

# Feeding the world

– with world-beating athletics coverage

In August last year, London hosted the IAAF World Championships. With dozens of track and field heats and finals taking place each day, and broadcasters from all over the world requiring coverage of athletes from their own countries, this was a complex job for the host broadcaster. Overseeing the planning, positioning and operation of around 100 cameras in the stadium for Sunset+Vine was GTC member **Tim Moses**. Last November, the team were delighted when their work was awarded the RTS Craft Award for Multicamera Work and Tim has also been nominated for a GTC Award for Excellence for his organisational skill in co-ordinating the camera coverage of this major event. Here he explains just a little of what went into the planning and supervision.

All photographs by Graeme McAlpine, Richard Haywood and Tim Moses



Leighton Grist head on at the long jump

**W**hen executive director Helen Kuttner approached me back in 2015 to ask if I would like to work with her, executive producer Michael Cole and the Sunset+Vine team on their host broadcaster (HB) coverage of the World Athletics Championships, I jumped at the chance.

We had worked together, with many of the crew, on the host feed of other major athletics events over the years, including the 2010 Delhi and 2014 Glasgow Commonwealth Games. Indeed, the core of the crew were part of legendary BBC athletics director Martin Webster's team, which had provided the World feed on the 2000 Sydney Olympics Athletics. That was such an iconic event it is still my personal all-time career highlight (sorry London!).

So, even before we discussed the crew, Helen had a strong idea which camera operators she wanted, from throughout the UK and beyond. Once I had seen her draft but detailed camera narrative, which would in fact remain remarkably intact, I was able to offer suggestions for suitable extra cameramen and women, with whom I had worked over the years, to fill in the gaps, bearing in mind that many good people would be unavailable due to other seasonal commitments. Also, many of the athletics regulars would be needed for our co-production partner Film Nova. Led by director Matthew Coliandris and camera supervisor John Oldroyd, that team was to provide live coverage of the marathons and walks, away from the stadium. Fortunately, Sunset+Vine's senior production manager, Ruth Hayman, was able to offer hotel rooms for those based outside London.

Within the stadium, GTC sponsor Aerial Camera Systems (ACS) was, unsurprisingly, contracted to supply the superb tracking cameras, wire cam and mini cameras, which ended up providing fantastic super slo-mo replays – in fact, I think the best I have seen. As for me, I was to slot back into my role of 'non-playing captain', supervising the camera deployment to ensure all hopefully ran smoothly, and always on hand to provide plenty of refreshments and encouragement.

## State-of-the-art planning

The philosophy of host athletics coverage over the years has been to divide the coverage up in to separate feeds for the various disciplines. For a small meet, there will be a minimum of a track feed (running races) and another for the field (shot put, high jump, javelin, etc.). If there is no additional combining integrated feed, the highlights from the field feed are inserted into the track coverage. Once the track cameras are rigged, they usually stay in place for the whole event.



ACS cameraman Dave Manton carrying out checks to the home straight railcam

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Final checks on the wire cam

However, one of the challenges for the camera supervisor is to co-ordinate the movement of the field cameras to cover the various field events, often several at the same time, which can be all over the field of play.

During the planning stage, Venue Technical Manager, Steve Goodey, an engineering manager with vast athletics experience, and Sunset+Vine's Director of Technical Operations, Mark Dennis, were tasked with translating Helen's camera narrative into a technical specification, with all the various permutations and associated connectivity, laid out on Excel spreadsheets. I felt one of my jobs was to transfer these details to colour-coded infographic camera plans, so we could all see quickly where each camera and camera operator needed to be for every event and the relevant cable route back to the various production galleries. I suffer a little from number blindness and a big spreadsheet sometimes makes my eyes glaze over. Talking amongst colleagues, this does not seem to be uncommon amongst those of us who have made careers in the visual crafts. I hand-drew these camera plans at Glasgow 2014, for my own benefit as much as anything, but they went down well, helping all departments sing from the same sheet. Now I wanted to up my game and enter the 21st century for London 2017 by providing electronic versions. On advice from fellow cameraman Kevin Bonner, I eventually settled on Apple's Keynote as the most suitable software. The track camera plan would almost certainly be constant but the field camera plan would be different for each of the 14 sessions and would indeed frequently change mid-session (see examples of the camera plans on page 34).



Sessions were physically demanding for the handheld and Steadicam operators; in action here capturing the atmosphere, GTC member Matt Payne

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One thing we have learnt from experience is that it is vital to hire tripod wheels for the field cameras, as this is the only way to commute them efficiently and safely between events.

**Co-ordinating the feeds and cameras**

As 2017 was such a huge event, we had a track feed, five field feeds and a dedicated feed from the marathons and race walks, to ensure that nothing was missed for the broadcasters on site. An integrated feed combined the best from all of the HB outputs as well as its own dedicated cameras to produce the World feed.

Each feed had its own production gallery, director, script supervisor, sound supervisor and dedicated VT operation. Thus, we were producing up to seven separate simultaneous broadcasts for the duration of the championships. The integrated World feed alone produced 70 hours of continuous coverage with HB commentary, which many international broadcasters took as complete stand-alone programmes.

Larger international broadcasters, such as NBC, TBS from Japan, the BBC and several other European nations had their own dedicated cameras in the stadium to provide an even greater focus on their domestic athletes and would take those cameras along with all the individual HB feeds to produce more country-specific coverage. For instance, Bruce Miller's BBC crew had 10 of their own cameras in the stadium, including their on-site studio. Our camera teams

worked with the BBC and the overseas broadcasters to avoid long lenses appearing in each other's shots, but it was only our host broadcaster cameras that were allowed on the field of play to ensure that the competition and coverage was as clean as possible.

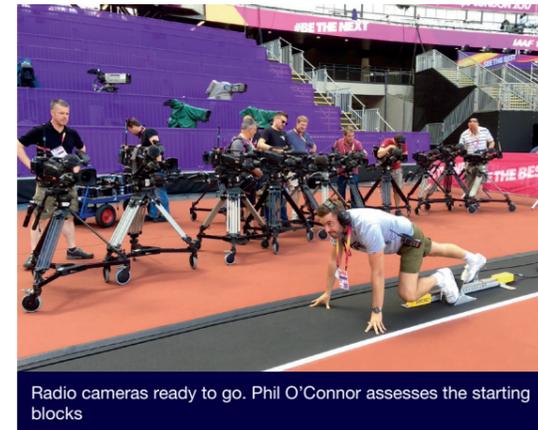
**Camera array**

The main camera configuration consisted of regular OB fare: Sony 2500 standard and 4300 slo-mo cameras, Canon 86:1 box lenses and HJ22:1 and HJ14:1 lightweight lenses, and the lovely EL75 OLED viewfinders. These were bolstered with 10 radio cameras, four jimmy jibs, a tracking buggy, five ACS rail cameras, eight mini-cameras, three Sprintcam Hi-Mo cameras and a wirecam. It is important, however, not to overlook the basics and one thing we have learnt from experience is that it is vital to hire tripod wheels for the field cameras, as this is the only way to commute them efficiently and safely between events.

**Putting the plan into action**

After months of planning, involving many site visits and meetings, it was good to arrive at the Olympic Stadium at the end of July to find unit managers Kevin Orwin and Trevor Cooper's NEP team well established in the sizeable TV compound, based around 17 portacabins of production galleries and technical areas.

NEP guarantee cameraman Leighton Grist had already organised hundreds of camera boxes in a tent in the corner of the compound – he was a superb quartermaster, in addition to his day job of operating one of the super slo-mo cameras. After a week of rigging, cable testing and rehearsing, we were ready to go on Friday 4 August.



Radio cameras ready to go. Phil O'Connor assesses the starting blocks

Once up and running, the track coverage, as predicted, was self-contained and there was not much for me to deal with, apart from some discussions on style and minor housekeeping. I left the track in the hands of camera supervisor Glen Woodcock, who has worked with Helen for many years.

I had hoped that with all the planning, the field events would also run smoothly, but in the event there were a few logistical issues to deal with. This started with a bang, on the second morning of coverage, when the event organisers laid the high jump mats over our camera cables before we had even arrived on site at 07:00. Requiring all hands on deck and following some delicate negotiations with the officials, plus Keith Davies from UK Athletics and the Olympic Stadium

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Towards the end of a session, fatigue sometimes became evident and several times I offered my services as a relief, but each time I was turned down – everyone was keen to finish the job.



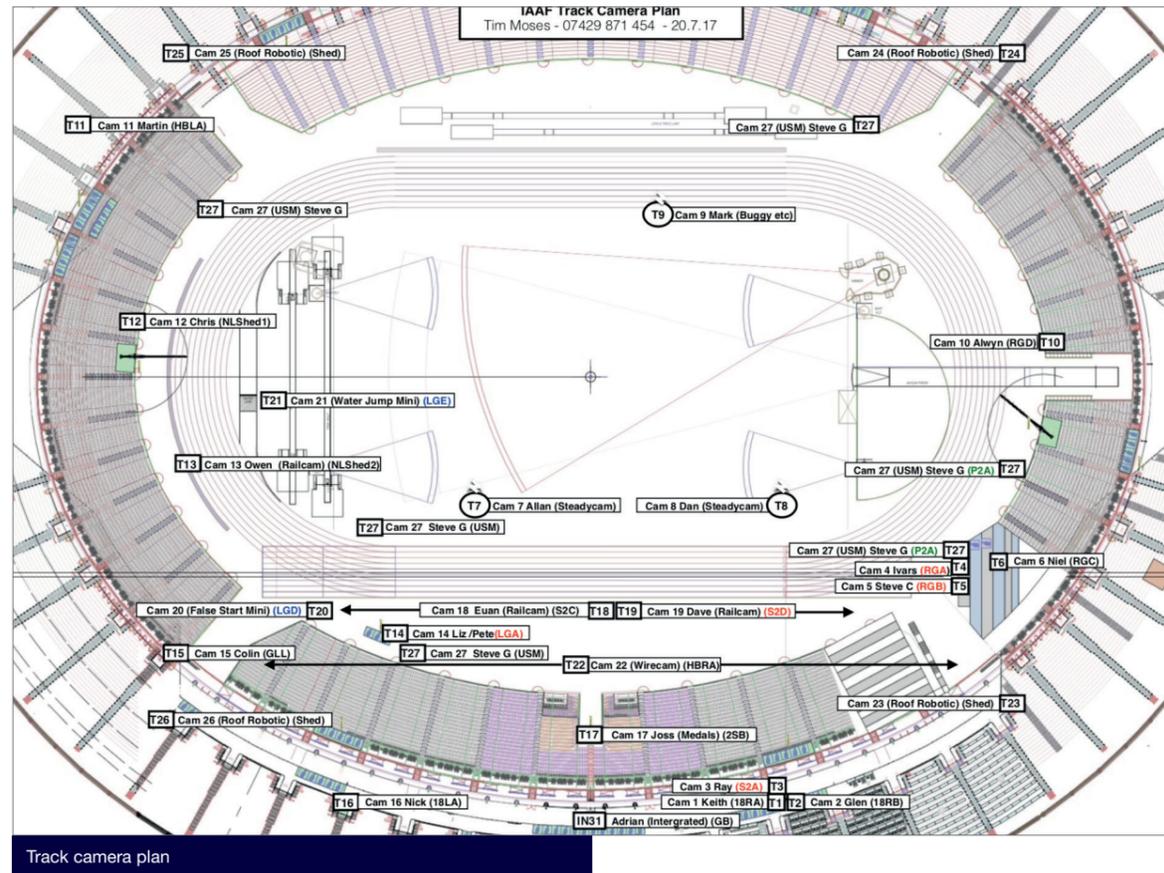
Tim Moses, Steve Coleman, Sam Curtis, Neil Cooper and Alan Gomery contemplate testing some of the field camera cables

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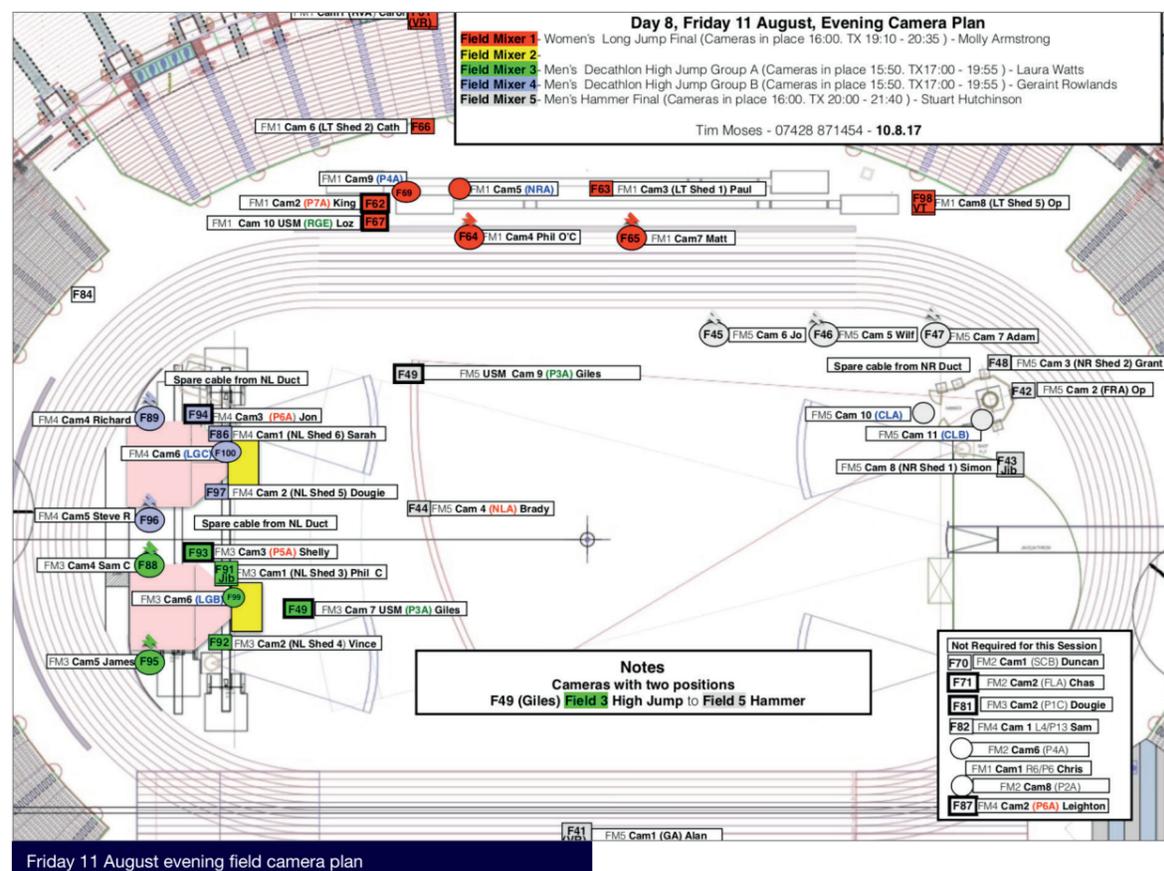
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fail to prepare then be prepared to fail, and a lot of people from the broadcast team put in a serious amount of planning to ensure that the right folk and equipment were in the right place at the right time; once on site it was full-on for all of us. I know from my friends and family how the event captured the imagination of the British public. Many of the camera crew also told me how much they enjoyed it and how proud they were to have been part of such an iconic event. The only downside was saying farewell to head-on specialist cameraman Steve Coleman, who had decided that after 40 years of inspirational service this was to be his last major event. You are a legend Steve!

For myself, it was real pleasure to work with so many friends for those two weeks in August, when the eyes of the world were upon us.



ground staff, who were keen to ensure minimum harm to West Ham's pristine turf, we managed to free our cables, plug up our cameras and get everything ready by the time the athletes arrived on the field of play at 09:30. By the skin of our teeth! It was just as well we had made the effort during the build to foster friendly and co-operative relationships with the other teams working alongside us.

**Long sessions**

For the most part everyone operated the same camera throughout the event, which provides substantial continuity benefits – and, although it can be challenging, it is usual for the Steadicams down on the track to cover the whole session. This is manageable as there are natural punctuations during the track schedule allowing for some rest. It did mean, however, that the other handheld radio camera operators would have to cover the entirety of each field event, and there were sometimes several of these per session. I would not ask anybody to do anything that I would not do myself and the feeling was that it would be hard work but manageable, with gaps in the day and, indeed, some sessions where a particular camera was not required at all. Again, we ensured that each radio camera also had its own tripod and wheels available if required. Towards the end of a session, fatigue sometimes became evident and several times I offered my services as a relief, but each time I was turned down. Everyone was keen to finish the job.

After 10 days and 250 hours of live coverage of superb athletics, captured by over 80 of our cameras at the end of 50 kilometres of cable, it was all over. The general consensus was that it was the best athletics world championships coverage ever and the standard and creativity of camerawork on display was fittingly world class. As the cliché goes, if you

**Fact File**

GTC member Tim Moses is a cameraman with 25 years' experience. Formerly a cameraman at BBC TV Centre and a Camera Supervisor at BBC OBs and SISLive, Tim has been freelance since 2012.

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