

FAA STC ST02692CH

Installation of Automatic Dependent Surveillance – Broadcast (ADS-B) Provisions & Mode-S Transponders on Boeing 757 Series Aircraft

OVERVIEW

- » FAA STC ST02692CH

Governs the installation of Electronic Flight Bag (EFB) data and power connectors with associated aircraft wiring interface in accordance with Electronic Cable Specialists (ECS) master data list ECS-206442.

YOUR NEEDS

STC ST02692CH authorizes installation of dual EFB provisions, which is required to support a separate installation and operational approval of EFBs in the cockpit.

PRODUCT DESCRIPTION

- » EFB data/power disconnects, power wires, and system interface wiring are installed on the aircraft as noted in Figure 1.

YOUR BENEFITS

The STC initiates the ability to provide the flight crew a means to stream and display satellite weather data.

STC AIRCRAFT EFFECTIVITY

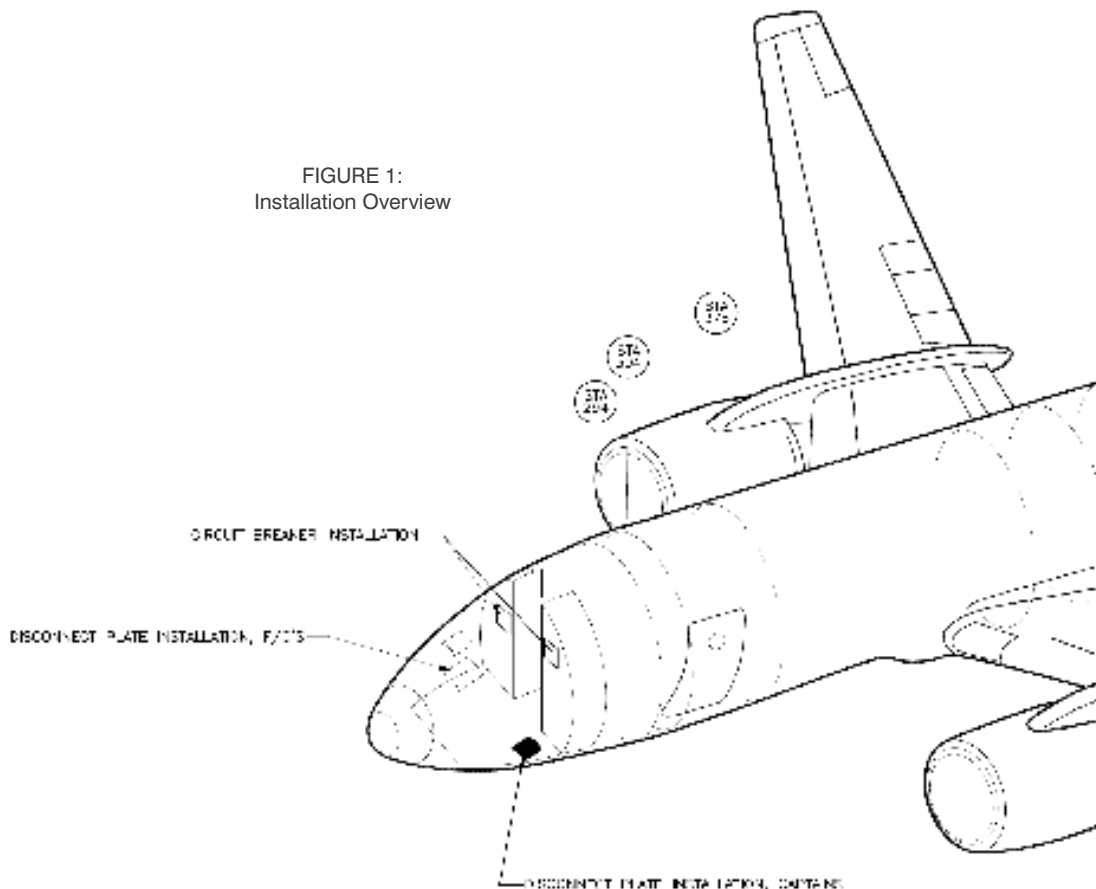
- » Boeing 737-700 series aircraft

STC CONFIGURATIONS & LIMITATIONS

- » **Configuration 1:** Dual EFB provisions installation

STC Limitations: Satellite weather system installed per FAA approved method in accordance with ECS Master Data List ECS-206889, Configuration 1.

FIGURE 1:
Installation Overview



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MECHANICAL CHANGES

- » Two new connector disconnect panels were installed in the captain's and first officer's side consoles into existing mounting rails. EFB data/power disconnect connectors (Figure 2) are located on the left and right side consoles of the cockpit.

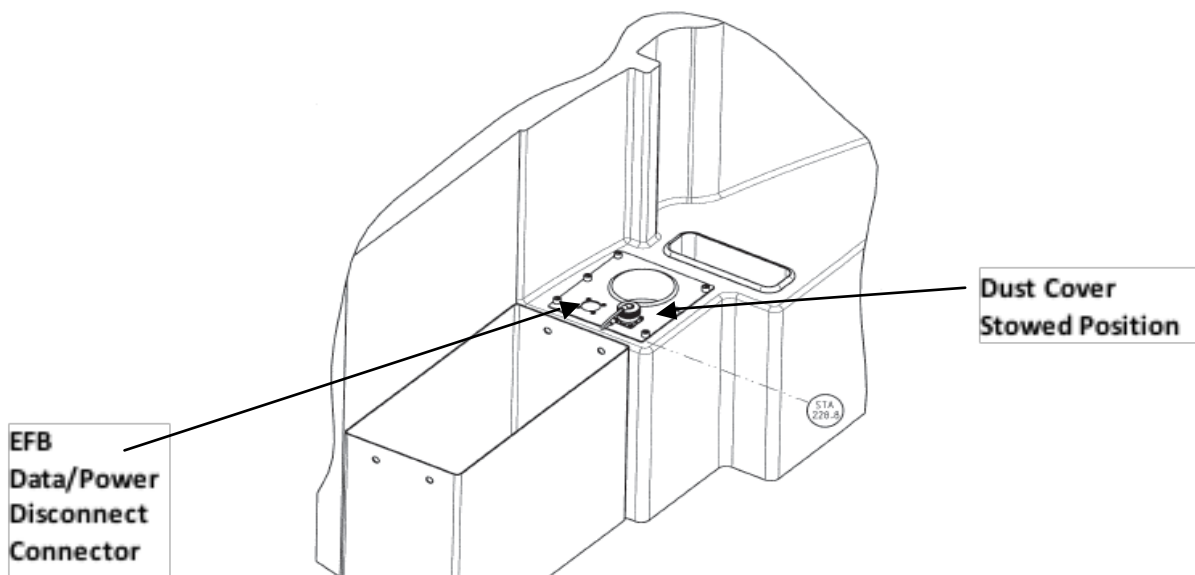


FIGURE 2:
Disconnect Panel Installations

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ELECTRICAL CHANGES

The following electrical changes are made for Configuration 1. See block diagram Figure 3.

- » 28 VDC power and ground wiring were installed between the aircraft and each of the two EFB disconnects.
- » RS-422 wiring was installed between the respective flight deck EFB disconnect connector and the E8-1 shelf-disconnect in the electronics equipment compartment to provide an interface to existing XM weather system wiring provisions. The E8-1 shelf and XM weather system are installed under a separate STC project.
- » Ethernet wiring was routed from each EFB disconnect connector to E3-3 shelf disconnect panel connectors in the electronics equipment compartment. A jumper wire was installed at the E3-3 disconnect panel to connect the two Ethernet wires together.
- » ARINC 429 wiring provisions were routed from each EFB disconnect to the electronics equipment compartment E5-2 shelf and capped and stowed for future applications.
- » ARINC 429 wiring provisions were routed from each EFB disconnect to the electronics equipment compartment E3-3 Shelf and capped and stowed for future applications.
- » ARINC 429 wiring provisions were routed from each EFB disconnect to the electronics equipment compartment E1-1 shelf and capped and stowed for future applications.
- » USB wiring provisions were routed from each EFB disconnect connector to the electronics equipment compartment E8-1 shelf and capped and stowed for future applications.
- » Discrete wiring provisions were routed from the captain's EFB disconnect to junction box J22 in the electronics equipment compartment and capped and stowed for future applications.
- » Discrete wiring provisions were routed from the first officer's EFB disconnect to junction box J20 in the electronics equipment compartment and capped and stowed for future applications.
- » Discrete wiring provisions were routed from each EFB disconnect to the electronics equipment compartment E8-1 shelf and capped and stowed for future applications.

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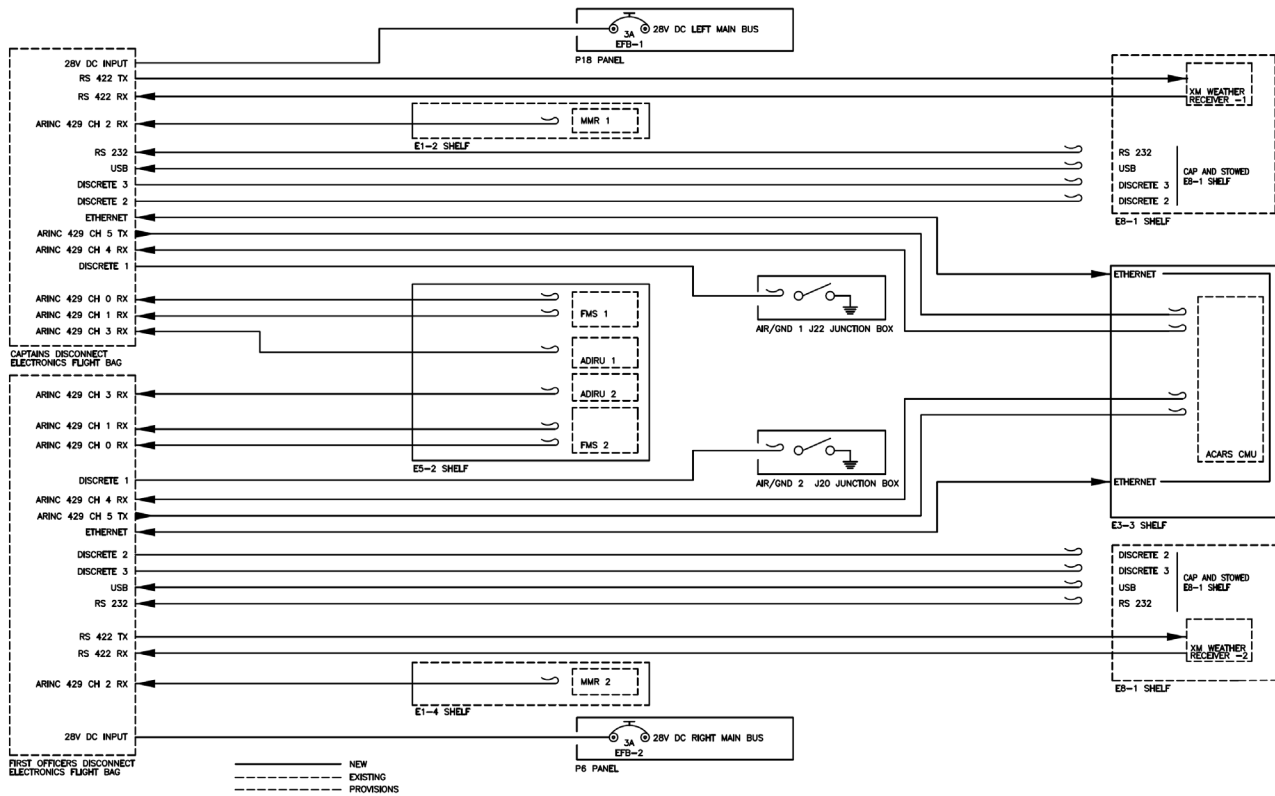


FIGURE 3:
EFC System Block Diagram