AT A GLANCE

► **Customer**: Embraer Defense & Security
► **Task**: In the development of airborne communications, particularly for close air support (CAS) and armed reconnaissance missions, airborne transceivers must provide secure communications interfaces
► **Solution**: A unique transceiver from the SOVERON® airborne radio family was developed to be fully operational in difficult environments and interoperable within a network centric environment and provide reliable and secure radio communications links
► **Key benefit**: This SOVERON® airborne radio family transceiver provides national data links for real-time, jam-resistant and secure transfer of data, voice and navigation information between widely dispersed elements

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**The customer/platform**
The A-29 Super Tucano from Embraer is a turboprop light attack aircraft that can provide basic and advanced pilot training, while also serving as a counterinsurgency (COIN), border patrol and surveillance aircraft. It was designed as an inexpensive system to be operated in low-threat environments.

**Customer situation and requirement**
The A-29 Super Tucano has enjoyed international success as a multi-mission platform for close air support (CAS), armed reconnaissance and advanced training missions. It can operate from remote and unpaved runways for border surveillance, law enforcement or COIN missions. Operationally proven, it is used by over 15 air forces around the world.

**Rohde & Schwarz solution**
The A-29 Super Tucano comes with up to two R&S®MR6000R VHF/UHF airborne transceivers from the SOVERON® airborne radio family. They come in a very compact ARC-164 housing and have integrated frequency hopping and encryption for secure tactical radiocommunications with ground troops along with 8.33 kHz ATC channel spacing. R&S®SECOS is a secure digital voice and data system with COMSEC/TRANSEC capabilities and embedded black key loading.
“The airborne transceiver meets the toughest air force requirements and is well suited for use in COIN applications and can establish secure national and near real-time data link networks for information superiority in mission-critical environments.”

Igor Luvizeto, Head of Secure Communications at Rohde & Schwarz Brazil

Results and achievements
Other versions of this transceiver support NATO HAVE QUICK II and SATURN frequency algorithms for interoperability in allied operations. Software downloads enable the transceivers to implement important functions during a mission. Almost 8000 radios from the SOVERON® radio family are in use worldwide on over 70 different airborne platforms.

Product
The R&S®MR6000R is part of the SOVERON® family of radios and designed for installation in the avionic bay and is remotely controlled. Despite weighing less than 4 kg, the R&S®MR6000R offers outstanding reception and transmission performance, and multiple frequency hopping methods: HAVE QUICK II/SATURN or HAVE QUICK II, SATURN and R&S®SECOS in a single device, as well as highly secure embedded R&S®SECOS encryption.