

## PRESS RELEASE NOVEMBER 27 2013

### THE MODEL UNIT

### MINIATURE EFFECTS FOR 'THE DAY OF THE DOCTOR'

*'Lavish, blockbusting special effects' – Daily Mail*

*'Superb special effects' – The Mirror*

*'Incredible special effects' - The Independent*

The Model Unit's involvement in **Doctor Who: Day of the Doctor** was for the Time War section of this historic episode, providing several cutaways of the Time Lord staser cannon (including its destruction) and a longer sequence showing John Hurt's TARDIS crashing through a wall and destroying several Daleks that are unlucky enough to be in its path.



Following an initial discussion with producer Marcus Wilson to establish the sort of shots that might be needed Miniature Effects Supervisor Mike Tucker met up with stereo supervisors Adam Sculthorp and David Wigram to work through the practicalities of shooting high speed miniature effects sequences in 3D – a first for a British television drama production.

A proof of concept test utilising an existing miniature established that the models shouldn't be smaller than 1/6<sup>th</sup> scale, and ideally at 1/4 scale. Further research established that the miniature effects sequences for the Martin Scorsese movie 'Hugo' had been done at 1/4 scale and with the same Alexa high speed camera rigs

that we were planning to use, and so we were able to proceed with a certain amount of confidence that what we were about to do was realistically achievable.

With a five-week lead-time and a two-day shoot in Cardiff in April of this year model construction was split between several Model Unit regulars. Alan 'Rocky' Marshal was given the task of constructing the staser cannon, Nick Kool took on the TARDIS model and associated rigs and Colin Mapson worked with new recruit Paul Jarvis on the ruined Arcadian buildings and breakaway wall sections.



In a nod to past effects sequences, the Dalek miniatures were achieved in the time honoured way by utilising off-the-shelf toys (in this case the 18 inch voice-interactive toys that had been produced by Character Options a few years back), albeit with a few careful modifications in order to match them more closely to the actual props. Further detail was added to the interiors, including a scaled model of the mutant creature.

Model Unit DoP Peter Tyler worked closely with main unit DoP Neville Kidd to establishing a lighting design for the miniatures as, due to camera rig availability, we were shooting our miniatures in advance of the live action unit – a complete reversal of how things are usually done.

Close collaboration was also needed with the production design team with Mike and assistant art director Richard Hardy constantly swapping notes about the final design details of both Time Lord machinery and architecture to ensure a seamless blend with the location.



Day one of the shoot concentrated on the shooting of the cannon allowing the more complex rig of the TARDIS to be set up and tested, whilst the second day took in several takes of the TARDIS shots. The ¼ scale TARDIS miniature was fixed to a steel rig mounted on a trolley system that allowed us to fire it at the wall using bungee cord.

Two takes of each set up were shot on two high speed Alexa stereo rigs shooting at 120fps.

Mike and his crew watched the completed episode at the Doctor Who Celebration at Excel with an audience of 2000 fans.

### **Model Unit Crew**

Miniature Effects Supervisor: Mike Tucker

Senior VFX technician: Nick Kool

Senior VFX technician: Alan 'Rocky' Marshall

Senior VFX technician: Colin Mapson

Sculptors: Paul Jarvis / Tammy Haye

Pyrotechnician: Peter Kersey

Miniature Effects DoP: Peter Tyler

Gaffer: Billy Harron

3D Crew: Steve Evans / Steve Evans Jnr / Mustafa Tyebkhan