

ROHDE & SCHWARZ

Make ideas real



THE SOVERON AIRBORNE RADIO FAMILY AND THE F-16

Combines ease of integration with high technology

AT A GLANCE

- ▶ **Customer:** Lockheed Martin
- ▶ **Task:** Integration of secure airborne communications for the F-16 Block 70/72 multirole fighter aircraft
- ▶ **Challenge:** Radiocommunications equipment requiring full operational capability at extreme altitudes and temperatures as well as ease of integration
- ▶ **Solution:** The SOVERON airborne radio family was designed for secure transmission of voice and data communications to prevent eavesdropping and circumvent jamming at extreme altitudes and temperatures
- ▶ **Key benefit:** The SOVERON airborne radio family combines ease of integration through its small form factor and low weight with high technology



Photo: Lockheed Martin

The customer

The Lockheed Martin F-16 Block 70/72 aircraft is the latest and most advanced F-16 production configuration. It provides a new aircraft structure that lasts 50% longer than previous F-16 production aircraft and offers advanced interoperable capabilities that enhance partnerships with allies. New production F-16s leverage structural and capability upgrades that ensure the international F-16 fleet can operate to 2060 and beyond.

Customer situation and requirement

The Lockheed Martin F-16 Block 70/72 aircraft is designed to interoperate with fifth-generation fighters better than previous F-16 production aircraft, and will become the new F-16 baseline. The fighter jet can be deployed in suppression of enemy air defenses (SEAD) missions, air-to-ground and air-to-air combat and deep interdiction missions.

Rohde & Schwarz solution

The R&S®MR6000R/R&S®MR6000L radios are designed to either be installed in the avionic bay or controlled locally by the pilot. The radios ensure ease of integration thanks to their small form factor, low weight and standardized ARC-164 housing. The R&S®MR6000R/R&S®MR6000L radios are part of the SOVERON radio family. The radios feature embedded encryption and a tactical VHF frequency range for communications with ground troops as well as direction finding and homing support for locating transmitters in the VHF and UHF frequency ranges.

For more information, visit
www.rohde-schwarz.com





Results and achievements

Lockheed Martin selected Rohde & Schwarz as the preferred supplier of airborne radiocommunications for new production F-16 Block 70/72 aircraft. The SOVERON airborne radios are a game changer for any air force that flies the F-16, since the radio's excellent capabilities and RF characteristics make it suitable for applications in military environments, including all types of airborne platforms.

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

Product

The independent company's R&S®MR6000R/ R&S®MR6000L radio, part of the SOVERON family of radios, consists of two transceivers:

- ▶ A remote controlled transceiver installed in the avionics bay
- ▶ A transceiver in the cockpit accessible by a local control panel

Both cover the frequency range from 30 MHz to 400 MHz and support the NATO frequency hopping algorithms (TRANSEC) HAVE QUICK II and SATURN. Other variants for the export market feature R&S®SECOS, a proprietary TRANSEC and COMSEC capability.



The R&S®MR6000R/R&S®MR6000L radios are designed to either be installed in the avionics bay or controlled locally by the pilot.

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The SOVERON Airborne Radio Family and the F-16
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