

# **Software FMS**

### Next-Generation Scalable Flight Management System

The CMC Electronics Software FMS (SW FMS) is a next-generation scalable flight management system designed for use within Modular Open System Architectures (MOSA) and Future Airborne Capability Environments (FACE).

The core RNP/RNAV functions leverage more than 30 years of experience and proven, in-service history on a wide range of fixed wing and rotary wing aircraft for both civil and military applications. Compliance with the latest civil standards enables aircraft to fly in civil airspace, while also reducing operating costs by flying on more precise routes and by minimizing missed approaches.

The SW FMS is the perfect RNP/RNAV solution to bring civil certifiable navigation functions to military aircraft or as a standalone navigation solution on civil aircraft. In addition, the civil navigation capabilities can be augmented with a broad set of specialized tactical functions optimized to reduce pilot workload at critical moments.

#### **FEATURES**

- SW FMS components are designed following Modular Open System Architecture (MOSA) principles and aligned with the ARINC 653 standard, enabling independence from a specific hardware platform
- Flight Management Function (FMF) component decoupled from the Pilot Vehicle Interface (PVI) via Application Programming Interface. FMF and PVI offered as separate Units of Portability (UoP) when used within a FACE environment
- Customizable Application Programming Interface (API) facilitates FMF integration with 3rd-party applications
- Meets PBN airspace requirements and full RNP/RNAV capability worldwide (RNAV 2, RNAV1, RNP 4, RNP2, RNP1, RNP 0.3, RNP APCH (LNAV, LNAV/VNAV and LP/LPV)
- Meets the requirements of TSO-C115D/DO- 283B Class B and TSO-C146D/DO-229D Class Gamma 3 for approach operations





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#### **RNP/RNAV FLIGHT MANAGEMENT CORE FUNCTIONS**

- Multi-sensor navigation (GPS, DME/DME, VOR/DME, IRS, TACAN, ...)
- Flight planning
- Navigation database generated as per DO-200B
- Company, custom and user databases
- Trajectory predictions and guidance

#### PILOT VEHICLE INTERFACE (USER INTERFACE)

- Touch-screen interface for minimal training and quick function access
- Supports multiple display types (multifunction display with or without line select keys, touch-screen control unit, large area display...)
- · User interface customization via API to adapt to different cockpit environments

#### **RADIO MANAGEMENT FUNCTIONS**

Radio management capabilities can be added to the flight management function. The radio management function can tune and provide status on a wide range of radios, e.g. for navigation, communication and transponders.

#### EXTENDED CONFIGURABLE FUNCTIONS

Extended tactical and helicopter functions can be added to the core flight management function to expand the capabilities to meet the needs of specialized missions. Extended FMS functions are designed to reduce crew workload and to provide improved situational awareness.



**Route Definition** 

Legs Page

Flight Monitoring During Approach Radio Summary



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