

More than just communications

Inside The P.A. People

By
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The PA People work around the globe, supplying highly complex communications systems for the largest events ever held. But they also rent belt packs and radios from their Rhodes complex in mid west Sydney. Sitting in between these extremes they design and install audio visual systems for venues and buildings across Australia.

It's a story about technical passion but also love of the show, understanding of theatre, and good old Australian ingenuity. Boss Chris Dodds is the kind of guy who likes to have a go.

It wasn't too long sitting in their meeting room before he leapt up, and swept down the stairs to the truck yard. It appears I just had to see something.

"This is my box", he declared, twisting open the side doors on a new 20' container. Inside are large objects with neatly fitted soft covers, a stack of risers, some electronics racks, and a couple of 250kg concrete ballast blocks.

Sure enough, the objects turn out to be the 3m tall stainless steel 'A O' elements with inbuilt LED screens that featured in so much of the footage of the iconic Australian Open tennis season early this year.

"They had a branding company design the new logo and in the presentation video they had these two huge letters, with video inside. They said 'we want exactly that', and started looking around for someone to build it", Chris explained, the words almost tumbling out in enthusiasm.

Tennis Australia bought the system that The PA People built, wholly within the Rhodes factory where they fabricate wood, metal, plastic and electronics. It's a man cave of epic proportions, with enthusiastic people multi-tasking to meet the current project challenge.

▶▶ AO sign Pre Shipment



THE COMMS WORLD



➤ Baku Opening Ceremony - Image Courtesy of Jo Nisbet

Every production company has a bunch of beltpacks and headsets, and a batch of radios. While PA People rent and sell these, it's on the complex gigs where they make their reputation. Because comms failure can maim or even kill a show, stone cold dead.

Take the huge arena ceremonies attached to major events like an Olympics. These are a virtual 'arms race' to complexity, each event endeavoring to exceed the previous. Such as Baku, home of the Inaugural European Games in 2015.

"It was the biggest comms system ever delivered anywhere", Campbell Waller (Manager, Event-Comms) said.

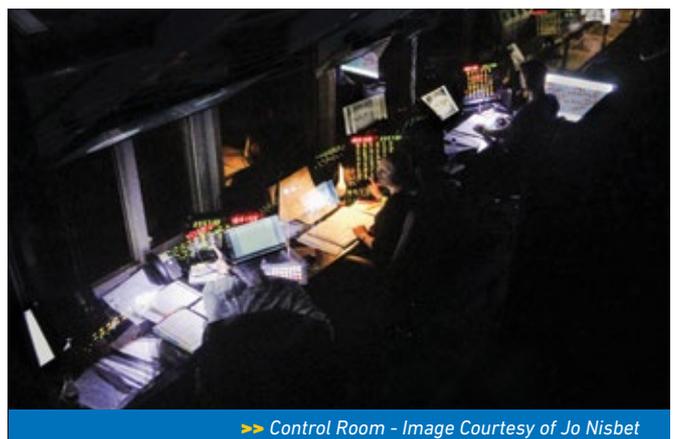
"So much RF hadn't been successfully done at this scale. We put a lot of effort in, with 30 racks of RF."

"There were five key elements", added Chris Dodds. "A big matrix intercom, 200 key stations, and 400 ports of things connected. Then a very large 2 way radio system: 40 duplex bases, and 56 simplex bases all in one room, plumbed together."

"It all went out on 4 antennas", said Campbell.



➤ Campbell Waller & Chris Dodds



➤ Control Room - Image Courtesy of Jo Nisbet

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Chris: "We regarded it as challenging, but we knew we could do it. The tech team on this job pushed for what they believed they could deliver. We had 1,200 2 way radios, plus some people on party lines, which means there were 1,500 people directly related, plus the 6,000 cast on fm receivers (which requires changing the batteries 4 times!). On top of the 200 matrix stations, there were 150 digital party line belt packs, and 80 full duplex packs."

Campbell: "Plus a CCTV system for the venue that was 46 cameras, with 50 people viewing."

Chris: "We have the biggest ClearCom rental inventory, fullstop."

Campbell: "But we can help a TD that wants 6 belt packs and 10 radios, that is what we do."

PUTTING IT ALL TOGETHER

Chris: " We can integrate a small system. Anyone can buy equipment – we bring integration not just at a technical level but also at a conceptual level – we're theatre people. We understand what the gig is about."

Campbell: "At a large scale there can be simplistic things – all that gear needs to be air-conditioned, and that's out of our scope. Our gear at Baku was on 40kva of UPS (uninterruptible power supply) which gave us 1 hour if the power failed. Power comes on dual feeds. But Radio interference - that is a massive challenge. High quality filtering mitigates that – even in-ear monitor transmitters can cause interference to us – we have to fault-find on the ground."

>> Gear - Image Courtesy of Jo Nisbet



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Chris: "After all the RF surveys had been done, we've found all the spectrum available, then maybe a Government at an event country decides to do digital TV testing! That's happened. We go back and impress on them that they need to stop until the event is over. So they cancelled the TV licenses until we could do the ceremony."

Campbell: "We've had a pirate FM station just start up somewhere near. Because they can! We had that in Athens, on one of our frequencies! Comms is the only department to integrate with every other department – other than finance. The comms work 24/7. They might have finished a rehearsal, then they want to do pyro test. We are the critical part of the service."

Chris: "Redundancy is critical."

Campbell: "An example, in the middle east in Qatar for the Asian Games in 2006, it almost never rains. But 4 feet of water filled the moat we were in. We saw the weather

coming, and got the gear lifted up".

Chris: "In Baku, it was very windy and dusty."

Campbell: "Our gear is always covered in dust – airflow management is part of the design. Along with redundant fibre loops, and the UPS protected remote racks".

Chris: "All our gear sits on an Ethernet backbone. By default we are network specialists, we move audio, video, we move all the comms and every other thing all on our system. In most jurisdictions we build relationships. They say things can't be done, and we show them it can be done. We have to work closely with the government."

Campbell: "It's all complex. The advantage we have is we can do it all – design and construct - in house. We literally think outside the square, to get to the technical and creative solutions. It's a big part of what we do."

CHALLENGES!

Campbell: "So many challenges. Freight lead times, being in Australia, and utilization at scale."

Chris: "Even if we did every major gig in the world, we would still only get 30% utilization for our gear".

Campbell: "The Ceremony component of major events is scaling back a little, in terms of overall budgets."

Chris: "They have to ask themselves, is the country showcasing itself, or just doing an event?"

Campbell: "We do heaps locally too. Take the recent job we did for TP Group at Luna Park in Sydney, it was 3 nights

on site, with boats on harbor, and comms to all the tech departments along with general distribution across the site. Great execution, and cost effective too. We met them early with a list of gear and helped them pull it together. Having guys exposed to really big events helps – we talk at the level where we're part of the solution."

Chris: "The City of Sydney New Years Eve fireworks, we won a 5 year tender and just won another. The system now bears very little resemblance to what we started with. We install systems. We operate systems. We maintain systems. We know the challenges of a day-to-day operation."

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