

# The first Tel OB

Prompted by recent correspondence in Prospero, John Trenouth explains how the scanner got its name



PROSPERO

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BBC staff have always referred to television Outside Broadcast trucks as 'Scanners' despite the fact that very few people have any idea where the name came from.

There have been a number of reasons put forward over the years, including a statement that the name derived from the similarity of mobile radar trucks (with their attendant scanner assemblies) used towards the end of WWII. However, the real reason for the name dates back to the early 1930s.

In 1928 John Logie Baird demonstrated 'daylight television' from the rooftop of his studio in Long Acre. For the first time he was able to produce images from outside the studio and realised that the ability to broadcast live pictures from any location, an 'outside broadcast', was vital to the future of television.

His camera was very different to the electronic versions which would be in regular use within the next ten years. It was a mechanical drum with 30 mirrors around its edge and rotated at a high speed.

Baird didn't call it a camera. He preferred the term 'scanner'. As the heavy metal drum rotated, the mirrors mounted on it scanned the scene being televised. The scanner was bulky, heavy and quite delicate. It also could only be moved very slowly when it was running, so panning and tilting were out of the question.

Regular 30-line television broadcasts started in 1929, using the BBC's 2LO transmitter on the roof of Selfridges late in the evening when the radio service closed for the day. The pictures were sent by post office line from Baird's Long Acre studio.

Initially the broadcasts comprised two minutes of picture followed by two minutes of sound, then another two minutes of picture and so on...

It was not until the following year that the new Brookmans Park transmitter opened, thus allowing him access to two transmitters at



The Baird scanner at the 1932 Derby

the same time, one for picture and one for sound. By the time the 30-line service closed down (September 1935) there were around three thousand receivers and 'lookers-in' (the term 'viewer' had not yet been adopted)

In 1931 Baird fitted the scanner inside an old caravan and parked it in the street outside to continue his experiments.

Seeing the horses going up and down Long Acre on their way to Covent Garden market gave him the idea to try to televise the Derby.

The heavy wooden caravan was towed behind an ancient De Soto automobile and parked alongside the winning post at Epsom. The Post Office laid temporary land lines back to Long Acre and special dispensation was given to use the London National wavelength of the BBC for half an hour to cover the race.

This, the UK's first outside broadcast, was not a huge success, mainly because the 30-line picture was tall and narrow (the 3:7 aspect ratio was chosen for head &

shoulder shots) and the inability to pan the scanner to follow the race meant that all viewers saw was the blur of the horses flashing past the finish line.

The following year he was back with an improved system which contained not one, but three mirror drums. The centre drum produced the picture for the television broadcast, whilst the three drums combined to produce a much wider 'zone' picture on the screen of the Metropole cinema in Victoria – a sort of television version of 3-strip Cinerama.

More importantly for the viewers at home, the scanner was arranged to look through a large mirror mounted on the inside of the caravan door. As the door was swung open, the scanner panned across the scene. So it was now possible to follow the action at the end of the race and it was, for its day, a great success.

Of course by now, everyone started referring to the whole caravan as the 'scanner' – especially as the caravan door was a vital part of the apparatus. A number of the

Baird staff involved in these experiments were later employed by the BBC and they used the term 'Scanner 1' to describe the EMI mobile television control room used for the 1937 Coronation. The name stuck and we've used it ever since.

Before leaving the subject of the 30 line broadcasts, because they were on medium wave, they could be received all over the country. Usable pictures were even received across Europe and in North Africa.

This compares very favourably with the official range of 25 miles from the Alexandra Palace transmitter when 405 line BBC television started in 1936. For those readers of a technical bent, the maximum theoretical bandwidth required for 30 line transmission is 13 KHz, which reduces to just under 10KHz by

applying the Kell factor. However it's unlikely that Baird's video amplifiers at the time could cope with more than 6 KHz – which was about the bandwidth of the 2LO transmitter. The domestic radio set used to receive the 30 line signals probably had even less bandwidth. Even so, the pictures were surprisingly good.

Following the recent interest among Prospero readers in old Scanners, I can confirm that the National Media Museum have two examples, a CMCR2 with EMI 2001 cameras and a CMCR5 with Philips LDK25 cameras.

There are at least five more in private ownership, some of which have been lovingly restored. The oldest UK made example still in near original (working) condition is in the collection of the National Museum of Australia. It's a 1952 Pye vehicle fitted with Pye Mk III cameras.

John Trenouth is former senior curator of Television at the National Museum of Photography, Film & Television.

## Soaping it up...

EastEnders fans visiting the National Media Museum in Bradford have had the chance to shoot a scene from their favourite soap as part of activities marking the 25th anniversary of the show. EastEnders artefacts and photographs feature in the museum's year-long celebration of broadcast soaps. This year also sees Corrie turn 50 and Hollyoaks turn 15. Robert Seatter, manager of BBC History, will be taking this

celebration of all things soap right up to New Year's Day 2011. That's a very special anniversary – 60 years since the launch of The Archers. As for EastEnders, it celebrated its 25th on February 19 with a live episode in which the killer of Archie Mitchell was exposed. For devotees there's a Prop Quiz: what role did this ornament play? And why were there two of them – a plaster one and a rubber one?



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