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DALEKS & SCUTTERS

Peter Wraggs's Life in Special Effects

PETER Wragg is an Effects Designer at the BBC's Visual Effects Department. His most recent work has included **Red Dwarf**, but in his extensive career he has blown up Daleks on **Doctor Who**, and flown Thunderbird 2 with all the grace of a ballroom dancer!

In this issue, we look at his career after the collapse of Century 21.

To support his family, Peter opted for government retraining, resulting in 5 years' work as a tool-maker, "With always the desire to *get back* at some point" firmly in his mind.

"I used to keep in touch with some of the guys from Century 21. One of the chaps was Tony Harding, who had been an assistant at Century 21, and he was already here at the BBC." When Peter expressed his frustration (which he wryly characterizes now as "cat-kicking"!) at being away from Effects work, Tony suggested he should apply to the BBC.

"They said they could only offer me a 4 month contract — and it was less money than I was getting in the tool-room. So I went home and said, 'What do I do?'. My wife said, 'Take it'."

His four month contract was extended by another four months, and then a year. During that time he worked on Michael Bentine's **Square World** ("the flee circus type thing") and **The Goodies** ("the jokey props"). He also worked on **Doctor Who**, making futuristic weapons.

"There didn't tend to be a lot of model shooting. Occasionally we did get some model shots on **Doctor Who**. Then it was a case of trying to convince the director and producer that you needed to shoot it on film, because you need to shoot at high speed. On video tape you can't do that. For me, it was going back to something that I knew and understood. The memories started to come back as to what lens al-

ways looks right — always as wide an angle lens as possible for the landscapes, because you get the sense of *distance*."

"One of the things about **Thunderbirds**, which seems incredible now, is that we shot everything on 35 mm film, which in those days was very out of the ordinary. I mean we would never get that facility at the BBC. It was always 16 mm, or they would insist on doing it on [video] tape." The reason? "Money, basically. Budgetry constraint."

Doctor Who

One of the earliest memories Peter has of working on **Doctor Who** is of being inside a Fendahl in *Image of the Fendahl* (which featured Tom Baker as the Doctor). Later, as an Effects Designer, he worked on *The Visitation* (starring Peter Davison). "Michael Melia, who was the Terileptil leader, now runs the pub in [the Soap Opera] *Eastenders*," Peter notes with a chuckle.

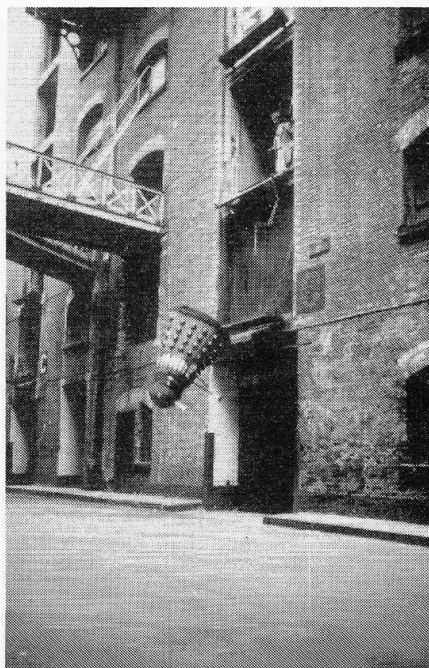
"We did the Terileptil heads, and used radio control to give some lip movement and have gills working. It was pushing the boundaries slightly. Radio control is always a difficult thing to use, especially in studios... You've got the possibility of a lot of frequency interference with electronic cameras."

A couple of years later, Peter was turning his talents to assisting the long-anticipated return of the Daleks, in *Resurrection of the Daleks* (also starring Peter Davison).

"We blew Daleks up in the studio. I remember throwing a Dalek off one of the big warehouses down in the docklands — three storeys up. The Dalek had to hurl itself out of the doorway and explode on hitting the ground. It was quite difficult to do, because in order to make it explode you've got to have the explosives and the



Peter Davison pushes a Dalek to its destruction (left page) Photos © S Moore



power to fire them. That means you've either got a line carrying your power coming down with the Dalek — which you don't want, because you're going to see the cable — or you have the explosives on the ground, and hide the cable on the ground. But then the Dalek doesn't necessarily land on the spot where the explosives are. So what we actually did was fire it on radio control.

"We didn't need a wire, but then obviously we had to be very careful that we weren't going to get any stray radio interference that would suddenly fire it when Peter Davison still had hold of it. We had a safety trip that was on a nylon line, so as the Dalek was pushed out the nylon would become taut and pull this safety [device] out. It couldn't be activated until that happened, so at worst you knew that it would be a safe distance away from the actor if it did fire accidentally. Fortunately it worked fine. The Dalek hit the ground, we hit the radio control button and it worked.

"We made up three Daleks made out of foam for the purposes of exploding. In that particular story we had quite a few exploding Daleks, so we made some moulds and then made sort of 'brittle' foam Daleks to blow up in the studio."

Peter's next encounter with **Doctor Who** was in the *Mindwarp* segment of the

Trial of a Time Lord season, starring Colin Baker. The main work he remembers from that story was on the monster costumes for Sil (played by Nabil Shaban) and his overlord Kiv (Christopher Ryan).

The Flipside

Following this, Peter "thoroughly enjoyed" working on the BBC plays **The Flipside of Dominick Hide** and **Another Flip for Dominick** (both of which will be released this year on BBC Video). Peter particularly remembers creating the effect of a disintegrating rose.

"Dominic brings a rose back from our Time. He takes it back to the Future with him in a sealed container, but when he opens the sealed container the rose disintegrates and turns to dust. I did a series of things. First, with a real rose and part of the box (now made out of heat-resistant material), I put a blow-lamp onto the rose so that the petals started to curl and blacken and shrivel. Then I took a rose and stuck it in a micro-wave so that it became very brittle. Then, with stop-frame animation, we'd break bits of the petals off and shoot four frames, run back two frames, break off a bit more... using a rostrum camera."

Peter demonstrates another **Dominick**

Hide effect with some pride. He produces a bottle, and, as he explains its use, something very strange happens.

"Dominick Hide had a ring that possessed various powers — he spoke into it and things like that. In our Time he's given a bottle of wine to open, and he doesn't know how to use a cork-screw. So he just points his ring at it and..." The cork lifts itself slowly, silently and smoothly out of the wine bottle Peter's holding. He explains, "There's a machined piece in there with a little motor. There's a little button on the underside and it's got a little battery inside. We wanted it so that he could actually pick it up and walk around with it, so that there weren't any wires coming from it."

Red Dwarf

When Peter started work on **Red Dwarf**, in terms of Effects, it was a far less demanding show than it has been in the last couple of seasons. "They just wanted the Red Dwarf model... left to right, right to left, under camera, over camera — and that was it, basically. It was all shot on motion control. It was an eight foot model shot at Pierless [a non-BBC facilities house] by Peter Tyler.

"It was then a Paul Jackson Production being made with BBC facilities. Paul Jackson said, 'The model shots have got to look good'. I said, 'Well, if you want them to look good, the first thing I've got to say is you should shoot them on 35mm [film]'. So he said, 'All right, we'll shoot them on 35mm then'."

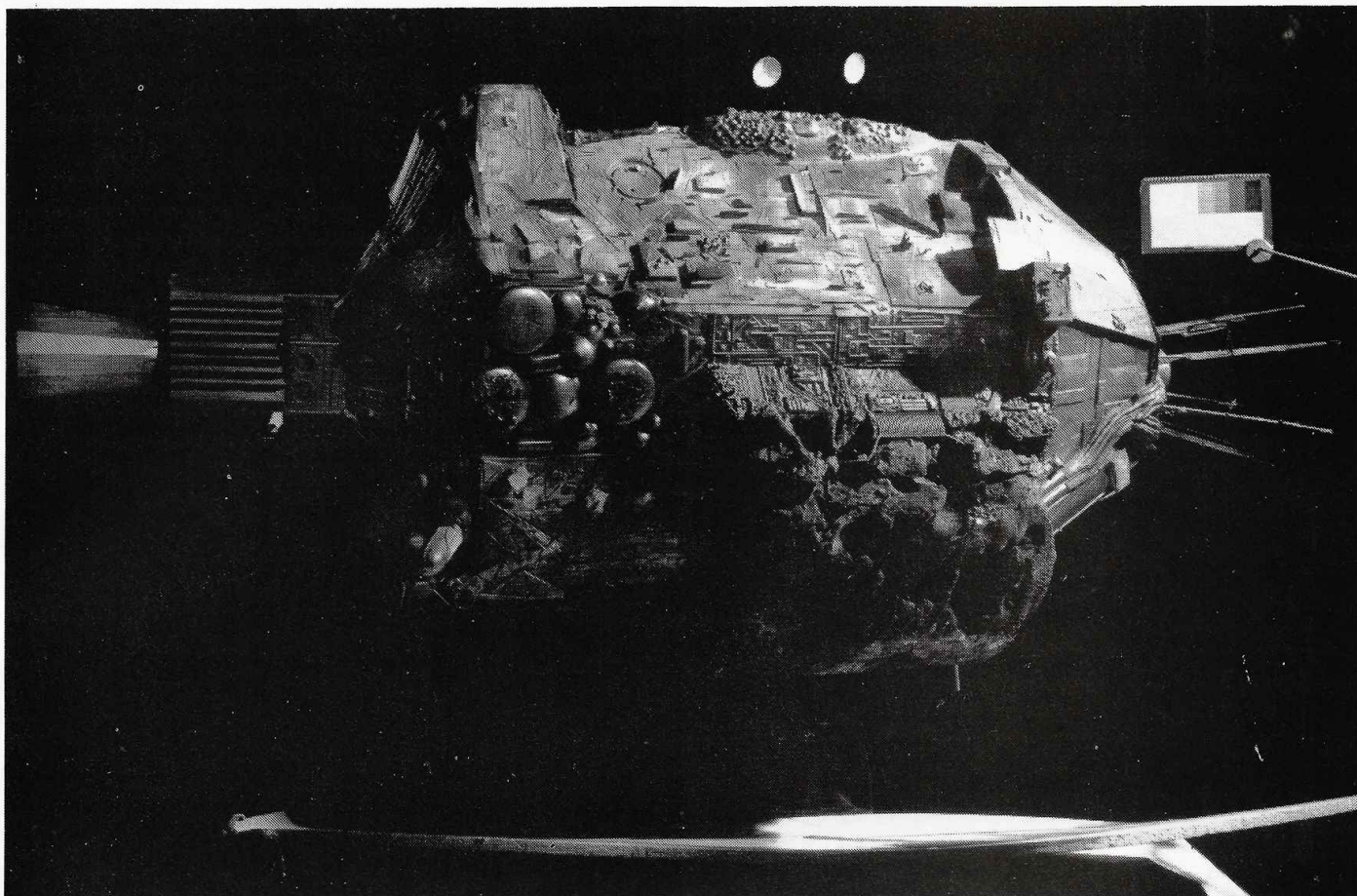
As well as filming model work, Peter was also responsible for studio effects, such as the Scutters.

"The Scutters were radio-controlled. They didn't really feature very much in series three and four, but featured quite heavily in series one and two. They were described in the first script as something the size of a shoe-box, with an arm and a clawed hand, that trundled around and did things for Rimmer, because he couldn't touch things. So I discussed with Andy Bowman, one of my assistants — he's a radio control *whizzkid* — that I knew some of it would have to be done by hand, as a puppet version [of a Scutter] as it were. They wanted the Scutters to write, and things like that. Well, there's nothing you can do that is ever going to make that look 'real', apart from actually having a hand. So we started with the premise that I would need something the size of a hand to actually get my hand in: we had a three-clawed thing.

"Then we had a sort of fibre-glass, domed head, with lights for eyes that flicked up. But because I knew that, for

A radio-controlled Scutter, from *Red Dwarf*, with human hand-sized attachment





A rare shot of the actual Red Dwarf model, lined up for motion-control filming

some of the time, it would have to be hand-operated, I then wanted to make sure that people [the viewers] didn't think that it was a hand-puppet being used the whole time. So we went for a very thin arm, so there was no way it could be anything else. I would constantly go back to Andy and say, 'It would be nice if it could swing right round' or 'if we could get *this* movement'. I just kept adding things the whole time, and he kept finding ways of fitting it in.

"In the end, each Scutter had two transmitters. One to drive the base and steer it. The other transmitter, using all the seven channels, to lift the arm up, rotate it, turn the head, operate the lights, the claws and so on. We had two Scutters, so that meant four transmitters on the day. We'd be using them in the studio, they'd be working fine, then all of a sudden they'd take on a life of their own, whizzing 'round the studio and spinning round and going berserk. You're looking at the transmitter and saying, 'I'm not touching anything!'"

The Spaceship model work of **Red Dwarf** has attracted the most praise and won an award for Peter [for a full account of the work, see Motion Control Cameraman Peter Tyler's *Starburst* articles]. However, despite advances in technology, the set-up is more modest than the Century 21 model stages for

Thunderbirds and the other Anderson series back in the 1960s.

Peter explains, "Unfortunately, the amount of model filming we do can come and go. Really, over the last few years there's only been **Red Dwarf**... We had a set-up going at **Thunderbirds**, because it was just *all* models."

You can find out exactly what that set-up was — and how Peter's ballroom dancing expertise helped Thunderbird Two — in the story of Peter Wragg's earlier Special Effects career, in the *TV Zone Sixties Special*, published on 10th October this year.

Nicholas Briggs

Peter Wragg on the Visual Effects stage for *Red Dwarf*

