also writes extensively for TV and film. He is half of OSKAR, who have released two albums and produced art installations for the V&A and CCA, as well as written live soundtracks for Prada in Milan. In 2017, he scored *Bloom*, the opening event of the Edinburgh International Festival and the Guggenheim, Bilbao's 20th anniversary celebration *Reflections*. His chamber piece *Cold Calling: The Arctic Project* was presented by Birmingham Rep with the City of Birmingham Symphony Orchestra.

## Zoom H5

I love this portable recorder because, even with the built-in microphones it is great quality, it is large enough to be easy to operate (smaller ones can be SO fiddly!), but still small, and it doubles as a good and reliable soundcard for when I'm on the road. Most times I'm composing, ideas start as a little sketch recorded onto this from my piano or guitar – or even me just singing into it on the street. Also great for recording interesting noises I hear when wandering around – material to subsequently abuse in Ableton. I realised ages ago that having something in rehearsals that you can just bring out in a moment of creative impetus to make recordings in rehearsals is more important than waiting for a time you can bully people into a studio. The Moment being more important than the sound quality in many cases and no one wants to hang around for you in rehearsals. It has two XLR inputs so you can put posh mics into it as well. Best of all it looks like a prop from a *Doctor Who* episode. I try to have it on me at all times.





### **Squire Telecaster Made in Korea S998232**

I bought this guitar when I was really young brand new for around £100 around 1990 and I've had it ever since. It's been thrown around, cried on, bounced off stages and generally abused but it has always survived and I still use it on most things I do. Recently, I realised (with some horror) how long I'd owned it, so I thought I would celebrate our relationship by giving it a makeover. I took it to Stairway To Kevin in Denmark St and gave it The Works, including new Fralin pick-ups and now it sounds AMAZING. I love it like a sibling (we do still have bad days but we're in it for the long haul). One day I'll learn how to play it properly.

### **OK, this will sound corny but... final one is... collaborators!**

Sometimes, you've got to go to your 'cave' and go through the horror of solo creation – be it musical or sound design or whatever, but, as someone riddled by self-doubt, I am completely dependent on the support and the buzz of bouncing ideas off other creative people. I'm not going to do a list of names but I've been incredibly lucky with who I have ended up working with, be it the engineers and associates who have been so supportive at working out how to technically bring 'back of a fag packet' ideas to life, to directors, writers, designers, lighting designers, video artists, actors and the amazing musicians who through their skills and through creative conversations and late nights still keep the juices flowing. Oh, and the fights are important too!

# First and last: forty years of sound engineering



ZOE MILTON

It's been a few years since I first stepped foot into the quiet still of a dark theatre. The possibilities held in that silence still have the power to excite me today, but much has changed in the intervening years. Not only in terms of technology, but in the way we do our jobs. The technology at our fingertips means that we are much quicker to adapt and much

more flexible with what we can achieve. I sat down with Richard Sharratt, Jane Bloomfield, Tom Marshall and Vicki Hill to ask about their first mixes and what they think has changed during their careers.

I spoke to Richard Sharratt first, Richard started out in 1978 and has mixed and designed some of the best shows seen by London audiences since then, not least of which was mixing FOH for the opening ceremony for the 2012 Olympics.

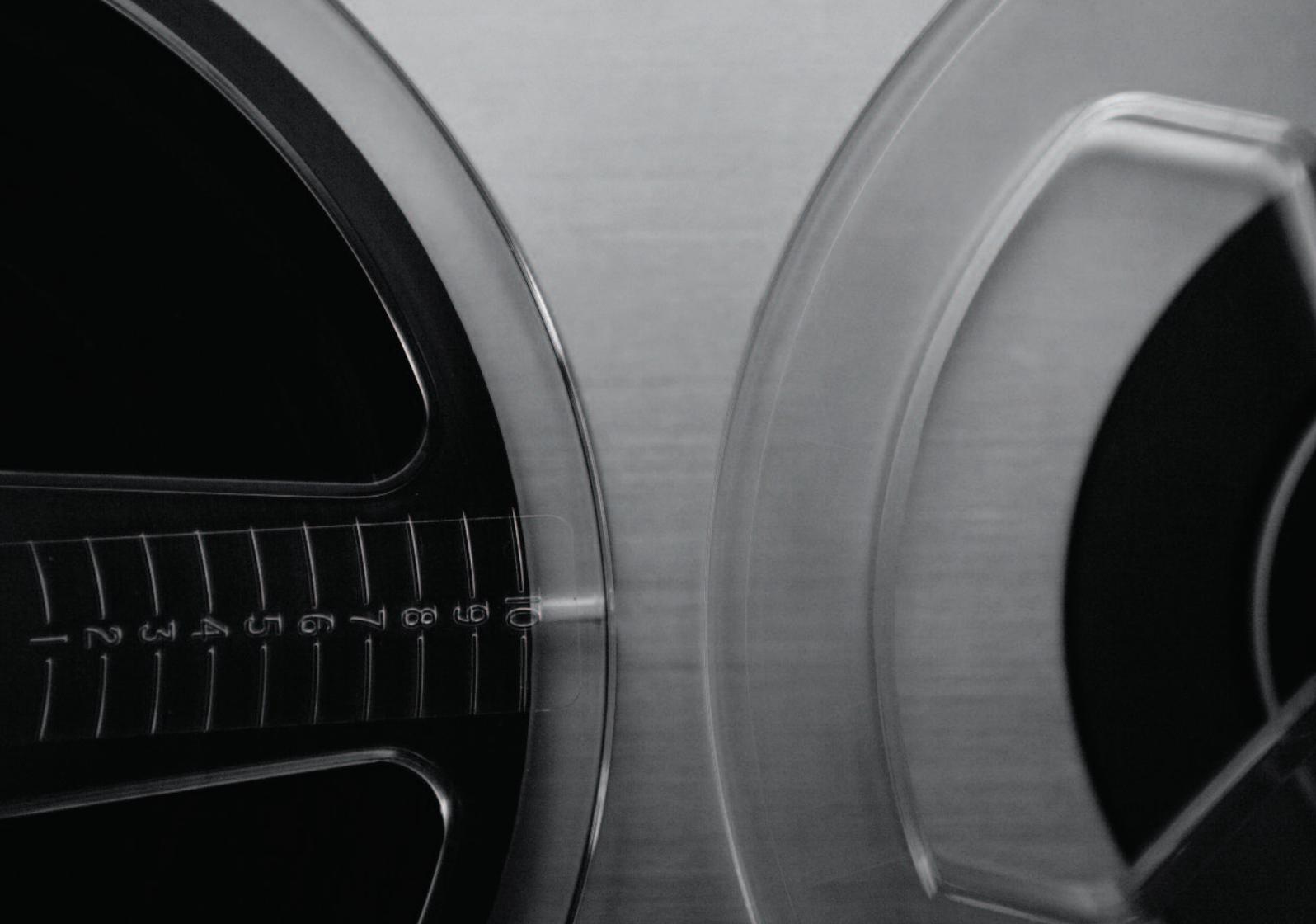
## **Richard Sharratt**

My first shows were in Rep' at the Salisbury Playhouse. I was an assistant electrician, doing mostly lighting but also the occasional bit of sound. This involved playback from a couple of Revox A77s. I then moved onto the Liverpool Playhouse as deputy chief electrician. We had Bose 802 speakers, a Tascam 8:2 mixer and Revox A77 reel-to-reel tape machines (with photo-stops) and not very much in terms of live elements. If you only have two possible sources of sound FX you can only have a SFX bed and the

occasional spot cue. There was no option to have layered sound effects the way we can today.

At the Liverpool Playhouse I had my first musical mix. They planned three shows *Chish and Fips*, *A Tale of Two Cities* and *Blood Brothers*, and decided to splash out on some sound equipment. The production manager looked in a few catalogues, ordered the bits and, as the boxes arrived, told me to get on with it. I was young and keen; it was all very exciting. Once I got my teeth into the boxes of audio equipment. I came to realise that sound was actually much more interesting than lighting. Lighting involved dimmers, 15A plugs and nasty hot, sharp things whereas sound was a bit more subtle with its delicate, expensive looking equipment connected up with XLRs, jacks, multi-pins plus different sorts of flex for mics and speakers, if you were lucky.

Radio mics were still quite new to theatre sound. The mics were placed on the lapels of the actors' costumes. We only had eight and in



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## *I had very little clue what would work, so we did things that might be frowned on or laughed at by people more in the know*



Liverpool there wasn't a No.2 backstage to fit them. I think head worn mics arrived some time circa 1984, maybe for *Starlight Express*? I remember Siobhan McCarthy going into the studio at Autograph to do experiments with head worn mics around that time.

The size of the microphones was a limiting factor. Until the Sennheiser MKE2 came out, mics were too big to be head worn. Sony ECM50s were the norm, they measured nearly 12mm in diameter and over 20.5mm in length, so they went on the clothes and the whole unit, transmitter and mic, was swapped from actor to actor. Generally, the cast swapped them between themselves, so you could never be entirely sure what you were going to get when you opened the fader.

I had very little clue what would work, so we did things that might be frowned on or laughed at by people more in the know. Luckily, Andrew Bruce came up to see *Blood Brothers*. He took it and me, to the West End. That was my first West

End mix, with Barbara Dickson at the Lyric Theatre, Shaftesbury Avenue. The run only lasted six months. We still only had eight radio mics. They were non-diversity Micron systems. We had to array the receivers across the console metre bridge. And we had to lift and turn them in order to avoid dropouts.

The PA was the newly introduced Meyer UPAs and USWs with Revox Piccolos for delays, fed from a Klark-Technik DN700 delay unit. I think the mixer was a Trident Trimix. Jonathan Deans spent many hours cable-tying the PSU cables into a position where the hum became acceptable. We did have a Lexicon 224 though, still my favourite reverb. There was only one sound effect that I recall. An air gun was fired towards the rear of the stalls, as if at a statue, and the sound of it hitting its target was made by me hitting an Anglepoise lamp with a screwdriver. It got a laugh every night.

After the age of the Revox, Carts became the standard playback medium. For each show you would have a pile of Carts lined up and you had to be very careful to get them in the right order and not knock the stack over. I did that once, not only did it make a horrendous noise, but you've then got to get them all back in the right order before your next cue!

The show control was entirely different too, we

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- » Last Tango
- » Addams Family
- » Don Quixote
- » Fiddler on the Roof
- » Ruthless
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had no mix compression, no gates or reverb as part of the desk. If you did need reverb or a specific effect, it was outboard. EQ and gain were set on the channel, so no recalling a different EQ with your mic swap. We made flip-up paper legend strips for the channels to help us remember mic changes. We only had 24 input channels, so once you had a band and a few mics on the actors, that was it, there was no space for massive multi tracked, layered sound effects.

I think the focus of the audience was different then. At home, theatregoers would be happy listening to a mono speaker on their TV sets, which were showing a very limited choice of programming – pre-VHS even, they didn't have the breadth of choice of modern audiences. There wasn't the expectation to be as immersed in the show and the storytelling as there is today. Our main aim was to try to make everything heard as clearly as possible, which, when you're relying on just a handful of relatively untrustworthy radio mics and some float mics, could be tricky.

Although the technology was nothing compared to what we have now we did have a sense of being at the cutting edge. There was always some new, hugely expensive device that had to be cajoled into doing what you wanted.

Bernouilli drives for playback, auto-locating 1/2" tape machines, Cadac desks with programmable VCAs, diversity radio mics. Things were made to work through improvising, because they had to be. Going to B&Q on a Bank Holiday, buying drainpipe, cutting it into angled pieces and glue-gunning speaker drivers on the end to make delays for *Phantom of the Opera* was just one example of what we had to do to make things work."

In the late 70s and early 80s manufacturers were not creating equipment specifically for theatre. Everything needed to be adapted to suit the very different needs of theatrical performance. Until Abe Jacob convinced John Meyer to design the UPA-1 speakers were generally unsuitably large for central proscenium positions. Speakers were not the only things being adapted for the theatre, in the 80s microphone placements were still being refined, and radio mics were still an expensive option, so their use was limited, and float mic'ing more common. I asked Jane Bloomfield which innovations she best remembers from that time.

#### **Jane Bloomfield**

"It was just so exciting. We were all having fun, such interesting times. I was lucky to be working with some clever people, like Martin Levan, who

were really thinking outside the box, thinking about everything and pushing equipment to its limits. On *Starlight Express* in Tokyo, we weren't getting the level we needed from the cast mics, so Martin handed me a piece of wire, a coat hanger or something, and said try what you can to get them closer to the mouth. The Japanese team and I did all sorts of metal work to make a frame to get the mic closer and it was close to working, but we were overloading the capsule, so Martin got them to put a resistor in-line and we got there! It was always so fascinating to be working with him. Months later the footage came out of Madonna using a boom mic, but we'd been using them on our tour across Japan for a long while by then! Even when we worked on *Napoleon* at the Shaftesbury Theatre in 2000, he was still doing unimaginable things, taking speakers out of their boxes, pointing them into the dome and using computer software for sound playback. Being around people who were excellent meant that you were learning all the time. We would just try things out."

Of course, adapted equipment was not immediately trusted. As new techniques developed and technology became more widely used, reliability inevitably increased. Having a greater trust in your equipment allows a team to use it more effectively. Building on the

advances of the 70s and 80s meant that the next generation of sound engineers were coming in at an advantage. Our next interviewee, Tom Marshall explains how it felt to be part of this new wave of shows and equipment.

Tom first entered theatre as work-experience on *Miss Saigon* in 1993, it was that experience that really cemented his desire to work in theatre sound.

#### **Tom Marshall**

“I have to admit that prior to this I’d barely set foot in a theatre and the idea of a sound system larger than a Revox and a few microphones had never entered my mind. I remember being blown away by the huge amount of top-end equipment and watching the engineer’s precision when it came to running it all. That’s when I knew I wanted to work in theatre sound.

Half a year later I was offered the No.3 position on *Oliver!* opening in the London Palladium in 1994. I loved everything about this job, the show, the people, the theatre and of course the equipment. Designed by Mike Walker and Paul Groothuis, and run by Richard Brooker, the system was pretty much all analogue. A huge Cadac J-Type, arranged in a horseshoe shape, with over 90 channels, controlled the show. I’d

***It seemed a completely bonkers idea to me, but then I suppose it must have been bonkers to anyone brought up on analogue***

heard of these desks and spent a bit of time cleaning and testing them when I was on work experience at Autograph, but I’d never really seen one in action. It was awe inspiring, almost a living beast that had mood swings like the best of us, and we the team, were its caretakers.

Backstage we had what was, at the time, the West End’s largest collection of RF channels, 32 Sennheiser SK50’s with 1046 receivers. All using the large rechargeable battery packs which made them a considerable size by today’s standards. That combined with over 100 mic heads for all of the cast made it feel like you were running the biggest, most lavish sound system in the world. Cast mics were all Sennheiser MKE2 Red dots. Towards the end of the run, Mike managed to get hold of a very early demo DPA 4060 – complete with the original Teflon cable and we started to introduce them into the show. No one was double mic’d and as backstage engineers we had our work cut out making sure that nothing failed.



There was very little processing as part of the system, Mike and Paul's ethos was to keep in simple and embrace the light reinforcement style that was popular in the early 90s. FOH sound effects were on four Denon CD carts, each one held a CD with a share of the shows sound effects so that more than one effect could be played at once. Paul has often reminded me that if a sound effect needed changing it would be an overnight operation. Imagine that when programming multiple sound effects on QLab in the blink of an eye. After I'd paid my dues, I was taught to mix the show. This was like being given the keys to the Rolls Royce and asked not to scratch it. Every moment was incredible, precision was key. Not to mention the ability to gently tap the desk with a Motorola when it stopped passing audio; or mixing whilst reaching over the top of the desk to re-plug a channel that had gone down. Of course, we had a small amount of automation – namely VCA groupings – thanks to the Cadac software, but looking back, even this now seems somewhat basic and agricultural to program.

Overall, we took pride, we cared immensely. Maintenance of the gear was a regular thing, but then again, so were overtime contracts!

The first time I became a No.1 was an incredible

feeling. Back then it really felt that one had to work ones way up the ladder for much longer before that position was offered to you, so when I was finally taken aside and given the role on a brand-new musical I was over the moon. I remember feeling a sense of apprehension too: could I do it? Could I set up a mix? Could I run a department? All of which I gradually figured out and settled into these roles with ease.

I was lucky enough to always open new shows so my experience of being an HOD was never as a take-over, and I think it's fair to say that the highlight of being a No.1 for me was the initial production period. From the start of rehearsals, through fit up, tech, previews and press night it is an emotional (and sometimes physical) rollercoaster that can have you buzzing on adrenaline one day and almost on the verge of tears another.

The last show I ever mixed was a production of *Chess* in Toronto. Designed by Richard Brooker, it was the only time I ever got to mix a musical on a DiGiCo SD7. Since then I've been designing myself for almost ten years. The equipment I regularly specify has moved to an entirely new league compared to that on my first job. I remember when the idea of a digital desk emerged and one was going to be used in theatre for the new production of *Martin Guerre*

at the Prince Edward. The folk at Autograph were pioneering a new innovation in desks, the Soundcraft Broadway, and hats off to them for all of their efforts, but my personal reaction was somewhat negative. In fact, it seemed a completely bonkers idea to me, but then I suppose it must have been bonkers to anyone brought up on analogue.

These days I don't even bat an eyelid when it comes to stringing bits of DiGiCo together on BNC. I now don't think twice about piling a multitude of audio devices and software together that all runs on a telecom cable. Back when I started, 90 input channels took up approximately 20 seats at the back of the auditorium and we couldn't be certain that the desk would handle the demands of the show. Now I start planning a show with at least 120 channels of input processing from the off, removing just the bare minimum of expensive seats. I learned from Mike, Paul and Richard that keeping it simple was the key, and I still aim to attain that, even if I do indulge in the odd plug-in here and there. With the audio spending most of its time in the digital domain, we are now able to bring all the facets of the recording studio to the bench, something that could barely be imagined on my first show.

Mic technology has advanced hugely too,



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## *Even though the advances in technology have been vast, the core responsibilities of our sound engineers hasn't changed much*



especially when it comes to cast mics. As we move forward, technology has allowed for smaller and smaller mic heads with very little, if any, compromise in audio quality. The same can be said for the transmitters too, modern digital packs are in another league both in size, ability and battery life when compared to the ones I used twenty years ago. I'd say that the 32 transmitters I first encountered on *Oliver!* would be a minimum amount on a large musical now. Not to mention the now standard practice of double mic'ing for redundancy.

There's an amazing feeling as show mixer, either when opening a show or learning; when what seems like an endless barrage of information suddenly starts to form into some kind of shape. The mist clears and you finally begin to remember what's coming up next instead of everything seeming the same. It's a special moment when you begin to critically listen to what you're doing with your fingers, as opposed to throwing faders around in a blind panic; and then there's the excitement when you realise

that you've not looked at a script for over five minutes! As with any mental and physical exercise this usually improves exponentially, and before you know it, you have control. That's the eureka moment. For me, the most amazing feeling comes when you, the desk, the cast and the band are all at one. When you stand behind the desk, lock into what's happening onstage and let your subconscious take care of everything else. There's nothing like this feeling and when you mix a great show it's an elation that I've never felt anywhere else. Truly rewarding."

As we approach the present, we speak to Vicki Hill. Vicki graduated from LAMDA in 2014. Her first mix was the West End transfer of *Curious Incident of the Dog in the Night Time*, designed by Ian Dickinson for Autograph. I asked Vicki how she felt when she left drama school and how she coped with the pressure of learning a new show.

### **Vicki Hill**

"It was my first mix and I was using a DiGiCo SD9. The show was largely playback off QLab and Ableton, but some sequences were also mic'd. I had just graduated and it was HUGE to be behind a desk in the West End.

My experience until that point had been

dep'ping and sound No.2 on *Sunny Afternoon* (non-mix). I had operated a few shows at LAMDA, but it was a really big step for me, for sure. I am, to this day, very grateful for the opportunity.

You need to be prepared to learn how you learn best. When I'm learning a mix, I need to watch someone do it, make some notes, then practice to get the muscle memory in. Some people are better when they colour-code everything, other people use number systems. The more you know about what works for you, the faster you'll learn the mechanics of a mix, then you're free to listen properly and do the real work. A big one for me is how to recover from mistakes. It is heart-stopping when you drop a line or misfire a cue; you feel like the entire audience is looking at you and that everyone is going to hate you. They don't, obviously. But if you drop a line then proceed to mess up the rest of the number, that's when you're not doing your job. We're all human and as long as you own up to your mistakes, nothing terrible is going to happen.

An important skill for a No.1, that is less well known, is the need to teach other people to mix. I suppose that follows on from me learning how I learn: you then have to either ask your No.2 or No.3 how they best learn, or you have to help them find out! That's the big challenge, because

it is so important that your team feel confident in their mixes. You will inevitably be exhausted from getting through tech yourself, but it is so rewarding to watch your department ace their first solo mixes. I always like to think back to the No.1's that I enjoyed working with and try to emulate their approaches.

Recently I've been out with the *Kurious Tour* for Cirque du Soleil, in China with *Evita* but my most recent West End job was on *The Lehman Trilogy* at The Piccadilly Theatre, designed by Nick Powell and Dom Bilkey.

The system was much more complicated from a sound point of view; we were using d&b Soundscape to create a really natural sounding play, whilst making sure that the actors (performing in a glass box) could be heard evenly around the theatre. We were also running everything via a Dante network, which whilst not new to me, was a big change from when I first started. We were also using the Shure ADX1M packs to double-mic the three actors on stage.

Lots of things were very similar too though. I used DiGiCo desks for both SD10 for *Curious* and SD10T-24 for *Lehman*. We were also still using QLab to drive playback.

The time gap between *Curious* and *Lehman* wasn't huge, and so a lot of the component parts were really similar. I am interested to see where we are in another five years' time. I think more and more emphasis will be on object-positioning and creating hyper-realism in sound design. I think this will mean all sorts of things for the skills that will be required of No.1's in terms of programming, and also in terms of keeping on top of actor blocking and changes. I do wonder how this will work for touring and I look forward to seeing these great designs that we've had in the West End transfer to different sized houses around the world, and how that affects the work done by our PSEs and touring departments".

Even though the advances in technology have been vast, the core responsibilities of our sound engineers hasn't changed much. Good teamwork, excellent communication skills, the ability to remain calm when things go wrong are all important factors. The ability to teach your mix onto the rest of your team is really important too, again, showing that calm under pressure and helping your team achieve that same sense of elation as you have when you ace a show mix.

I asked Tom, Jane and Richard how they felt when they are stood behind a desk, and how

that has changed throughout their careers.

**Tom:** “I think that learning to mix an existing show is far harder than setting up a mix. There’s very little, if any, live rehearsal time, although these days MADI recordings are a huge asset to the process. I’ve taught many great engineers to mix shows over the years and I always use the same methods that I had been exposed to. A calm approach that requires both parties to put in the hours to climb the mountain. That also involves protection and positive encouragement, even when things aren’t going to plan. Behind the desk, with a musical at your fingertips is categorically no place for shouting or aggression, and I made a concerted effort to never let this happen. It’s another great moment when you see someone go from absolute panic, to calm concentration in the space of a week or so. Yes, it’s frustrating at times (and occasionally embarrassing) but you have to support them no matter what and when they get it, like you did. When you can sit back in your chair it’s a huge accomplishment, and a huge feeling of proud relief.

The tools we have today are incredible, but the expectation of the equipment and the people has also changed. As a designer I have to be able to produce and adapt on the spot and it’s somewhat taken for granted that this is

achievable, even if it means attempting to bend the laws of physics on a regular basis!

With much shorter tech and rehearsal times the show staff are expected to achieve top quality work in a very short space of time, something again that often gets overlooked as a huge technical skill. With producers putting shows out for smaller and smaller budgets the notion of having the right amount of show staff does fall by the wayside, especially when it comes to backstage. Years ago you would only ever have just one radio mic runner if the show had less than a handful of cast, whereas now it seems to be the norm. Of course, we too evolve, we have to, and by surrounding ourselves with the tech and the right people we manage to achieve a high standard of theatre audio in almost any given circumstance”.

**Jane:** “Throughout my career I’ve worked with brilliant, talented people. I’ve always felt guided and nurtured, I think that’s been a really important part of my development. Working with Rick Clarke was a real joy because he was so adaptable, it made being on his team so much easier because everyone was happy, there was no bullsh\*it, it was such fun. Now I work on ships, The Norwegian Star for the last few years and it’s the same, I’m not in a bricks and mortar theatre but this allows me more

freedom, I’m trusted and pretty much left to my own devices. It means that you have much more space to develop and make the show your own.

If you were to ask me what has changed for me over my career I would say not very much really. I’ve always worked with great people; I’ve been guided throughout my career and I’ve never felt dictated to. I get the feeling, especially with bigger, more commercial shows that you need to have a greater understanding of the business side of things now. There was always a sense of being part of a bigger machine, but perhaps now that is a slightly more important part of the job.”

**Richard:** “In Rep’, I especially remember the sense of support and everybody mucking in. You would be spending your days as part of a big family of cast, stage management, carpenters, wardrobe, etc. and socialising together. It was exciting and at times terrifying - so I guess not much has changed there. I think the opening night of *Phantom* and the *Olympics Opening Ceremony* are the most scary shows I can remember.

Theatre is always evolving, but fundamentally the job is still the same, you’re still opening faders and mixing what comes to you as part of telling the story”. ●

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# Employment rights and tax status



GARETH FRY

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**An online version of this article is available in the Resources section of the ASD website and will be updated occasionally to reflect changes in the law.**

We've looked at some of the benefits of being self-employed, and of working as a limited company, in previous issues of *The Echo*. But we've never looked at being an employee, and how these types of employment compare to each other. Nationally, the UK workplace is changing too, with the rise of zero-hour contracts and the gig economy. And with Coronavirus lockdown, and the launch of government income support schemes, some of our notions about which is the best form of employment have been turned on their head. Coronavirus will impact our private and professional lives for a few years at the very least, so this feels like an appropriate moment to look at financial aspects and employment rights of how we are employed, and indeed, how some of us often misclassify ourselves.

It's important to remember as you read through this article that employment law, the rights you have under employment law, and your status under tax law do not always align logically.

This is a bit of a deep dive, and full of technical information. To help you make it through the

article, we have also included some photos of cute animals.

## The main types of employment

### Employee

Being a full-time or part-time employee of a company is what many consider to be the traditional method of being employed. Those of us who work for theatres, for a venue, may be on a full or part time contract of employment.

Those of us who work on shows are more likely to be employees on a fixed term contract, or a rolling contract, depending on whether the show is anticipated to have a short or long run.

There are many benefits for the employee to both these forms of employment, from tangible benefits like holiday pay and pension schemes to less tangible benefits such as a sense of security and the ability to predict one's income.

There are very firm rights for employees under employment law, which protect them from unfair dismissal, mandate sick pay and redundancy pay, amongst others.

I spoke with Ollie Young, currently head of sound on *Harry Potter and the Cursed Child* at



the Palace Theatre, London. “I prefer being on a PAYE contract to being freelance. Even on a short run show there is usually a sense of financial security, which enables me to plan my life. I really enjoy my job, being a No 1 Sound Op, and I get a sense of satisfaction from seeing a show through from its first preview to its last night. Producers often seek that from an employee, someone they can count on to really look after the show. And they often reward that by offering you work on their next show.”

What are the difficulties of being employed?

“It can be difficult to take the holiday you are entitled to on a short run. For a smaller show that has a limited run of, say, five months you might accrue two weeks of holiday. If you take that in the middle of the run you end up missing a significant chunk of the run, and a lot can happen in that time. And your holiday cover is up to you, the employer doesn’t arrange it, you have to find cover and you have to train them. It can be frustrating, you may not have built up a roster of people who could dep in for you, who are really familiar with the show and the politics of the company. So whilst no-one will say anything, producers are keen for you to wait until after the show has finished, and take your holiday then. On a show with a larger department, or with a longer run, that’s usually

easier – but even then we have to judge when we take holiday around the other people in our relatively small department, and any other staff changes or re-casts that are happening.”

Some people also do freelance work on top of their employment. Is that something you do?

“I did it a bit when I first started out. But it was stressful. I notice that a lot of freelancers are constantly on the phone, talking about dates, trying to sort out their next gig. That never really appealed to me. Another advantage of being employed is that it was easier to get a mortgage, so when I bought my flat I spent my free time doing that up, and making it worth more when I eventually sold it. I was then able to do the same with our last house. That’s obviously not something that I’ll reap the rewards of until later on in life, but financially I hope that it will prove better in the long run.”

As Ollie says, employees typically find it easier to get mortgages, or to re-mortgage, and often may be offered a lower rate of interest. Other lines of credit are also easier to access too.

For the employer there are many benefits too, there is a direct line of accountability between employer and employee, as well as a degree of certainty that an employee is in it for the long

term, as much as we can talk about that in our industry. For employers whose focus is profit, these benefits may outweigh the cost, and certainly employees are expensive for employers. For example, for an employee to take home £650 per week, the employer will have to pay out £1021, which includes the employer NI (£98), employee NI (£86) and tax (£132), employer and employee pension contributions (£55). And that’s before holiday pay, and potentially sick pay and maternity/paternity costs are factored in too.

An employee is more likely to have a more secure contract, union representation and collectively bargained agreements, which makes it harder for an employer to fire or renegotiate the terms of employment; or to rapidly expand or contract the size of their workforce.

Outside the theatre industry, we see employers moving away from this model, with companies like Sports Direct using zero hour contracts (where the employees are on a similar contract as an employee, paid by the hour, but without any commitment from the employer to provide them with hours to work), or Uber arguing unsuccessfully that its drivers are freelancers rather than employees. Fortunately, in theatre we’ve seen very little of those sorts of moves.

One key benefit of being employed is the sheer simplicity of it – your pay arrives and all the tax and NI has been calculated and paid to HMRC. You have a clear idea of your income and it will likely remain fairly constant over the course of the year, with no nasty surprises as the end of the financial year. As we'll see, self-employment and personal service companies may have financial benefits, but they come with a degree of complexity, and require financial planning and knowledge.

### Self employed

This form of work is most common for people who work by the day, or across multiple projects and employers, which covers a vast array of job titles. We've covered the nitty gritty of being freelance in detail.

[tinyurl.com/asd-tax](https://tinyurl.com/asd-tax)

In essence, the freelancer negotiates a rate or fee, and a 'contract for services' with a company, and the company has no financial commitments beyond the negotiated amounts. The freelancer is solely responsible for making tax and NI payments to HMRC, through filling a self-assessment form each year. Self-employed people have very few rights under employment law: there is no sick pay, holiday pay, pension contributions, there is no right to claim unfair dismissal or take maternity or paternity leave, unless these things have been

specifically negotiated for in a contract, which is very rare in the UK.

For an employer to bring on a freelancer for £650 per week, the employer would only pay £650 per week, rather than the £1,021 for an employee. Typically a freelancer might expect to receive what on the surface might appear to be a higher wage than an employee for doing the same role, but this hides the fact that the freelancer will have to pay income tax and NI, and cover sick days, holidays and pensions through their earnings, as well as the cost of equipment and other expenses. A freelancer would need to be paid £915.50 per week in order to receive £650 per week once they've set aside 20% for income tax, 9% for Class 4 NI, and paid £3 per week in Class 2 NI. This is a slightly rough calculation as personal allowances and NI thresholds mean that you might only pay 25% of your income towards tax and NI, but that is something you can only calculate at the end of the year, which makes it risky to save less than this.

Freelancers can also deduct a range of their outgoings to reduce the amount of tax and NI they pay, though HMRC is strict about what can and can't be deducted. Employees cannot claim expenses against their tax and NI (though some companies allow specific expenses to be

### VAT

Being VAT registered is completely separate to your employment and tax status, and both freelancers and businesses can be VAT registered, but not employees.

Find out more about when you must become VAT registered, and the benefits of it, at [tinyurl.com/asd-vat](https://tinyurl.com/asd-vat)



## *Employees typically find it easier to get mortgages, or to re-mortgage, and often may be offered a lower rate of interest*

claimed in the course of work). An employer is more likely to provide the premises and equipment required to do an employees work, and less likely for a freelancer. Freelancers find it harder to obtain mortgages and credit than employees, and are often required to present two to three years of tax accounts, certified by an accountant, to prove their sustained income level. This can obviously prove challenging the early years and has also proved problematic for people who have held a full-time post for many years and then gone freelance, only to discover they can't then move to a new house because they don't have any accounts to back up their mortgage application.

Another key distinction between being employed and being freelance is that as a freelancer you pay tax and NI according to HMRC's schedules, which means they need to carefully save the correct amounts, and pay HMRC, along with the correct forms at the correct times. This is onerous, and requires a chunk of time, or to spend money on any

accountant to figure it out, or to invest in software that can manage it. Accountants are very useful for this and typically may only charge a few hundred pounds for a self-assessment return – but crucially they can often save you considerably more than that by advising you, which is especially useful when you are just starting out and don't fully understand the system. There's a range of software out there, such as Freeagent (10% discount referral link: [link below](https://tinyurl.com/freeagent-referral)), allowing you to manage your bank account, allocate costs to categories, issue and track invoices, and many of them can submit your self-assessment (and VAT if you choose that too) to HMRC for you. [tinyurl.com/freeagent-referral](https://tinyurl.com/freeagent-referral)

### **Are you self-employed or an employee?**

The ASD occasionally receives emails from members who are normally freelance but are being required by their client to be taken on as an employee on a short term contract, with their earnings taxed under the PAYE scheme, and with NI deductions taken. This can cause

consternation that this will result in financial loss. It is clearly beneficial to be on a fixed term contract in terms of employment rights. Financially, when you calculate your self-assessment you are asked (in the Employment section) to declare how much you've already paid via PAYE, and so you pay correspondingly less income tax and Class 4 NI, so in the long run you shouldn't lose out financially on that front. But of course, the extra tax and NI is still deducted from your wages, meaning you have less in your pocket to spend in the moment, which can be tricky if finances are already tight. Additionally, whilst you are in PAYE employ you can't claim back expenses relating to that work. Those can be considerable, and it can get complicated if you have regular business costs like premises hire or a business mobile phone contract.

HMRC specify that technicians are normally PAYE earners unless specific circumstances dictate otherwise. HMRC says that: 'Someone is probably self-employed and shouldn't be paid through PAYE if most of the following are true:

- they're in business for themselves, are responsible for the success or failure of their business and can make a loss or a profit
- they can decide what work they do and when, where or how to do it
- they can hire someone else to do the work

- they're responsible for fixing any unsatisfactory work in their own time
- their employer agrees a fixed price for their work – it doesn't depend on how long the job takes to finish
- they use their own money to buy business assets, cover running costs, and provide tools and equipment for their work
- they can work for more than one client.'

[tinyurl.com/gov-selfemployed](https://tinyurl.com/gov-selfemployed)

The 'what, where, when and how' part of this is important – and this is referring to the work you are being paid to do, not to your work in general. But there are certainly times when this outline isn't conclusive. HMRC provides an online tool to help you determine your correct employment status, and HMRC say they will honour the outcome of this tool.

[tinyurl.com/gov-cest-tool](https://tinyurl.com/gov-cest-tool)

It is worth bearing in mind though that the tool has received considerable criticism and has apparently 'been shown to return the wrong outcome in the most straightforward of employment status cases'.

[tinyurl.com/asd-cest-tool](https://tinyurl.com/asd-cest-tool)

### But are you really a worker?

We often may refer to ourselves as self-employed which may be true for our tax status,

but not for our employment rights. There is a further category known as a worker. The key difference between a worker and being self-employed is whether you are personally being employed to fulfil work. Or to put it another way, do you have the right to send in a substitute to do your work if you can't, or don't want to? If the arrangement is with you personally, then you are a worker and not self-employed for the purposes of your employment rights. This is important because you are then entitled to many additional rights, such as annual leave and sick pay. Confusingly you may be self-employed for the purposes of tax, but a worker for the purposes of employment law. You can work out whether you are a worker using HMRC's guide.

[gov.uk/employment-status/worker](https://gov.uk/employment-status/worker)

### Limited companies

Increasingly, freelancers are setting themselves up as small businesses, predominantly as limited companies. These offer marginal financial benefits for higher earners, which HMRC are often trying to diminish. We took a deep dive into this.

[tinyurl.com/asd-limited](https://tinyurl.com/asd-limited)

For our purposes, you are typically an employee of your own company, so the company employing your company has little to no

obligation to you, as they are not employing you at all – they are contracting your business to provide a service. The contract negotiated between the two businesses can encapsulate many aspects of how those services are provided, and what happens if things go sour. Tax wise, your company will be paid what you have negotiated between yourselves, and your company will have to pay corporation tax on the profits you make – currently 19%. Once the money has been paid to your business, company directors typically pay themselves using two methods.

Firstly, as an employee of the company, your company would typically pay you a small PAYE salary, typically either just below, or at, the minimum threshold at which tax and employee and employer NI is deducted. Secondly, as a shareholder, the company would pay you a dividend, which doesn't have NI deducted, and is taxed at only 7.5% (remember, it's already had 19% corporation tax deducted from it).

For many people, this may financially be similar to being self-employed. But for people who earn enough to be in the higher rates of income tax as a freelancer they might pay less tax as a limited company. A limited company is administratively much more complex than being self-employed, and requires an

## WORKING ABROAD

Working abroad can typically be divided into two categories: when you (or your company) are working abroad for a UK employer, and when you are working abroad for a non-UK employer. So long as you are not out of the country for too long, working for a UK employer means you will likely be paid in Sterling, and be subject to UK employment rights and tax laws. If you are working for a non-UK employer, things get more complicated as you then have to also consider how local laws for businesses and employees interact with UK law. We touched on some of this in our Working in the USA article in issue 14.

As a UK freelancer working in, for example, Germany, for a German employer, there are multiple tax hurdles to overcome to avoid being taxed as both a German employee and a UK freelancer. This can often result in you not receiving payment for three to four months whilst the UK and German authorities send various forms around to be stamped. Instead, if you remain in the employment of a UK company, the German company pays for your services to that company. This applies equally if you work for a UK company employing you as a freelancer, or for your own limited company. These business-to-business (b2b) payments don't involve the complexities of employment laws in different countries so require relatively little paperwork. It's not all plain sailing though, some countries like France don't allow royalties to be paid to a company.

Some people also set up additional companies in the USA to better deal with local tax, employment responsibilities and immigration policies there.



accountant to submit audited accounts to Companies House, which is more costly than preparing a self-assessment.

I spoke to Tom Lishman, who started off as a freelancer and became a limited company.

“I converted into a limited company in 2003 when the Labour government encouraged freelancers to do so with tax incentives, as HMRC felt it would be easier to police us as a workforce. Those incentives were removed after a couple of years, and HMRC have been progressively reducing the benefits ever since. However, it is still advantageous to work as a Personal Services Company (PSC), as it creates a clear delineation between your personal finances and your company finances, and between your company and your client. Apart from the extra administration involved there hasn't been a disadvantage of being a limited company. I always felt that having my own company made me seem more legitimate and established – although recent events regarding coronavirus support have proved me wrong!”

“Increasingly, clients are insisting we form our own limited companies, and won't employ self-employed freelancers. This is happening in the corporate sector, in Film and TV, and with the BBC, and is creeping into the theatre sector, with

another large hire company recently announcing they would not engage the self-employed anymore.”

There are a number of reasons for this shift. There is the issue of liability – who is responsible, and who pays (or whose insurance pays) when something goes wrong. It's hard for a company to pass the buck if it's to a freelancer they're employing, but a lot easier to pass it on to their sub-contracting company. A company can significantly reduce their employee and public liability insurance costs if they replace all their freelance contractors with separate companies who each hold their own insurance policies.

But a huge shift has occurred recently in response to the changes to the IR35 regulations that were due to come in this April but have now been deferred to 2021.

### **IR35**

IR35 are HMRC's rules that endeavour to ensure that individuals who provide services to a company pay the same tax and NI as an employee would. They were initially aimed at the IT industry where individuals were providing their services via a limited company, but only working for one client. HMRC's view was that the employers were avoiding paying employer's NI

and providing employee benefits by doing this, and the individuals were paying less tax. The 2021 changes to the regulations would change who determines the workers employment status, i.e. does the worker meet the 'what, when, where, how' and other criteria that would normally apply to a freelancer. Currently, you decide. In the future, each of your employers will decide on a project-by-project basis.

The financial and legal liability is also moved to the employing company. If they wrongly classify someone as exempt from PAYE, HMRC will require them to pay the additional income tax and NI rather than the worker.

It was expected that vast swathes of people who had previously worked out of a personal services company, would be forced to be paid on a PAYE basis, and would not be able to claim any relevant expenses against tax, consequently losing a large chunk of their income. Perversely, this only affects their tax status and not their employment rights, so as a 'deemed employee' they still would not receive holiday pay, sick pay or pension contributions.

To take a hypothetical example, you have negotiated a fee of £5,000 for a job, which is then deemed to be within IR35. So, you will have £1,000 tax deducted, and £421.66 Class 1 NI

deducted, leaving you with £3,578.34. Now, just as with our freelancer who was pulled into the payroll earlier on in the article, you can factor these outgoings into the self-assessment a company director fills out each year, and you shouldn't lose out. But, let's imagine that you expect to run up £1,000 of expenses over the course of this project – you can't claim these back as you can't claim expenses against income as a PAYE employee. But you're left with only £2,578.34 in your pocket from your initial £5,000. To add insult to injury you don't get sick pay, holiday pay, or any of the employment rights an employee would have. By contrast, if the same job had fallen outside IR35, your £1,000 expenses would mean you would only be taxed on £4,000 profits, only £1,160, so you'd be left with £3,840 from your initial £5,000.

The changes to IR35 were instigated in the private sector in 2017 and caused havoc. Despite protestations from large businesses, and organisations like IPSE, HMRC have pressed ahead. In some acknowledgement of the pandemonium this change was going to cause, as the Coronavirus pandemic snowballed, they delayed its implementation for 12 months.

As we've discovered, employees are far more expensive for a business to employ than a freelancer, so businesses are not happy about

these changes. In the above example, your employer will have had to pay 13.8% Employer's NI contribution on your behalf and cover the administration costs of your payroll. But more than that, they don't like being investigated and fined by HMRC. So already, many large businesses such as Barclays and Lloyds, have halted completely the use of external contractors, even if they can prove that they genuinely fall outside IR35.

Whilst in theatre it is already fairly commonplace for freelancers to be told they must go on the payroll, that doesn't tend to happen for people who work out of personal service companies.

Tom: "I think we're increasingly going to see HMRC investigating us to see if we fall inside IR35 rules. Employers like the BBC already ask people to provide a list of equipment they will be supplying, to demonstrate one of the criteria that they're exempt from PAYE. Increasingly theatre employers will want concrete proof from us – for every single job, as every single job has to be assessed whether we should be PAYE or not. We're going to need to re-examine some of the terms of how we've been employed in the past to ensure we don't fall into the grey areas, where employers push us into being on the payroll to play it safe. The wording of each

contract will become really critical." "The rules regarding employment change regularly, and it's critical to have an accountant as they keep track of all these changes. If you're doing your own accounts and include calculations based on the wrong rules, HMRC are more likely to notice you, and investigate you. HMRC need to cover the costs of their investigations so they will try very hard to find where you owe them more money."

We've prepared some examples of how similarly paid roles might pan out in real life. It is very important to point out that these figures do not tell the whole story. Factors like being able to get a cheaper mortgage, job stability, etc, must also be considered.

You can see from the table (right) a few things:

- The higher your expenses are as a self-employed person, the less income you pay tax on. This encourages investing the profits back into the company.
- You need to be earning about £15k pa more as a freelancer to take home the equivalent PAYE income. But there may be considerable expenses as a freelancer that can be claimed, which as a PAYE have to be paid for out of your take home pay. To look at one example, a PAYE employee on £60k will have paid £16,560 tax and NI to HMRC. A self-employed person who

receives £60k of income but spends £20k on expenses and investing in their company, will only pay £8,400 in tax and NI. This potentially allows the company to grow in size and capacity, and potentially earn more money.

- Running a limited company is financially only marginally better than being self-employed for an income of £30-60k, but this is usually offset by increased accounting costs. It only really becomes advantageous when annual income exceeds £75k. As discussed, there are other benefits to becoming a limited company which may lead you to do this, or you may be forced to do so because your client requires it.

### Impact of Coronavirus

As Coronavirus shut down our industry, and many others across the country, the government set up a variety of income support schemes for different types of employees. Initially the government offered full and part time employees 80% of their salary, up to a cap of £2,500 per month – which works out as a maximum of £576 per week (£462 after tax and NI deducted!). It took a week of heavy petitioning, including from the ASD, for the government to realise that freelancers would also need support too. They did this with thinly veiled threats about making the world harder for freelancers after Coronavirus passes, whenever that might be, and reluctantly

Annual income vs Take home pay

	Annual income of £20,000	Annual income of £30,000	Annual income of £45,000	Annual income of £60,000	Annual income of £75,000	Annual income of £90,000	Annual income of £105,000	Annual income of £210,000
PAYE take home pay	£17,240.00	£24,040.00	£34,240.00	£43,440.00	£52,140.00	£60,735.84	£68,540.00	£122,440.00
PAYE tax & NI paid	£2,760.00	£5,960.00	£10,760.00	£16,560.00	£22,860.00	£29,160.00	£36,460.00	£87,560.00
Self employed with £10k expenses	£9,796.00	£17,396.00	£28,046.00	£38,696.00	£47,396.00	£56,096.00	£64,796.00	£118,196.00
Tax and NI paid	£204.00	£2,604.00	£6,954.00	£11,304.00	£17,604.00	£23,904.00	£30,204.00	£81,804.00
Self employed with £20k expenses		£9,796.00	£20,946.00	£31,596.00	£41,596.00	£50,296.00	£58,996.00	£112,896.00
Tax and NI paid		£204.00	£4,054.00	£8,404.00	£13,404.00	£19,704.00	£26,004.00	£77,104.00
Limited company with £10k expenses	£9,769.72	£17,616.99	£28,855.74	£40,094.49	£50,253.31	£58,454.56	£66,655.81	£118,203.50
Tax paid	£230.28	£2,383.01	£6,144.26	£9,905.51	£14,746.69	£21,545.44	£28,344.19	£81,796.50
Limited company with £20k expenses		£9,769.72	£21,363.24	£32,601.99	£43,840.74	£52,987.06	£61,188.31	£113,189.60
Tax paid		£230.28	£3,636.76	£7,398.01	£11,159.26	£17,012.94	£23,811.69	£76,810.40

Table 1: Annual income vs Take home pay

Take home pay is calculated once all taxes and NI has been paid. These calculations do not include pension contributions. For the limited company, this assumes a salary just below the NI threshold of £8,788 per year is taken, with the majority of income drawn from dividends, and that all money is taken out of the company each year.

A spreadsheet containing the full calculations is available: [tinyurl.com/asd-tax-spreadsheet](https://tinyurl.com/asd-tax-spreadsheet)



unveiled a package that would allow for freelancers to claim a grant of 80% of their average monthly trading profits, paid out in a single instalment covering three months, and capped at £7,500.

To be eligible their profits (not income) must be less than £50,000 in the 2018-2019 tax year and must have traded during the tax year 2018 to 2019 (which ended on 5th April 2019), and more than 50% of their income must have been through self-employment.

For those who worked a mix of PAYE and freelance work, you may be eligible for one of the two schemes, or for neither, depending on the ratio of work, and when it happened. Notably, this grant is seen as income, so you may well end up giving 29% of it back to the government in tax and NI!

After that, the £7,500 becomes £5,325, which works out as £409 per week. Self-employed people can continue to work and still claim under the income support scheme, and they can also claim universal credit.

Whilst these schemes provide welcome support for employees and established freelancers, those who have started out as freelancers after 5th April 2019 can only claim universal credit, and

those with limited companies receive very little support. As you'll remember, limited business owners are technically employees so can claim under the furloughed employee scheme, but their PAYE income will typically be a small percentage of their income, and so the support is too, with most people likely to receive the equivalent of £135 per week. There are 'bounce back' loans, which are interest and payment free for the first year, and whilst they are very low interest you will still need to pay them back.

The government isn't providing support for dividend payments because they believe large companies will take advantage of it, and because HMRC claim they can't confirm people's income from the different dividends they might receive. They have said they have no plans to provide support for small business owners. Before the outbreak of Coronavirus, the financial advantages of being freelance or a limited company director, may seem to outweigh the benefits of being on PAYE, depending on your job and personal circumstances. However, the reverse is true in terms of support you might receive, with employees receiving almost £330 per week more in financial support than limited company directors or the newly freelance. Of course, it is of limited use to compare these numbers if the job you do falls squarely within one type of

**Furlough income support, per week, after tax and NI deducted**

	Annual income of £20,000	Annual income of £30,000	Annual income of £45,000	Annual income of £60,000	Annual income of £75,000	Annual income of £90,000	Annual income of £105,000	Annual income of £210,000
Take home pay PAYE	£279.23	£383.85	£462.31	£462.31	£462.31	£462.31	£462.31	£462.31
Self employed with £10k expenses	£140.00	£218.46	£382.31	£0.00	£0.00	£0.00	£0.00	£0.00
Self employed with £20k expenses		£140.00	£273.08	£409.62	£0.00	£0.00	£0.00	£0.00
Director of limited company	£135.20	£135.20	£135.20	£135.20	£135.20	£135.20	£135.20	£135.20

**Table 2: Furlough income support, per week, after tax and NI deducted**  
For the freelancer, the income is the average income over the last 3 years. For the limited company, this assumes a salary just below the NI threshold of £8,788 per year is taken, with the majority of income drawn from dividends. Other factors can affect the eligibility and extent of the income support schemes and grants, and it is unclear how long they will last for, or how they might change over time.

employment or another.

The different types of employment have different advantages depending on your income and circumstances. As table 1 demonstrates, the difference between salary or income and the actual take home pay is considerably different between PAYE and being either freelance or a limited company. But where they are further apart still is in terms of the responsibilities your employer has towards you, and nationwide we are rapidly moving towards employment methods where these are reduced. As this

happens it's increasingly important to ensure that the contracts we negotiate cover the eventualities we might face. And the things we don't imagine will ever happen to us, like a global pandemic shutting down the entire industry for months and months.

We are still learning about the Coronavirus. We are learning that whilst it can be no worse than the flu for some, for others it can, often combined with secondary infections, leave people ill, and unable to work, for many weeks. We are still learning to what degree people

who've had Coronavirus build up an immunity to having it again. The strategy of 'flattening the curve' is not about stopping people from getting Coronavirus, it is about making sure people don't all get it at once. Consequently, only a small percentage of the population have contracted it, and just as most people get a cold virus each year, we will be living with Coronavirus for many years to come. Now more than ever, it is going to be important to know about your rights as an employee, or as a worker, or as a freelancer, or company director.

Crucially, if you can show that your employment is as a worker rather than on a self-employed basis, you may be eligible for sick pay if you need to self-isolate. If you can show you are self-employed (that you have the right to substitute your presence with someone else), this may help if you suddenly need to self-isolate and send someone else in to do your job. If there is a second wave of lockdowns in the future, and they exist in a similar form to now, how will the work you take on between now and then affect your eligibility for those schemes? Will the changes to IR35 change how you might be employed for future projects?

Many of us are often employed in various capacities on word of mouth, with 'letters of agreement', or with paper-thin contracts that

are barely fit for purpose. Some companies are very responsible and issue detailed contracts that are really clear and effective. If your contract is shorter than four pages, it does not fall into the latter category. With the upcoming changes to IR35 the wording of our contracts will become critical to ensuring we are taxed correctly and fairly.

The majority of employment-related enquiries the ASD receives from members usually comes down to this conversation 'What does it say in your contract?', 'It doesn't say anything about this in my contract'. In these grey areas, there is room for arguments about money and responsibilities, and it is often members who find themselves losing money and, in the process, falling out with producers, a.k.a potential future employers. It is difficult when negotiating a contract to ensure that every eventuality is covered – and even the best contracts I've seen didn't cover the eventuality of a pandemic.

On the ASD website (link below) you can find an extensive list of clauses that your contract should contain, and how they might be worded. These include areas such as these: payment terms, what happens if the production is postponed or abandoned, liability and insurances, crediting and job titles. Design

contracts might also cover ownership of content, clearance of music, subsequent use of a design, whether and how it can be modified. A classic clause that is missed from operator contracts is what happens if you terminate your contract early – who will pay for the crossover weeks when someone is learning the show from you. Whilst some of these clauses might be covered under agreements made by BECTU, Equity, SOLT, UK Theatre and others, many of those agreements were hammered out years ago when working practises were different to today. Unfortunately, the ASD is legally not allowed to develop a standardised contract that could be used.

[tinyurl.com/asd-contract](https://tinyurl.com/asd-contract)

In the coming months and years we are going to encounter more grey areas and bumpy roads than we've encountered in recent decades, and whilst we can face many of these challenges with a sense of community, with the ability to concede things that we wouldn't normally to help our industry get back on track, there will also be times when we will need employment law to help us to make it through. As individual members it comes down to us to ensure that we are employed correctly, understand our employment rights and financial responsibilities, and can adapt this knowledge to deal with the times ahead. ●

# CORPORATE MEMBERS

Audio Alliance  
audioalliance.com



Autograph  
autograph.co.uk



AUTOGRAPH

Avid  
avid.com



Blitz  
blitzcommunications.co.uk



Clear-Com  
clearcom.com



CODA  
codaaudio.com



CT Audio  
ct-group.com/eu/en/services/audio



d&b audiotechnik  
dbaudio.com



DBS Solutions  
dbs-solutions.co.uk



DiGiCo  
digico.biz



EM Acoustics  
emacoustics.co.uk



Figure 53  
figure53.com



Harman  
pro.harman.com



HD PRO Audio  
hdproaudio.co.uk



KV2 Audio  
kv2audio.com



L'Acoustics  
l-acoustics.com



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meyersound.com



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outboard.co.uk



Riedel  
riedel.net



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shure.co.uk



Sonosphere  
sonosphere.co.uk



Sony  
pro.sony/en\_GB/home



Sound Network  
soundnetwork.co.uk



Stage Sound Services  
stagesoundservices.co.uk



Tube  
tubeuk.com



WaveTool  
wavetool.fi



White Light  
whitelight.ltd.uk



Yamaha  
uk.yamaha.com/en/products/proaudio



# ASD Equipment Loan Scheme

THE ASD HAVE TEAMED UP WITH THE NATIONAL THEATRE AND SENNHEISER TO ENABLE ACCESS TO EQUIPMENT THAT WOULD BE FINANCIALLY OUT OF REACH FOR MANY, AND OUTSIDE THE SCOPE OF NORMAL THEATRE HIRE COMPANIES.



NEUMANN KU100 BINAURAL HEAD  
SENNHEISER ESFERA STEREO MICROPHONE  
SENNHEISER MKH416 RIFLE MIC IN RYCOTE  
SOUND DEVICES 722 2-TRACK FIELD RECORDER  
ZOOM F8 8-TRACK FIELD RECORDER  
SMART V8 FULL ANALYSIS SYSTEM

Members can borrow equipment for up to a week free of charge.  
Terms and conditions apply.

See [www.theasd.uk/equipment-loan](http://www.theasd.uk/equipment-loan) for more information.

National  
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