

Dassault Falcon 900B

Flight Deck Upgrade Program



UNIVERSAL™ AVIONICS
an Elbit Systems Company

The Future of Your Falcon

The Dassault Falcon 900B is recognized as a long-life aircraft, built with high engineering standards and a strong structural quality. Universal Avionics and Authorized Dealer, Duncan Aviation, have partnered to deliver a technologically advanced flight deck upgrade for operators of this aircraft.

The flight deck upgrade replaces 25 legacy avionics instruments and greatly improves reliability and situational awareness. This exciting upgrade program offers:

- Dependable, high-resolution LED/LCD displays
- Increased capability
- Enhanced flight crew cockpit efficiency
- Maximized Return on Investment (ROI)
- Maximized safety

Additionally, the upgrade program will ensure that your Falcon 900B is approved to fly in all airspace, and gain compliance with emerging mandates, such as:

- Wide Area Augmentation System/Satellite-Based Augmentation System (WAAS/SBAS) – including Localizer Performance with Vertical (LPV)
- Future Air Navigation System (FANS) 1/A+
- European Aeronautical Telecommunications Network Baseline 1 (ATN B1)
- Automatic Dependent Surveillance-Broadcast (ADS-B)

Retrofit Flight Deck Package

Available through a partnership with Duncan Aviation, the Universal Avionics Falcon 900B flight deck retrofit package presents a simple concept: replace only the most critical components to maximize upgrade efficiency. This straightforward solution provides significant weight and power savings, and reduced maintenance costs. The operator will realize maintenance cost savings and less downtime while receiving the latest advancements in avionics technology comparable to latest production OEM aircraft.

The upgrade considerably reduces legacy instruments. It also removes remote Symbol Generators (SG) and their associated high maintenance costs. Computation and symbol generation are embedded in every display for multiple redundancies.



Universal Avionics Falcon 900B Flight Deck Retrofit Package

Components

- 5 – EFI-890R 8.9" Advanced Flight Displays including one fully dedicated Engine Display (ED)
- 2 – Vision-1™ Synthetic Vision Systems (SVS)
- 2 – Application Server Units (ASU) for Jeppesen charts, Checklists and E-DOCS
- 2 – UNS-1Fw SBAS-Flight Management Systems (FMS) with 5" Control Display Units (CDU)

Optional

- Third UNS-1Fw SBAS-FMS with 5" CDU
- 2 – Radio Control Units (RCU)
- 1 – UniLink™ UL-801 Airborne Data Link Communications Management Unit (CMU) with integrated VDL Mode 2 VHF radio



UNS-1Fw SBAS-FMS

Features and Benefits

Advanced Flight Displays

The EFI-890R Advanced Flight Displays provide primary flight information normally associated with standard Attitude Director Indicator (ADI) and Horizontal Situation Indicator (HSI) presentations including altitude, flight guidance and speed information. The high-resolution LED-backlit display provides significantly higher reliability over traditional fluorescent backlight technology. Featuring crisp displays in both high- and low-light cockpit conditions, the EFI-890R increases reliability while reducing visual fatigue.



EFI-890R Advanced Flight Display with Digital Engine Display

Engine Indication

The centrally-located EFI-890R Multi-Function Display (MFD) interfaces with an Engine Interface Unit (EIU) to present an all-digital engine indication system that replaces 15 analog indicators and stores up to 100 hours of engine data. Each engine function is shown in an analog scale dial and digital readout, providing greater visual identification of important engine parameters. Engine Displays aid the flight crew by accurately depicting key performance criteria, potentially reducing maintenance costs. The Pilot and Co-Pilot Primary Flight Displays (PFD) support engine display reversion capabilities.

Synthetic Vision System

Synthetic vision is provided by Universal Avionics' Vision-1, featuring dynamic terrain images integrated with the flight plan and projected flight path of the aircraft. The "Egocentric" pilot's view provides the pilot with a VFR perspective, as if looking out the flight deck window. Vision-1 also features a unique "Exocentric" wingman's view, providing a 3D view of your aircraft with respect to the flight path and surrounding terrain.



Vision-1 SVS Egocentric View

Charts, Checklists and E-DOC Capabilities

The ASU is a full featured system providing electronic charting as well as many other benefits. It supports procedural checklists, electronic documents (E-DOCS), Present Position (depiction) on approach plate overlays, and external video capability.



Nav Display with Electronic Chart

Radio Control

Universal Avionics' RCU reduces cockpit workload by centralizing aircraft navigation and communications frequency management. The intuitive radio control interface, with radio tuning and mode control functions, consolidate multiple radio control heads into a single, convenient communications controller. The reduction in flight deck components saves aircraft power consumption and weight.

Data Link Capabilities

Universal Avionics' Next Generation UniLink UL-801 CMU provides data link capabilities for the Falcon 900B upgrade. Capable of providing FANS 1/A+ capabilities, the UniLink UL-801 accommodates the expansion of data link services into more streamlined applications of airline and air traffic operations such as Controller-Pilot Data Link Communications (CPDLC) and Automatic Dependent Surveillance-Contract (ADS-C). The benefits of equipping with FANS 1/A+ technology includes preferred routing in the North Atlantic Airspace, options for altitudes with more favorable winds, and complete Aircraft Communications Addressing and Reporting System (ACARS) functionality. The UniLink UL-801 platform is provisioned for the European Data Link Services Implementing Rule (DLS IR) (formerly known as Link 2000+) compliance.

The UniLink UL-800/801 also provides many non-mandated benefits including position reporting and air to ground / ground to air messaging.



UniLink UL-800/801 CMU

WAAS (SBAS) and LPV Capabilities

Since introducing the world's very first FMS in 1982, Universal Avionics has continually taken the industry forward with a pilot-focused vision of flight management. Universal's SBAS-FMSs include VHF Omnidirectional Range (VOR), Non-Directional Beacon (NDB), Global Positioning System (GPS) and Area Navigation (RNAV) approaches to all available Levels of Service (LOS) for global operations. The FMSs are integrated with autopilot and aircraft flight guidance for coupled lateral and vertical approaches including LPV approaches.

The Universal Avionics – Duncan Aviation Relationship: A Solid Foundation

Universal Avionics and Duncan Aviation have a proven relationship that has delivered technologically advanced avionics solutions for business aircraft for over three decades. As an Authorized Universal Avionics Dealer since 1982, Duncan Aviation has extensive experience in the installation and support of Universal Avionics equipment. Both companies have a long-standing relationship founded on the principle of working together to provide leading edge and world class avionics retrofit solutions for the business jet market.

Duncan Aviation (Lincoln) is also a Universal Avionics Authorized Service Center where they provide technical support, support spares, warranty repair, sales and installation, and engineering.

With the successful completion of its Supplemental Type Certificate (STC) for the EFI-890R Advanced Flight Displays in the Challenger CL-601, Duncan Aviation opened the Part 25 business jet market for this display system. Today, Universal Avionics Authorized Dealers have successfully completed over 38 STCs for the EFI-890R.

Knowledgeable Professionals Providing Individualized Support

With Universal Avionics' world-renowned Support team, customers will always reach a live person during business hours. Phone and on site technical support is provided at no additional charge. Universal Avionics has an extensive Field Service Engineering staff located in strategic areas of the world to meet customers' needs.

The company's consistently high support ratings in industry publications prove Universal's commitment to overall customer support, operation and reliability.

An Experienced Team Delivering Proven Solutions

To upgrade your Falcon 900B flight deck, contact a Universal Avionics Sales Representative or Duncan Aviation. To locate a Sales Representative near you, visit uasc.com/sales.



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