

Avionics Upgrade Program (AUP)



FOR *canadair* CL-215T & CL-415 AIRCRAFT

The Avionics Upgrade Program (AUP) for the Canadair CL-215T & CL-415 aircraft combines the latest technology in communications, navigation, surveillance and air-traffic management functionality in a single platform featuring the Collins Pro Line Fusion® avionics suite, and will address supportability and end-of-life component challenges inherent with aging aircraft systems.

Utilizing the Collins Pro Line Fusion® avionics suite, a FAR/PART 25 certified, scalable software-based system with flexible architecture, the avionics suite will utilize modern and reliable COTS systems that will easily interface with specialized mission equipment. The system is designed as a complete integrated solution for a harmonized cockpit that will not only meet current regulatory requirements, but also address future operational and technical requirements over a +25 year horizon.

- Program to be done in conjunction with a Canadian integrator for the integration and certification of the AUP
- Early installation slots or kit deliveries schedule available
- Certification planned for 2021

Operators will now have a new aftermarket option for taking advantage of airspace enhancements while adding the many other benefits of Pro Line Fusion®.

New features designed to improve situational awareness and reduce pilot workload with the Collins Pro Line Fusion® upgrade include:

- The ability to operate in new global airspace with localized performance, including vertical guidance (LPV) approaches, ADS-B mandate compliance options and SBAS capable GNSS
- Market-leading high-resolution synthetic vision standard in the core configuration, to improve safety and mobility during operations in varying topography
- Three 14.1-inch touchscreen LCD displays with advanced graphics, configurable windows, and point-and-click navigation (aircraft systems also accessible via Multi-Function Keyboard Panel and Cursor Control)
- Touch-interactive maps with high-resolution topography, weather, and obstacles plus geo-referenced electronic charts displaying aircraft position





The avionic suite core configuration will comply with most operational requirements around the world, and includes:

CORE CONFIGURATION

- Multi-Function Keyboard Panel and dual Cursor Control
- Electronic Flight Instrument Display System (EFIDS)
 - Dual Primary Flight Displays (PFD)
 - Single Multi-Functional Displays (MFD)
 - Flight director, Guidance Control Panels
 - Engine & Fuel Indication
 - Hydraulic Indication
 - Control Surface Position & Trim Indication
 - Communications, Navigation, Surveillance Information
 - Crew Alerting Systems (Caution Warning System)
 - Enhanced mapping
- Synthetic Vision
- Single Electronic Standby Instrument System (ESIS)
- Interphone Communications System
- Dual VHF Radio – Voice (8.33KHz/25KHz)
- Emergency Locator Transmitter (ELT) 406MHz
- Single Nav aids (ADF/DME)
- Dual Nav aids (VOR/ILS/MB)
- Single Radio Altimeter
- Dual Air Data Computer
- Dual Attitude Heading Reference System
- Dual Global Positioning System (GPS) – SBAS
- Flight Management System (FMS)
- Navigation Performance (RNP/RNAV/LNAV/VNAV)
 - Precision Approach (ILS)
 - Non-Precision Approach (VOR, DME, NDB)
 - Vertical Guidance Approach (LPV)
- Terrain Advisory Warning System (TAWS) Class A
- Traffic collision Avoidance System (TCAS) II 7.1
- ADS-B out
- Single Transponder Mode S
- NVIS compatibility of all the AUP Components



In addition to this Core configuration, operators can customize their avionics to suit their operational requirements by selecting the latest in technological advancements, with options, such as:

PROPOSED OPTIONS

- AutoPilot (AP)
- Dual Transponder Mode S
- SATCOM-Iridium – Datalink Only
- SATCOM-Iridium – Datalink and Voice
- Weather Radar (WxR)
- Cockpit Voice Recorder (CVR)
- Flight Data Recorder (FDR)
- Latitude Ionode (flight monitoring)
- Direction Finder
- FLIR Video display
- Dual Radio Altimeter
- Dual Nav aids (ADF/DME)
- Advanced Digital Moving Map
- E-Charts
- HF Radio – Voice
- FM/UHF Radio – Voice
- Third Audio Control Panel
- VHF Radio – Data Link (VDL Mode 2)
- Datalink : Link 2000+ / FanS1/A+ / ATN B1 / CPDLC / ACARS
- Automated Flight Following System

The Pro Line Fusion® integrated avionics system will be available as an upgrade for CL-215T & CL-415 aircraft, and will form the baseline of the avionics configuration of the CL-415EAF Enhanced Aerial Firefighter and any future production Viking Canadair aircraft, allowing customers to maintain a common configuration of the flight deck throughout the evolution of their fleet.

Early installation opportunities of the CL-215T / CL-415 Pro Line Fusion® upgrade are available through Viking and will ensure priority schedule for either installations or kits supply. Viking will also propose AUP installations services in Europe for both CL-215Ts & CL-415s.

