ROHDE&SCHWARZ

Make ideas real



THE SOVERON AIRBORNE RADIO FAMILY AND THE T-7A

Assuring ease of integration

AT A GLANCE

- ► Customer: Boeing
- ► Task: Development of secure airborne communications for the new Boeing T-7A Red Hawk advanced pilot training system
- ► Challenge: The aircraft's airborne communications need to meet the small size, lightweight and low power requirements of the training aircraft
- ➤ Solution: The SOVERON airborne radio family was developed to meet all size, weight and power requirements and MIL standards of any aircraft
- ► Key benefit: The SOVERON airborne radio family was designed to ease integration thanks to the continuous exchange of expertise with industrial partners, qualifications (MIL standards), minimizing EMC risks and other platform-specific requirements



The customer

Manufactured by Boeing and its risk sharing teammate Saab, the T-7A Red Hawk is an all-new purpose built training system designed for the mission, giving the U.S. Air Force a flexible design that can easily adapt as technologies and training needs evolve.

Customer situation and requirement

The T-7A Red Hawk is the new advanced pilot training system for the U.S. Air Force that will train the next generation of pilots for decades to come. Boeing was awarded a \$9.2 billion contract for 351 T-7A aircraft, 46 simulators and associated ground equipment to be delivered and installed, replacing Air Education and Training Command's 57-year-old fleet of T-38C Talons.

Rohde & Schwarz solution

Each T-7A Red Hawk advanced pilot training system will be equipped with two R&S®MR6000R VHF/UHF airborne transceivers of the SOVERON family. It meets the aircraft's small size, lightweight and low power requirements, weighing less than four kilograms. It furthermore covers the frequency range from 30 MHz to 400 MHz and supports the NATO frequency algorithms HAVE QUICKII for interoperability and digital fast frequency hopping standard SATURN.





"This cooperation is the culmination of years of unwavering teamwork by Boeing and Rohde & Schwarz. Along with updated technology and performance capabilities, the T-7A will be fitted with an enhanced radio communications suite, giving it an added benefit, preparing pilots for fifth-generation aircraft. We are looking forward to working with Rohde & Schwarz on this very important project, as well as future opportunities."



Michael Hofstetter, Vice President, Boeing Defense & Space, German

Results and achievements

In 2019, the aircraft manufacturer signed a framework agreement with Rohde & Schwarz. Under this agreement, the R&S®MR6000R VHF/UHF airborne transceiver, will be standard equipment for T-7A. Each aircraft will be equipped with one of these radios. Rohde & Schwarz has delivered the first VHF/UHF airborne transceivers for the T-7A test aircraft in 2015. The first test aircraft were flying with the radio in 2019.

Almost 8500 radios from the SOVERON airborne radio family are in use worldwide on over 70 different platforms.

Product

The R&S®MR6000R, part of the SOVERON radio family, is 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 a choice of frequency hopping methods: HAVE QUICKII/SATURN or HAVE QUICKII, SATURN and R&S®SECOS in a single device, as well as highly secure embedded R&S®SECOS encryption.

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