

Relevant technologies for real people

Secure and Instant Digital Two-Way Radio for Australia's Newest International Airport

Wagners appointed Comtel to provide a turnkey digital radio system for their greenfield airport and business park. Comtel planned, engineered, supplied and installed two-way radio infrastructure for the whole site.

Comtel's experience in airport communications ensured the digital radio system delivered the highest levels of safety, security and reliability.

THE CHALLENGE

The Brisbane West Wellcamp Airport is the first greenfield airport developed in Australia in nearly 50 years. The new Toowoomba airport connects domestic and international passengers and cargo to south western Queensland's mining and agricultural hub.

The owner-developer of the site, Wagners needed an experienced radio communications specialist to provide a turn-key two-way radio solution for the airport and associated business park. They needed someone with experience in engineering highly complex aviation radio infrastructure. The supplier needed to work with them on the ground throughout the construction, commissioning and operational phases.

Wagners are the first private developers in Australia to undertake an airport of this size and scale. They needed to implement a radio system that could meet the critical requirements for domestic and international flights. As well as a system that would be flexible enough to respond to future development of the airport and surrounding business park.

THE COMTEL SOLUTION

Comtel's strong local presence and experience with aviation radio communication infrastructure saw the company implement a closed-group digital radio communications system consisting of a main and a standby system guaranteeing 100% reliability.

The infrastructure is comprised of a digital base station, handsets, headsets, mobile equipment radios, plus local repeaters across the airport and business park. An aviation base station was integrated for plane arrivals and departures.

Comtel's closed two-way radio system provides workplace efficiency by integrating a large number of operational areas; security, baggage handling and tracking, customs inspection, air traffic control, emergency response, shuttle services, check in and boarding procedures, maintenance and infrastructure services, customer support, car park and fleet management.

Comtel continues to service, train and assist the Airport through its ongoing expansion.

OUR CLIENT

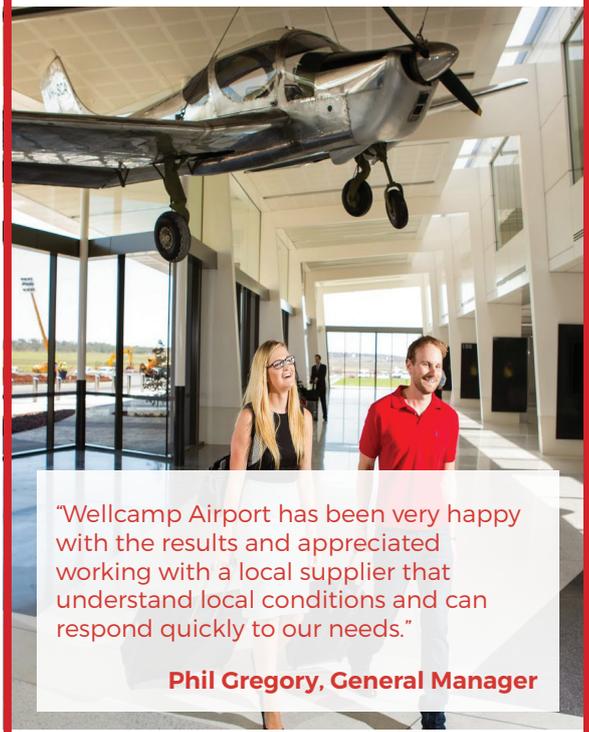
Brisbane West Wellcamp Airport and Business Park

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| Devices: | ~ 30 |
| Industry: | Aviation |
| # of Sites: | 1 |
| Special Requirements: | High-noise areas, tight security and emergency response. |

The airport and business park was opened in November 2014. It is the first major greenfield public airport development in Australia since Melbourne Airport opened in 1970. It is also the first privately funded major airport in Australia.

Owned by Wagners, the airport services domestic and international passengers and cargo.

www.wellcamp.com.au



"Wellcamp Airport has been very happy with the results and appreciated working with a local supplier that understand local conditions and can respond quickly to our needs."

Phil Gregory, General Manager

IMPLEMENTATION

Working to a tight schedule, Comtel completed project planning, execution and acceptance testing on time and on budget. Being based locally meant Comtel was highly involved in each stage of the system commissioning.

Comtel undertook a staged implementation program starting with local on site communications for the construction phase. During this period Comtel demonstrated to Wagners the significant level of audio quality required in high noise areas. Comtel also mapped a detailed digital security footprint to ensure the system could block any potential interference.

Once the system specification was finalised Comtel worked in partnership with Wagners to:

1. Facilitate the Australian Communications and Media Authority Application for UHF and VHF radio frequencies. This needed careful consideration given the proximity to an existing airport and Royal Australian Air Force base.
2. Infrastructure installation was staged alongside the construction program.
3. Detailed testing and scenario planning was undertaken to ensure all operational areas and emergency response were covered.
4. Continuous improvement reviews were undertaken during the opening phase.

Comtel was committed to delivering seamless communication throughout the project's development. Comtel engineers were on site to support Brisbane West Wellcamp Airport staff during all major milestones such as the first domestic flight and international cargo delivery.

BUSINESS RESULTS

Wagners chose Comtel due to the company's many years of experience in providing high-end airport traffic control radio systems. Combined with Comtel's local presence a highly customised and quality two-way digital radio system was delivered.

Comtel new the importance of supporting the two-way radio system with quality equipment for rapid, loud and clear communications in all environments. The focus on quality equipment has delivered exceptional reliability, security and reduced life cycle costs through greater durability in handsets and other equipment.

Key benefits of the Comtel two-way digital radio system include:

- ☑ Equipment with noise-reduction technology for air traffic and surrounding equipment to optimize ground staff voice clarity.
- ☑ Multiple communication paths to provide direct connection and optimise communications between different operational areas such as air traffic controllers, shuttle operates and flight crews.
- ☑ Fixed radio communications for mobile equipment that also provides location tracking.
- ☑ Ongoing support for increasing domestic and international services.

TECHNOLOGY



MOTOROLA

ICOM



Motorola Digital Handsets provide simultaneous talking paths while reducing external background noises.



Heavy-duty noise canceling digital headsets for increased protection and clarity in high noise areas.

"Motorola are the de facto supplier for International Airports globally and Comtel are our preferred partner with a proven record of infrastructure and application deployment. We had absolute confidence in the ability of Comtel."

Phil Gregory,
General Manager