



PLANES EXTEND COVERAGE AT IRONMAN 70.3



Customer

Ironman 70.3

Industry

Event management

Technology Partner

Motorola Rental Solutions

Need

- A reliable communications system across a large area of poor RF penetration

Benefits

- Reliable, broad coverage
- Better safety for all participants
- Long battery life

“We needed to make sure coverage extended over the whole course, even where the densely forested tuart area effected coverage of the bike course. So Motorola Rental Solutions came up with the solution – an elevated work platform (EWP).”

Paul Groeneveld, operations manager, Ironman 70.3 Busselton

The Ironman 70.3 Busselton is a long distance triathlon race held annually in Busselton, Western Australia. As one of the flattest courses in the global Ironman circuit, the site is renowned worldwide for achieving a personal best.

Such a well-known event must also provide the best communications and safety in order to proceed without a hitch.

Motorola Rental Solutions is proud to be a long-standing partner of the Ironman 70.3, providing a digital communications solution for various events. This solution, however, has turned out to be more than a simple matter of hiring equipment.

One event course covers at least 50 kilometres when each swim, bike and run leg is included. The bike leg takes athletes 30 kilometres out of Busselton, through Tuart Forest National Park. The tuart (eucalyptus) forest is so incredibly dense that radio frequency cannot penetrate adequately through this area.

Despite these challenges, coverage is “paramount” for the safety of all participants and organisers, says Paul Groeneveld, operations manager for the Ironman 70.3 Busselton.

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The EWP is almost 40 metres high, and is designed to extend above the tuart trees, providing a radio frequency footprint larger than necessary and delivering a greater coverage span. The platform contains two repeaters operating in Capacity Plus creating a scalable, single-site digital trunking solution. Capacity Plus expands the capacity of a MOTOTRBO communication system even further. Over a thousand radio users can quickly and efficiently share business-critical voice and data communication on the same system without having to add new frequencies.

Other equipment provided by Motorola Rental Solutions includes MOTOTRBO digital mobile and portable radios, which are used by the events operation centre, traffic management teams, marshals and medical staff. All parties involved can easily and quickly contact each other, especially in case of an incident. Having such reliable coverage and effective communication has subsequently improved safety for athletes, staff and volunteers.

Another challenge was solved by Motorola Rental Solutions when two events ran back-to-back two years ago. The Ironman 70.3 preceded the second event, Wings for Life, so much of the existing infrastructure was reused. However, the course for Wings for Life extended even further into the densely forested area, where coverage was still unreliable and unattainable with an EWP.

“Our Rentals architect came up with the idea of utilising two planes, which worked perfectly,” says Groeneveld.

So exactly how did two planes extend radio coverage into a forest?

Motorola Rental Solutions partnered with Blacktree Technology to commission and install one Capacity Plus repeater into each plane. One plane could stay in the air for four hours before running out of fuel, so just prior to that point, the second plane flew nearby. Simultaneously the repeater in the first plane was switched off while the second repeater in the fresh plane was switched on. This innovative approach achieved a seamless changeover and ensured continual coverage.

For such long shifts, great battery life is essential. “At most events we can use a radio for the whole day with one battery, especially important for those on the road who don’t have the opportunity to switch over. I am very confident that the batteries will last for a day,” says Groeneveld.



CASE STUDY: MOTOTRBO TWO-WAY RADIOS AND CAPACITY PLUS

Ironman 70.3



Another great feature in use is TX (transmission) interrupt, whereby an operator in the operations centre can dekey a radio from within the centre in order to take a priority call. This ensures the event operator can still communicate with those radios who are on the same talkgroup.

When questioned about working with Motorola Rental Solutions, Groeneveld is very positive: "We have worked with Motorola Rental Solutions for a long time, which is testament to the team and their work. Their customer service is second to none, and I am looking forward to continuing to work with them," he concludes.



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