

First-class solutions for the Defence Industry: Innovative electronic hardware and software for complex missions

f.u.n.k.e. AVIONICS is a certified and experienced partner for developing and producing complete electronic systems and equipment for aerospace and defence applications. We offer comprehensive turn-key solutions with full life-cycle support from specification, system design, hardware and software design, production and qualification to delivery, installation,

Services & Competences

- » Analogue & digital electronic hardware
- » Specific RF components and devices
- » Digital signal processing and RF signal generation
- » PCB layout

10+27

- » Microcontroller software
- » FPGA firmware development
- » Application software & apps

(3)

- » Measurement automatisation
- » EMC and mechanical environmental qualification (DO-160, MIL-STD-810, CE)
- » Compliance with software and electronic hardware guidelines for airborne systems up to DAL B (RTCA D0-178 & D0-254)
- » Accordance with Systems Engineering, Development and Safety processes (IEEE 15288, MIL-STD-882, SAE ARP4754 & SAE ARP4761)

operation support and maintenance. Our focus is finding optimal solutions for our customers' needs to ensure that highly demanding requirements are met. Based on our vast experience in numerous challenging military and civil aerospace projects, we ensure the provision of reliable and effective solutions meeting the highest quality standards.

Application examples

- » Mission Management Systems
- » Avionic Systems
- » Communication Subsystems
- » Radios and Transponders
- » Traffic Awareness Systems
- » Navigation Equipment (GNSS, SBAS, GBAS)

Certified by:









f.u.n.k.e. AVIONICS project references for defence & aerospace



Mission computer system for Airbus A310 MRTT / CC-150 tanker aircraft

Turnkey airborne mission planning and control system for air-to-air refuelling. f.u.n.k.e. AVIONICS developed and provided hard- and software for this highly complex avionics system which is in operation for over 10 years at the German and Canadian air forces.



PARALANDER navigation system for paratrooper and cargo parachutes

Mission planning and monitoring system including portable Mode S transponder and control software, developed on behalf of Airbus Defence and Space and in service for over 10 years at the German Army.



Management & Quality

- » Implementation of turnkey projects up to 3 M€ and 3 years duration plus after sales support
 » Management of projects and suppliers according
- to international quality standards (ISO9001, EN9100)



Design & Development

- » Radio frequency (RF) and electronic hardware systems incl. transponder and radar technologies
- » FPGA and VHDL code development for embedded systems (microcontroller) and applications for safety critical systems



Qualification & Certification

- » Environmental qualification in accordance to RTCA D0-160 (EMC, mechanical, environmental), RTCA D0-178 (software), RTCA D0-254 (hardware), ECSS, CE etc.
- » Certification for airworthy products



Development and implementation of a hardware-in-the-loop test rig for the military mission management system of the A400M military transport aircraft



Royal Air Force – adaptation and provision of transponders for Tucano training aircraft



Development and production of ground station equipment including signal generation and integrity monitoring devices



Development, qualification and production of a Link 22 device for series production which will be installed in military aircraft to allow the exchange of tactical data among the involved military units

HENSOLDT 1090 MHz frequency receiver



Support for remote operation of VHF radios and transponders onboard UAV

- Universität München UAV mission computer including AI technology
- VOLOCOPTER eVTOL data logging unit



Production & Assembly

» In-house assembly, integration and verification» In-house production



Requirements & Engineering

- » Tool-based engineering according to specific customer requirements
- Reliability, Availability, Maintainability, Safety (RAMS)



Maintenance & Support

» Logistics and supplier management

» Customer service, maintenance and repair Obsolescence management



Dr. Jörg Selle Director of Business Development

We would be happy to develop the right solution for you.

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