Keynote

Avionic Systems Overview

Armando Carbonari
Avionic Systems Engineering Manager, Embraer, Defense Projects
São José dos Campos, Brazil

ABSTRACT

The word "Avionics" is a contraction of aviation-electronics and is the term used for the electronic and electrical systems on aircraft. Today these systems are a complex mix of computers, sensors, actuators, and control and display units that have to be interconnected and integrated within a very compact space. They have to work to in real time whilst maintaining high standards of safety and reliability in a high stress environment. Avionic Systems play an increasingly important and central role in modern aircraft. As technology has advanced, the requirements placed on these systems have increased. This talk will provide an overview of Avionic Systems Architectures, the development process for system, hardware, firmware, and software and how they are integrated and tested in both civil and military aircraft.