Frequentis modernises the U.S. Army Air Traffic Control voice communications systems



The success of any U.S. Army mission is dependent upon effective, timely, and secure communications. In Army aviation operations, this is vital for the safety of personnel and protection of mission assets. Maintaining reliable, mission critical communications infrastructure in the Army Air Traffic Control (ATC) environment includes a robust, voice communications platform for ground-to-ground and air to-ground communications and a system that can evolve with Army aviation requirements and the evolution of technology.

Under a multi-year Interim Voice Switch Replacement (IVSR) contract, Frequentis is replacing the Army's Enhanced Terminal Voice Switch (ETVS), Small Digital Voice Switch (SDVS), and Small Tower Voice Switch (STVS) systems at air traffic control towers (ATCTs) and terminal radar approach control facilities across the US and U.S. Army locations locally.

Frequentis has so far modernized systems at more than 50 sites, of which the largest installation is at Fort Rucker Cairns ATCT and Cairns Army Radar Approach Control (ARAC).

Client profile

United States Army, www.army.mil

Business situation

To reduce operational risk, the U.S. Army sought to modernise its unsupportable ETVS, SDVS, STVS voice communications systems at its ATC facilities with minimal disruption to operations.

Solution

The U.S. Army engaged Frequentis to install, test and deploy 90 FAA accepted, scalable voice communications systems, and effect a seamless transition to the new voice switch technology.

Impact

- Enhanced resilience of voice communications with future-proof, robust technology roadmap
- Improved efficiency by streamlining air traffic control workflows
- Established US Government logistics program reinforced by certified maintenance training
- Preserved exceptional service continuity through no-downtime implementations

"We are extremely pleased that Controllers in the Cairns ARAC and Hub were able to go to work with all IVSR positions installed, and 100 percent of the radios and phones working and that there was no impact to operations during the entire four-week installation."

Lyle Voyles, Program Integrator, Fixed Base ATC Equipment Product Manager, Air Traffic Control (PM ATC)



Entering a new communications era



Evolving technology platforms

For organisations with 24/7 safety-critical operations such as the U.S. Army, it can be a challenge to navigate change. Any updates to technology must be handled without interruption to services.

The Army selected an IVSR solution based on the market-leading Frequentis VCS3020X product line. The VCS3020X provides an optimal mix of proven architecture with cutting-edge technology, enabling new operational concepts.

The VCS3020X has a strong legacy and a solid future with an installed base of over 25,000 working positions. In the last decade, the VCS3020X has gone through many technological and architectural advancements delivering superior performance and smooth implementation of VoIP in any IP VCS worldwide.

Achieving a seamless transformation

Located in Fort Rucker, Alabama, the U.S. Army Aviation Center of Excellence serves as a training and development base for Army Aviation officers and soldiers. With the center's voice communications systems out of support and fast approaching end of life, the U.S. Army sought replacement of their legacy systems. Frequentis replaced STVS systems at 16 stage fields, alongside five ETVS systems at four base fields. At the center's Cairns ARAC, Frequentis modernised the facility by updating 34 positions, 53 air-ground radios and 58 ground-ground telecommunications lines without any disruption to services. Eventually, Frequentis will deploy a total of 90 IVSR voice communications systems worldwide for the U.S. Army, with over 900 controller work positions with 1,530 radio frequencies and 1,162 telephone circuits.

Modernising with minimal disruption

The U.S. Army Aviation Center of Excellence achieved a business-as-usual transition to the Frequentis 3020X IVSR resilient voice communications system. The new solution incorporated a familiar Controller user-interface, enabling staff to continue with regular workflows.

The U.S. Army is using the Frequentis IVSRs to improve efficiency and benefit from ongoing logistics support. Frequentis is also training Army personnel in the operation and maintenance of the VCS.

As the U.S. Army continues to modernise its ATC voice communications systems partnering with Frequentis. The Government will equip the U.S. Army Forces with the reliable technology needed.

"This was a demanding and important project for the U.S. Army and we are pleased to have been able to successfully complete it in the required timeframe and without any service interruption to Cairns ARAC. We look forward to completing the remaining IVSR installations for the U.S. Army, supporting the mission of training Aviation Officers and pilots while modernising the ATC communications at all Army bases."

Leonard Swiontek, President of Frequentis USA, Inc.



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FREQUENTIS AG

Innovationsstraße 1 1100 Vienna, Austria Tel: +43-1-811 50-0 www.frequentis.com