



Caption

Meet the Martins:

# the art of lighting sitcoms

In late November 2021, Bernie Davis, top lighting director (LD) and Chairman of the STLD, welcomed its members to the set of the BBC's hit show *Not Going Out* at Pinewood Studios, for a chat with fellow LDs Martin Kempton (now retired) and (GTC Council member) Martin Hawkins about how they light studio sitcoms. GTC members were kindly invited to join the live stream, and Zerb's Managing Editor, Rob Emmanuel went along in person. Here's a summary of this fascinating discussion between three leading lights of the industry.

## Welcome.

**Bernie Davis:** I'm delighted that we've managed to arrange this in such a great venue, and on such an interesting subject. I'd like to introduce Martin Hawkins, a DoP who's worked on so many comedy shows his CV reads rather like a list of British comedy. And Martin Kempton, whose credits go back to *Top of the Pops* and all manner of iconic studio programmes. He was a BBC studio lighting director and, as such, would have done the whole rota of BBC shows, although he specialised in sitcoms and his CV also reads like a history of British comedy.

We're sitting here in the set of *Not Going Out*, with a new series starting soon, because this is where the careers of these two eminent LDs overlap, as both have worked on this show – although, interestingly, both actually came to lighting through the camera department rather than through vision. Part of the interest for tonight is to see how they approached the same show in different ways.

But to start, I think it's worth exploring the dynamics of how the lighting team works. The conventional route into lighting, particularly in studios, has tended to be through the vision department. As they deal with the cameras' images and exposure, there can be a natural progression to operating the lighting desk and, as the desk operator, they are then an assistant to the LD, but let's talk about how the lighting team works.

**Martin Hawkins:** Basically, your lighting team is your gaffer, who's on the floor; your console operator; and the vision engineer – and you get to choose them all. Having said that, because I inherited *Not Going Out* from Martin, I didn't want to come in and start changing everything, so I went with Jim Murphy, who'd been the vision engineer for virtually every series; Roy Winfield was the gaffer; and Simon Bradock was the console operator, both of whom I knew very well, having worked with them a lot, which is important because you don't want to have to explain everything all the time to new people. I think that's why most folk in TV like working with familiar faces, because you build up a shorthand, where each knows how the other works. You know the job will get done, and that provides peace of mind a lot of the time.

**Martin Kempton:** I liked my console operator to do the balance they thought looked good and then I'd comment on it, rather than start with me dictating exactly how I thought it should be. By letting them get on with it, I could then become the viewer, as it were. Sometimes they might surprise me by using a lamp I hadn't originally plotted for that scene, but I'd realise it actually worked well. I could chip in with comments in more general terms, offering suggestions on lamps and areas in response to what I was looking at.

The reason I preferred to do it like that, rather than work in a perhaps more traditional way, was due to my background at the BBC, where you started by racking cameras, then became a console operator, then an LD. It was a real team effort; the console operator's job title was actually vision supervisor and, weirdly, they were expected to actively contribute to the look of the show. I know it was different at ITV and in the film tradition, where the console op would be an electrician. In fact, going way back, it could be any electrician on the day, and they would expect to be told exactly what to do.

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The old saying 'You're only as good as your team' is very true and it's why it's important to pick your own crew, because they can make or break you.

It's changed nowadays and, whilst a lot of electricians still operate consoles, they contribute far more and are much more part of team.

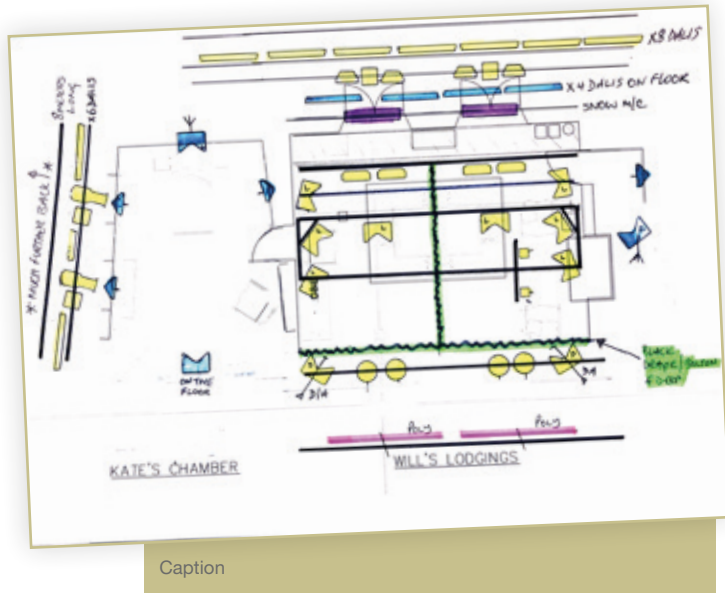
**MH:** Absolutely, you rely on your console operator as being a second pair of eyes. I didn't come from the BBC, so I like knowing all the levels of the lamps; so if I raise this light's output by 10% and drop that one by 10%, then I know that one is at 80% and the other is at 60%. Remember, we're not on the floor during filming but in the gallery in another part of the building, so we only have a monitor to go by and it's easy to get very disorientated as to what's on and what's not. You therefore not only rely on your plot – knowing which lamps are on and at what level in order to know how to respond – but also on your console op as a second pair of eyes, as well as to run ideas past them, because it's not all about you (the LD) all the time. The old saying 'You're only as good as your team' is very true and it's why it's important to pick your own crew, because they can make or break you.

**BD:** As I always say, as LD, I'm not the only person who can have good ideas about what should be done, I'm the editor of any ideas, not the sole producer. That doesn't mean giving up control, it's about engaging everybody's creativity – from the electricians that focus the lights, to the console operator and the vision people – I can point out when it's not a good idea and they should listen, but equally, they can make suggestions. It does work rather well.

**What about the setup of the studio – do you colour balance the cameras to a particular colour or do you vary it, show by show, and do you aim for a particular f-stop?**

**MH:** I would go 3200 Kelvin and that allows me to shift slightly warmer for night scenes or cooler for day scenes. I don't think there's any right or wrong way, but generally, it's a balancing act between putting some warmth or cool in the camera and/or in the lighting, depending on what you're doing. That's one of the beauties of LED lights, you can now have one light that can cover warm and cool needs. I'd much rather have one lamp up there that I can change from 2800 to 1100 Kelvin than two lamps. Having said that, I still haven't found an egg crate that matches that of the North Light – to me, a soft light is great but it's only as good as its egg crate.





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It's not just colour that can change the feel of the place, you can play with lighting levels as well – for the day setting, we'd bring more intensity from the window side to give a natural feeling of daylight coming in, whereas at night, the light would come from within the room, apparently from the practicals.

As for f-stop, it depends on the show. If we want a more dramatic feel, then I'll maybe work about a stop back from fully wide open, giving me a little leeway as sometimes you still need to push the camera a bit. On a show like this, it might be around f3, to throw the background out of focus a little and give it that filmic, single-camera look, although these cameras are never going to have the same shallow depth of field of an ARRI ALEXA or something like that.

You don't want the cameras to look too edgy or electronic. If you're lighting an light entertainment (LE) production, like a music, variety or game show, you probably want the pictures to look quite crisp and sharp, whereas with something like this, you're tweaking out the artificial sharpening of the cameras to try and smooth it all and make it look a bit more filmic and less electronic. But cameramen hate it, of course, because they're struggling to focus, which I do appreciate as I remember it from my days as a cameraman.

You're bringing the lights down all the time to get that low stop, but on several occasions, I've walked out of the lighting gallery onto the studio floor and was surprised how dark it actually was! Not only are the camera operators working fairly wide open, there's also a diffusion filter in the camera, so that's another layer of difficulty to deal with. With regards to diffusion, I tend to use a Lee Soft Effects No1, which is a little glycerin filter that goes behind the lens. A lot of studio cameras have built-in filters too, which I think are 1/4 and 1/2 Black Pro-Mist in different filter wheels, so you can have 1/4, 1/2 or 3/4, which gives you a bit of flexibility, depending on what you're doing.

**MK:** I did similar on Upstart Crow at The London Studios, where we used Glimmerglass filters as well. These were lovely for candlelit scenes, and we used to mix up different filtering. Also, if we had a dinner party scene on Not Going Out, we'd probably put in another layer of filtering to give the whole thing a slightly more evening-y glow. It's nice when the practicals have a slight glow around them; there's no obvious difference to the sharpness of the pictures, it just takes the edge off and really, it's what happens to the highlights that makes them look a bit nicer.

What exactly is sitcom lighting? Is it different from other genres or have we just imagined it to be?

**MH:** I don't think it's different from any other type of lighting; at least I don't want to think it is. You're creating a mood that's relevant to the scene or the script, and you're trying to get it as real as you can, bearing in mind you've got five cameras, with three booms poking over the top, so there's a limit to what you can do. But I think if the viewer feels comfortable with what they're watching, then, for me, that's good enough. You don't want to make it so good that the audience is looking at the lighting and not the comedy. With drama, a lot of the time it's about the shot, the track, the lighting, and the genre encompasses all that, whereas with comedy, whatever you do, the comedy must always be the priority; every department has to focus on ensuring that happens. So, my attitude is always to make it look as good and as real as I can, and then I think I've done my job.

Do you think realism is what it's about?

**MK:** I've asked myself this many times over the years, because a sitcom like this is not the same as shooting a single-camera sitcom. These days, some shows are called sitcoms that I think should be defined as comedies or comedy dramas, because they are shot single-camera on location without a studio audience and that makes for a much more realistic, natural way of performing; whereas most sitcoms filmed in front of a studio audience are more theatrical, so the performance is bigger and its timing governed by the audience reaction. Also, the writing is normally different because it's a lot more gag-driven, sometimes with visual/sight gags and things like that, and scenes tend to be longer as well.

So, you ask yourself why you're trying to make this look like it's a real house when we know it isn't; it's sort of a theatre set, in front of an audience. And yet, it would be wrong to light it theatrically; everyone – the art department, costume and so on – is trying to make the set look as real as possible. On some sitcoms (take Fawlty Towers – when Basil opens the front door, there's a painted cloth!), it doesn't matter and yet, on every sitcom I've ever lit, the producers, director, cast, everyone, has expected me to make it look as real as possible. But I don't think there is such a thing as 'sitcom lighting'.



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From your comment about lighting being there to deliver the comedy, is there an element of truth to the cliché of 'bright for comedy'?

**MH:** A lot of the time, the comedy is in the reaction, so you have to be able to see that reaction. As regards 'bright for comedy', I've never had a director say it's too bright but I've had several directors ask me to make it brighter! That's because they want to see the close-up as that's where the comedy is, in the reaction.

With sitcoms, do you shoot whole scenes in one go, to get that comic timing right?

**MH:** Yes. In fact, episode six of this series is set in a jury room and Lee [Mack, star of Not Going Out] wanted to run the whole 30 minutes without stopping.

**MK:** I lit a few of those. Lee likes to do that, to get the flow, but it's a real challenge for everyone, the cast, the boom ops, and obviously the camera crew to remember all the shots. To light it, you end up breaking the scene down into separate lighting cues and doing shifts of lighting balances as the scene progresses. I have to say, this revamped set now has a dark front door, but when I was lighting the show, the door was white and it was an absolute pain because it really kicked the light back, which certainly didn't help!

In a scene that runs for, say, five minutes, you might have at least two, perhaps three, lighting cues, plus lamps that are ridden manually. For example, a conversation that starts at the front door might move across to behind the sofa, then continue through to the kitchen, before finally ending up on the sofa. There might be a moment when somebody turns their head and looks in a different direction, so you might have a lamp that needs to be ridden up a bit just for that moment and then down again. That's a lot of different lighting cues involving various shifts of lighting balance, but the audience



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We seldom get the chance to rehearse anything again to check our lighting – that wouldn't go down well as there's too much to do on the day.

at home should never be aware of them. Hopefully they won't be, and that's down to the skill of the console operator getting those crossfades right. I imagine that sort of thing wouldn't normally happen on a single-camera drama shoot, where the lighting is set for each particular moment or shot.

**MH:** Yes, you're constantly changing things all the time. A lot of the action in this show happens upstage of the sofa, so you light that area, but then halfway through a scene, they might come forward and sit downstage, which means you seamlessly have to bring down the lighting behind, to keep the focus more on wherever the action has moved to. As Martin said, that sort of thing is happening constantly; it's not a question of just lighting the set and leaving it be.

**MK:** We don't get a technical rehearsal like they get in the theatre. We are constantly doing the lighting balance at the same time as the camera crew are rehearsing and blocking through the scene. It'll usually be rehearsed a few times, which is really the director working it through with cameras to get the shots, but then the boom operators are focusing on how they can cover it, and we're exploring how to light it, as we seldom get the chance to rehearse anything again to check our lighting – that wouldn't go down well as there's too much to do on the day.





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Take us through your different, but equally good ways of lighting Not Going Out.

**MK:** To design the lighting for a sitcom, you're given a set plan and, usually but not always, a model. Every studio has a different way of hanging lights; this studio is great because there are all these mono poles, so you've got huge flexibility as to where you can hang the lights and what height they can be.

I'd get my pencil and stencil ready to draw the lights on the plan, and start by breaking down each scene into its elements: "If this character is standing here with another there, then I need this lamp to do this and that one to do that. Hang on,

if they then go there, I need something to cover that...", and you build up the plot. You might sleep on it, then think: "Why have I put that lamp there? It doesn't make sense. Unless I move that lamp here. Hmm no, that's no good...", and so it evolves over a few days. When you get to the studio and do the pilot or the first episode, that's when you learn what actually works and what doesn't. On a long-running series that comes back year after year, you're continually trying different things; you may have a problem with a position that's never quite worked and decide to just stick a lamp in to sort it, and if that helps, you'll carry it on to the next series. As a result, with a show like this, I ended up with a huge lighting rig, as my gaffer, Roy Winfield, will testify!

Whilst my plot evolved over the years to include lots of lamps all pointing in different directions, it's relevant to mention that I like to mix colour quite a lot. For instance, on daylight scenes, I like to get a sense of cold light coming in from the window but, to give an excuse of why there would be cold light from the window and warm light in the room, I would often have practicals on in the room, even in a daytime scene. Therefore, above every window, I'd have one or two additional lamps, each with either a half- or quarter-CT Blue, just to give a cold kick when needed – and that all added to the size of the rig.

The great thing about Martin is that he came in, ignored everything I'd done, and did his own thing! Of course, everything works perfectly, it's just a different approach. But it's good to strip it back and start with a clean slate, because a lot of those lights were unnecessary, they were only there for historical reasons.

**MH:** The first sitcom I lit was Black Books, a few years ago. As Martin says, you sit at your kitchen table looking at a plot, wondering where you're going to put your lamps. Your first priority is boom shadows, so that means starting by putting some lights upstage (but then upstage keying does often give the best modelling anyway). I looked at the plot for Not Going

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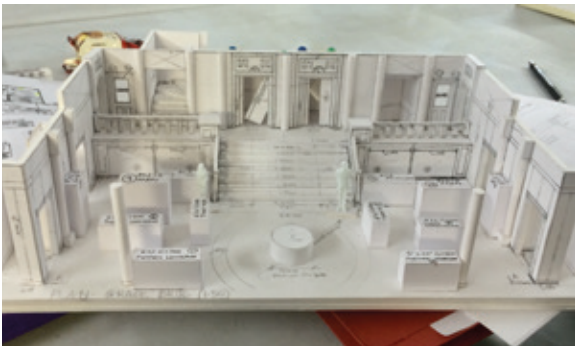
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Out and decided to have a lamp in both corners to cover the upstage area, desk and entrance. Then it's a good idea to have a lamp downstage of that, because if the director decides to move the actors downstage on the day, you can't go moving lights. So, I'll draw another light in the next lighting track along. I've pretty much taken that principle into most sets I've lit since and it just works. It might not work for everyone but it does for me. That's the thing about lighting: nobody can tell you how to light, you've got to find it out for yourself. You've got to discover what works for you, and for me it's with North Lights and I'm very confident and happy with what I can do with them. I was working at Teddington, where these North Lights came from, and the best thing about them, from my point of view, is the egg crate, because they are a lovely soft light and that's what I like using. But any soft light is only ever as good as its egg crate, as far as I'm concerned – fortunately, I'm still able to hire North Lights, as I just love them.

When you're asked to do a series, you first meet the director and designer, who will normally come up with a concept for the project. First off, the designer will create a model in the computer that we can all view and then the director and I throw in ideas. This gets transferred to the model where you

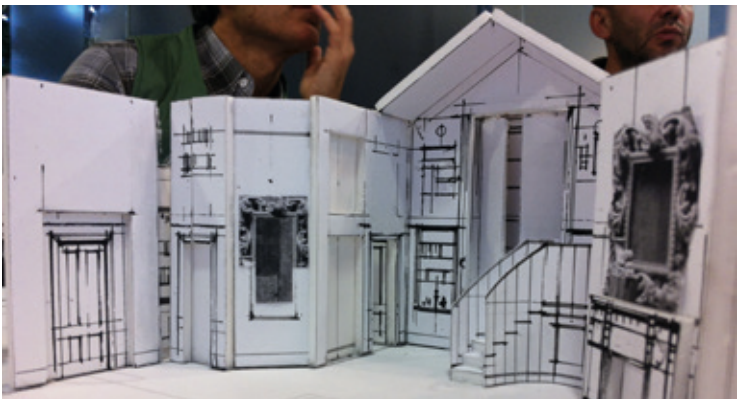
can look at different angles from camera points of view; as a result the director might ask for any camera traps and I might request a wall to be lowered to allow getting a lamp in.

Once it's all finalised, your lighting plot becomes your key; with the model in one hand and plot in the other, you can work out where you need your lamps. I like to keep things simple, so I tend to put a ring of soft lights around upstage and then the rest is about how you dress things in through windows, where the practicals go, etc. Martin and I are both fans of practicals on set, so we'll always ask the designer for wall lights and table lamps, etc.



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The question about visualisation is interesting because right throughout the preproduction process, the designer can show the producer and director the model, and they can get fabrics and wallpaper, and photographs of the type of furniture they're going to use; the costume designer can bring in the costumes. So, everyone has an idea of what the set and everything is going to be like, but no one knows what it's actually going to look like until the lights get turned on – and that's quite scary. (MK: Yes, that's quite a responsibility, isn't it? It's always slightly terrifying that first day of a new show, on a new set, and you just hope you've got it right. When the lights start to come on and you think, "Phew, that looks alright!"... unless it's: "Oh no, now what are we going to do?")



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So, everyone has an idea of what the set and everything is going to be like, but no one knows what it's actually going to look like until the lights get turned on – and that's quite scary.

The director rehearses with the cast in a rehearsal room, while the buildup to the first show begins. The lights will be rigged on the Sunday before the set's built on Monday and Tuesday; the lights will be lowered on Wednesday, which is my chance to fine-light and focus everything. If you're lucky, the set will stay built for the whole run, in which case you rig it once, although there will usually be guest sets, such as bedrooms or other living rooms, that get swapped in and out as needed. The crew arrive on Thursday, which can involve pre-records of scenes that can't be shot in front of an audience (e.g. any green screen or scenes involving children that aren't available on the record day). Finally, at 09.00 on Friday, you start rehearsing the show from beginning to end, followed



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by a dress run of the whole thing at around 16.00. There's a break for supper before the audience come in and you start recording at 19.30, hopefully finishing around 22.00. What I love about it is, you walk out of the studio knowing you've just finished a 30-minute show – and that's a great feeling.

All that then happens again the following week; the designer gives me the plot the week before, we discuss what will and won't be needed, and it gets rigged over the weekend. The director will start rehearsing the next show on the Monday, and the whole weekly schedule repeats for however many episodes are in the run.

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**With all the care and attention to detail you put into the pictures, do you both get involved in the grade?**

**MH:** When it comes to lighting, grading is a massive part of what we do, because, you may only get pictures to about 60% of what you're aiming for in the studio. With five cameras across the set, you're always struggling to get grip equipment in to where it's needed to control spill and create shape. The grade is really where you can start to improve things, but a grader will only know what you want if you're with them, so we both insist on being in the grade as much as possible.

where it should be. Grading is a massive process and it really shouldn't be underestimated at all; I love it because it makes the pictures for me.

**MK:** Colourists often work with single-camera material which, depending on where it's been shot, might have ended up with an unintentional, built-in colour cast, so their first instinct is to neutralise everything and bring it all down to a sort of 'mean white'. Often, when they're given scenes that we've lit deliberately warm or deliberately cool, the temptation is to correct them because it looks like an error, until you tell them otherwise. Some colourists absolutely get what we're trying to do, they work with us, helping to refine the pictures, to shape them, just tweaking the colour where necessary, whereas others, I'm afraid, just see themselves as being the next step in the process: the project is now with them and they will do what they think should be done to the pictures – of course, that can be very frustrating! However, grading is a very productive and enjoyable experience most of the time.



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Your lighting plot becomes your key; with the model in one hand and plot in the other, you can work out where you need your lamps. I like to keep things simple, so I tend to put a ring of soft lights around upstage and then the rest is about how you dress things in through windows, where the practicals go, etc.

Grading isn't so much about changing colour, it's about shaping and shading a lot of the time. For example, an over-shoulder shot where the near person is wearing a light shirt will result in the foreground being too bright and distracting; in the grade, you can take that brightness down to almost nothing, thereby bringing the focus of the shot back to

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When it comes to converting from tungsten to LED who wins the argument between production's budget concerns and the need to be more green?

**MH:** On Not Going Out, the budget for lighting is £36k for the whole series (£6k per episode), and you're not going to get a lot of LED for that, I'm afraid. We need a lot of lamps and, unfortunately, you just couldn't afford to do it with all LED units. It's worth noting that we do have about two-thirds tungsten and one-third LED here. It's a start, hopefully we're getting there, slowly. Mind you, not all the lights are on all the time; you may be running a lot of 2Ks on this set, but then the other sets will go dark, so you try to get a balancing act.

**MK:** And very few lamps are burning flat out, many will be at 60–70%. Although on paper it might look like you've got a huge amount of lighting, which will use a large amount of power, the draw at any given moment will actually be a lot less than your kit list might imply. But I don't know the answer, because the independent companies are in the business of making television programmes and they can't run at a loss.

At the beginning of 2020, before I retired or we'd even heard of COVID, I had a number of shows to light coming up and wanted to use more LED lighting. I contacted all the productions I was due to work for, to inform them I intended to halve the amount of power usage. I included rough figures of what it would cost but only one production agreed to it; all the others were horrified at how much more it was going to cost because it just wasn't in their budgets. I know everybody is trying to go green but, unfortunately, LED fixtures cost a lot more to hire than boring, old-fashioned tungsten – but that nettle has to be grasped somehow. I also pointed out there'd be far less electricity used and the savings to be had, but that doesn't get passed onto the production;



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they don't get a reduced hire rate from the studio because there's less electricity being used. So, there's got to be some joined-up thinking.

At some point though, somebody's got to speak up and insist on more budget for lighting because LED units do cost more; that's the world we live in now, but they do draw less power and we can't keep on burning all this tungsten.

**BD:** In a way, the answer to the question 'Who wins?' is that it's a production argument, because they want to get their albert credentials but they're also paying the bill, so they have to choose a side of that coin. Only time will tell!

I have to say, it's been fascinating. I've really enjoyed it, I hope you all have too. Thanks very much indeed to Martin Hawkins and Martin Kempton for giving up their time.

Fact File

Martin Hawkins is a member of the GTC, STLD and GBCT

For more information on him, please visit his web site: [martinhawkins.com](http://martinhawkins.com)



Caption

50 GTC Quick Q&A

with Chris Owen

Former GTC Awards Officer and Council member, and retired Head of Cameras at The London Studios (TLS)



Excerpt from Zerb Winter 1993

When and how did you join the industry?

I joined LWT from a job not connected with the industry in May 1972, just before the company moved from Wembley to its newly completed studios on the South Bank.



When did you join the GTC and why?

I joined the GTC very soon after it was formed (I'm member #016), because I thought it had great promise to bring the various camera departments in all the ITV companies and BBC together, so as to provide a voice to promote both training and the evaluation of equipment.

Who did you most admire during your career?

I was lucky to experience both studio and OB work, so (although they are now names from the distant past): Bob Gardam, as he transformed the whole look of football coverage; and David Bell, as he put so much life into studio entertainment shows. What was striking about both Bob and David, was that they each created really happy and professional atmospheres for their crews. My first senior cameraman was Tony Maynard; he was a brilliant operator and instilled the highest standards in every crew he led. I greatly admired both his skills with the camera as well as the atmosphere he generated with the colleagues around him.

Which job are you most proud to have been involved with?

I really enjoyed Torvill and Dean in *Fire & Ice*, which we recorded in an 'iced' sports hall in Stuttgart, Germany, in 1986. I was a junior operator at the time and was lucky to be added to the crew at the last minute when one of the operators couldn't make it. I operated a trackable Vinten low dolly, which had been fitted with 3 ski blades so it could be pushed across the ice by a skating rigger.

What is the biggest change you have seen during your career?

At LWT, we were very lucky that they retained the crew system for a long time after the regional ITV companies had lost most of

their staff operators, because the merging of the other ITV companies, combined with the loss of staff roles, made training and recruitment very difficult.

What is the biggest change you have seen within the GTC?

I was on Council for a while, both as a member and Awards Officer, and I have enjoyed observing how the awards procedure has blossomed, as well as how the membership has grown, especially with young and ambitious new joiners.

How do you foresee the next 50 years of the GTC?

We need to keep the membership growing and expanding across the whole range of media and camera roles, so as to ensure that all branches are well represented, with everyone having a voice.



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