DO-178 Compliance for Advanced UAV Systems

Challenge:

Faced with a compressed schedule, software for TAI's ANKA UAV needed to be compliant with DO-178B processes including planning, requirements, design, coding, and integration processes and by using supporting development tools.

Solution:

The TAI development team chose VectorCAST/C++ together with the VectorCAST/RSP for the Green Hills tool chain to support their unit and integration testing. They also used VectorCAST/Cover to collect structural coverage during system testing.

Details:

Turkish Aerospace Industries (TAI), headquartered in Ankara, is Turkey's center of technology in design, modernization, manufacturing, and life cycle support of integrated aerospace and defense systems, from fixed and rotary wing air platforms to unmanned vehicles and space systems.

Designed and developed by Turkish Aerospace Industries (TAI), ANKA is a Medium Altitude Long Endurance (MALE) Unmanned Aerial Vehicle (UAV) system, primarily manufactured to meet the reconnaissance and surveillance requirements of the Turkish Armed Forces. The ANKA UAV system can perform day and night, all weather Intelligence, Surveillance, Reconnaissance (ISR) missions, tracking of fixed and stationary targets, Signals Intelligence (SIGINT) and communications relay.

Turkish Aerospace Industries chose VectorCAST/C++ and VectorCAST/RSP to support their unit and integration testing and VectorCAST/Cover to collect structural coverage during system testing.

Turkish Aerospace Industries Inc.