

# Fire and Emergency Services Authority

## Western Australia

### Case Study



#### THE CUSTOMER

Fire and Emergency Services Authority of Western Australia (FESA) bring together the Fire and Rescue Service, Bush Fire Service, State Emergency Service, Volunteer Marine Rescue Services, Emergency Management Services, Community Safety Services. It has 30,000 emergency service volunteers and 900 career fire fighters across 965,255 square miles (2.5 million square kilometers).

#### SITUATION

Prior to the establishment of FESA, individual services operated radio communications on different networks which were experiencing network congestion.

Lack of interoperability between FESA divisions, Department of Environment and Conservation (DEC) and other emergency services throughout Western Australia was an issue raised in numerous post-emergency incident reviews, reports and coroner inquiries.

FESA needed to consolidate operational radio networks to VHF High Band or UHF, while incorporating UHF CB channels so that all services could communicate throughout the state. This required dual band radios in each vehicle to provide access to both UHF and VHF networks.

They also considered including Radio over Internet Protocol (RoIP) to extend radio voice and control signals over their Wide Area Network.

**“It was pure magic to have Sea Rescue, SES and Police all talking on common ground. Before, we had to station an SES vehicle on top of a hill and (manually) relay messages.**

**Now a vehicle can be stationed and used as a repeater and release manpower to other areas... which is always at a premium.”**

Alec Cull ESM - Operations Officer  
Peaceful Bay Sea Rescue Group

## RESPONSE

Tait and FESA worked together to improve the safety of FESA staff and volunteers and streamline radio communications.

Tait created two dual-band radios with different colored control heads (green and yellow) so users could easily identify the correct radio. The volume level can be different in the two radios so users can tell which radio the communications were coming through, without compromising the audio clarity. The radios can work in cross band mode, which can extend coverage and minimize the impact of dead spots.

GPS data is appended to every dual band radio message for vehicle location tracking. With RoIP vehicles can be tracked state wide, ultimately improving staff safety and emergency response coordination.

With temperatures up to 176°F (80°C) inside the vehicles, Tait developed a high-temperature display so the mobile screen can be easily viewed despite the heat or bright sunlight.

## OUTCOME

FESA has been able to stage costs over a number of years with a phased rollout. Tait guarantees that the first TM8000 radio would be identical to the last, even if new functionality is added.

## MORE INFORMATION

For news, product specifications, comprehensive technical information and contact details of your nearest Tait service facility, please visit [www.taitradio.com](http://www.taitradio.com)

## CUSTOMER PROFILE

FESA is Western Australia's peak emergency response coordination authority incorporating 30,000 emergency service volunteers.

## APPLICATIONS

- ▶ UHF/VHF dual band radios

## BUSINESS BENEFITS

- ▶ Interoperability between multiple agencies
- ▶ Wider communications distribution provides maximum safety for FESA staff
- ▶ GPS to improve staff safety and response accuracy to fires
- ▶ Custom high temperature display option for improved performance in hot environments
- ▶ In-vehicle cross-band repeating aids incident communications management and minimizes dead spots
- ▶ Enables FESA to share volunteer communications resources across the services
- ▶ State-wide AVL capability via RoIP

## PRODUCTS USED

- ▶ Tait TM8000 mobile radios

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Tait is a global leader in designing, delivering and managing innovative communication solutions that help utilities and public safety organizations to keep the lights on and communities safe.

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