Airservices Australia
Australia

Case Study

THE CUSTOMER

From the ground up, Airservices Australia (Airservices) does it all; from providing safe and environmentally sound air traffic control management to airside services for the nation's busiest airports.

Aviation Rescue and Fire Fighting (ARFF) is one of Airservices' most important roles and is one of the world's largest providers of ARFF services.

SITUATION

Two primary factors drove Airservices to upgrade their aging radio network at 19 ARFF services locations Australia-wide. Firstly, Airservices needed to improve incident response times in order to meet Civil Aviation Safety Authority (CASA) standards. Incident response times were directly impacted by the communications systems in use. Secondly the maintenance costs associated with running an obsolete system were continually increasing and becoming more difficult to manage.

Other requirements included improved user familiarity, voice clarity and coverage, Intrinsically Safe (IS) portable radios, improved connectivity between sites and interoperability with other government agencies at select sites.

RESPONSE

Vertel, acting as prime contractor and systems integrator, designed a solution to meet the long-term requirements of ARFF. The contract to upgrade Airservices communication systems across the 19 locations comprised Tait P25 digital radios, Australian Standards compliant ICOM airband equipment, on-site user training, and both corrective and preventative maintenance agreement.

The built-in Ethernet interface provided the ability to be notified of and diagnose any problems that might arise from a remote location.

Vertel interfaced the new communications equipment to ARFF systems such as voice recorders, PA systems and ASA WAN, in Fire Control Towers and a variety of operational appliances.

It is important for Airservices employees to be able to clearly hear a request from someone standing next to a jet engine, when hose pumps are operating or sirens are blaring. Digital mobile and portable radios provide this very real benefit, which is critical in emergency situations when lives depend on communication and response times. Vertel selected Tait P25 digital radios in a solution to meet Airservices' requirements. P25 digital technology effectively filters out background noise and maintains speech audio clarity right to the edge of the radio coverage area.

The Tait P25 TB9100's voice over IP (VoIP) Ethernet network interface allowed for multiple sites to be linked together via Airservices' existing local area network. When a call is made, the base stations operating on that channel at each site receive and compare the signal. The base station with the best quality signal then instantly retransmits across all sites in that network.

CASA standards require that portable radios used around aircraft and aviation fuel must be Intrinsically Safe (IS). Tait P25 TP9160 IS portable radios were chosen to meet CASA's safety requirements.

OUTCOME

In the event of a runway emergency, Airservices are the first responders and will often need to coordinate and communicate with other government agencies. Tait P25 equipment has the ability to interoperate with other conventional analog radios, as well as other agencies using P25 digital radios, making multi-agency communications for airport operations easier than before.

Airservices can now link the radio sites from each airport together and monitor all channels from any location with access to the IP network, thanks to the built-in Ethernet interface on the repeater equipment. This provides Airservices and Vertel the ability to be notified of and diagnose any problems that might arise from a remote location, reducing maintenance costs and system downtime.

Airservices required ongoing system support and Vertel was chosen to provide a one-stop-shop for their communications needs. Airservices' requirements have been met with a complete solution including extensive system design and installation, product training and ongoing support.

MORE INFORMATION

For news, product specifications, comprehensive technical information and contact details of your nearest Tait service facility, please visit www.taitradio.com

CUSTOMER PROFILE

Airservices Australia is a government-owned corporation that provides airside services for Australia's busiest airports. One of Airservices' most important roles is Aviation Rescue and Fire Fighting (ARFF) – protecting the people and property at the airport.

APPLICATIONS

▶ Tait P25 digital system

BUSINESS BENEFITS

▶ Improving clarity and coverage

▶ Improving safety

▶ Interoperability

▶ Better coordination with other government agencies

▶ Improving connectivity

▶ System support