EFB System for Boeing Aircraft

Tenencia Aerospace Design, a Carlisle Company, is an EASA-approved design and production organization specialising in turn-key solutions. We produce design packages and installation kits in-house, giving our customers single-source procurement and the benefits of an efficient combined operation. Our AS9100 Quality Management System oversees all our work.

Our Electronic Flight Bag System is designed for several Boeing aircraft, including 747, 757, 767, and 777. At the heart of the system is an ARINC 600 package Aircraft Interface Device (AID), which is designed to replace the existing OEM-installed computers. Our solution provides passenger and cargo aircraft operators with an expandable and customisable system, which enables the utilisation of aircraft data to increase efficiency and optimise operating costs – all in real-time.

The system includes a Collins Aerospace AID that delivers real-time communications between the aircraft and ground operations via SATCOM, or cellular data, while on the ground. Aircraft systems provide the data required to achieve optimal performance, and the hardware adds new network functionality to the aircraft. Tablets can be mounted as EFB displays in the flight deck, and functionality such as virtual QAR and remote dataloading can be realised.

OEM Class III System Replacement

- ARINC 600 format Aircraft Interface Devices replace the existing EFB computers
- Makes use of existing aircraft interface wiring (Ethernet, ARINC 429, and Discretes)
- Tablet Electronic Flight Bag
- Operational cost and efficiency benefits

INTRODUCTION

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CONNECTED AIRCRAFT BENEFITS

Improved Operating Costs
- More efficient flight plans and fuel usage

Improved Customer Experience
- Increased on-time flights
- Turbulence avoidance
- Real-time tracking for precious or sensitive freight

Flight Crew Operations
- Streamlined workload
- Improved situational awareness

Technical Operations
- Real-time data access
- Predictive maintenance

Safety & Security
- Real-time data access
- Fast access to system data onboard in one place
- Real-time POS approvals
- Internal temperature monitoring
EFB System for Boeing Aircraft

Full System Integration

SYSTEM COMPONENTS FOR TENENCIA CERTIFIED TURN-KEY PACKAGE

EASA/FAA STC

Aircraft Interface Devices

Installation Kit

INTRODUCTION

Intelligent Aircraft Interface Device
- Multiple interfaces to aircraft systems
- Virtual quick-access recorder plus DVR & video streaming
- Aircraft Condition Monitoring Lite (ACMS-Lite)
- Flight tracking
- Data loader
- ARINC 834 server

Tablet Interface Modules
- Flight deck mounted
- Transmit aircraft data from the aircraft interface device to the tablet display
- Provide power to the tablet displays

Tablet EFB Displays
- Mounted in place of existing displays
- Various tablets can be used

Options
- Intellisight® Electronic Flight Folder
- Internal & external cameras
- Cargo computer interface

SYSTEM ARCHITECTURE

TABLET EFB 1

TABLET INTERFACE MODULE 1

EXISTING INTERFACES

ETHERNET

ARINC 429

ARINC 717

DISCRETES

DATALOADER

AIRCRAFT INTERFACE DEVICE 1

GSM

WIFI

SATCOM

NFS

ARINC 717

TABLET EFB 2

TABLET INTERFACE MODULE 2

AIRCRAFT INTERFACE DEVICE 2

CarlisleIT products are subject to U.S. export control regulations. They may be subject to certain licensing requirements and restricted for export.

See Tenencia’s line of aircraft solutions at:
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