

Panavision in focus

Australia vs New Zealand.
A debut performance
live broadcast
in three dimensions



Sydney, 17 June 2010 – According to Panavision Asia Pacific Managing Director Martin Cayzer the 3D rigs that Panavision supplied and installed for the recent Australia versus New Zealand FIFA World Cup soccer build up match in Melbourne represent not only a first for the company but also for Australia and the state of things to come for the future.

“The 3D rig project for Australia versus New Zealand came about shortly after we announced our partnership with Element Technica,” said Cayzer. “We are now the exclusive Australian distributor for Technica 3D, a family of stereographic 3D rigs designed by Element Technica to precisely align and control positioning of a pair of cameras necessary for stereographic 3D imaging.”

With the new partnership successfully in place Panavision Asia Pacific Business Development Manager Andrew Timlin began discussions with Global Television’s Andy Armstrong and Andrew Quinn regarding what Panavision could supply in terms of equipment and expertise for a then ‘upcoming’ sporting event.

Timlin said, “The initial discussions were in line with Global’s usual client confidentiality requirements added by the fact it was the first broadcast of its kind so we had to quote without knowing specifically what the project was. We then did a full camera to 3D rig compatibility and systems check with Global TV and then demonstrated the Technica 3D rig set-up for senior executives and technical personnel from Global TV and Fox Sports with excellent results.”

The demo set-up consisted of a full Technica 3D rig, two Global TV-owned Sony HDC1500 multi-format HD portable cameras and a JVC 46-inch 3D LCD monitor.

Global TV’s Andy Armstrong said, “Quite honestly the demo was in line with our expectations as we had already been in discussions with Element Technica. The images and entire set-up didn’t disappoint so we then committed to move ahead with the Panavision Technica 3D solution from that moment.”

With only three weeks until the match Panavision’s team swung into action. Martin Cayzer explained, “This project was a first for 3D television in Australia and also moved Panavision firmly into the OB arena. We more tests with

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Global, Fox Sports and Foxtel to make sure everyone was comfortable with the technology and images. There was much to do as we were to supply the 3D equipment and personnel to operate it. Our philosophy, which differs from some others, is to recruit and train local technicians and crew to keep the costs as low as possible for the client - so we set about doing that immediately."

In total Global TV required five full Technica 3D rigs for the shoot and a significant number of trained crew.

Cayzer continued, "We had two rigs as local inventory and sourced the other three from Panavision's international network. This was a challenge in itself due to the unprecedented demand for 3D rigs worldwide. With the equipment secured we put together a team consisting of key Panavision Asia Pacific staff and some experienced locally-based technicians."

In addition to MD Martin Cayzer, Panavision's crew included Andrew Timlin as Project Co-ordinator, John Virtue as Head of Sourcing and Operations, Peter Lorz as Head Electronic Technician and Grant Hansford in charge of Optics and Rigs.

"We also brought in and trained four Interocular Convergence (IC) Pullers, a Stereographer and Lead Technician," said Cayzer. "It's a fact that with Stereoscopic 3D broadcasts there can be twice as many crew required to fully staff the shoot which can get expensive if you're flying them in from overseas, so we prefer to use in-house and local expertise and train people wherever possible."

Panavision supplied and installed five Quasar Broadcast rigs for Global TV – four mirror rigs and one side-by-side rig. The Technica 3D rigs have incorporated a number of groundbreaking features to the 3D rig marketplace. One of the major developments is the ambidexterity of the rig to the two principal stereoscopic shooting styles, side-by-side and beamsplitter (in both cinematic and broadcast configurations).

To achieve a stereoscopic image, a pair of cameras must be placed side-by-side, with what's known as the interocular distance between the two lenses. To maintain a realistic 3D effect, that interocular distance will vary according to a number of parameters including distance from the subject and lens focal length. When interocular distance must be reduced to such a point that the physical dimensions of the cameras do not permit a close enough interocular distance be-

tween the lenses, one camera is rotated 90 degrees and the image it shoots first passes through a prism, known as a beamsplitter, to direct it to the lens' new location. Since the cameras in the beamsplitter mode are only optically side-by-side, a minuscule interocular distance is possible.

Cayzer said, "Many existing 3D rigs are capable of only side-by-side or beamsplitter shooting, but not both. A Technica 3D rig can be reconfigured from side-by-side to beamsplitter, or vice-versa, in ten minutes or less."

Global TV's Andrew Quinn added, "Panavision set up all five rigs at our studios and conducted a very comprehensive programme of testing and configuration before setting off with the kit in our OB trucks to Melbourne. It was a major exercise and a very worthwhile one."

The testing also included a test transmission with a full 3D rig at Fox Sports' studios in Pyrmont, broadcast successfully to Fox Sports and Foxtel.

With all the testing successfully completed the equipment was driven to the Melbourne Cricket Ground (MCG) where the match was to be played. Panavision, alongside the crew from Global TV, set up and calibrated the cameras and lens controls for all five rigs. Fibre optic feeds from the cameras to the switchers were routed via a Sony MPE200 3D image processor and the 3D monitoring taken care of by a JVC 46-inch GD-463D10E 3D LCD screen installed in Global's award winning HD1 truck.

Andrew Timlin said, "We started rigging and plotting camera positions and cable runs about 7am on the day before the game. At 4pm we did a successful test record with the Australian team training in the background

With the final set-up complete the rigs were ready and the game began becoming the first ever live Australian sporting event to be broadcast in 3D.

Andrew Quinn commented, "It was a huge success and went even better than we anticipated. Hats off to Panavision, Fox Sports and all concerned. This is very much the future of 3D broadcasting."

Fox Sports Head of Technical Todd Proctor said, "The broadcast went out on FOX SPORTS 3HD (Channel 205) and was seamless. The reaction to the broadcast has been excellent to the point that we have recorded and broadcast a couple of other 3D projects with Panavision since. Thanks to Panavision and Global TV, 3D sports broadcasting in Australia is now not only possible but cost effective too."

Martin Cayzer concluded, "Putting together the first full 3D rigs for an Australian sporting broadcast was quite a challenge. Building up our local capability to make it commercially viable for both Global TV and Fox Sports was equally challenging and rewarding as we now see that it can be done. This is very much the future of sports broadcasting in Australia and we are delighted to be a part of it."



Panavision 3D rigs at the recent Australia versus New Zealand FIFA World Cup soccer build up match in Melbourne at the MCG.

