



U.S. Department
of Transportation

**Federal Aviation
Administration**

DEC 18 2008

**Transport Airplane Directorate
Aircraft Certification Service**

1601 Lind Avenue Southwest
Renton, Washington 98057-3356

In Reply

Refer To: 140S-08-399

Mr. Jordan B. Zundell
Lead Project Administrator
BCA Delegated Compliance Organization
P.O. Box 3707, M/C 67-LR
Seattle, WA 98124-2207

Dear Mr. Zundell:

Subject: Approval of an Alternative Method of Compliance with
Airworthiness Directive 2008-10-06

Reference: Boeing Letter BDCO-08-05733, "Alternative Method of Compliance (AMOC)
to Airworthiness Directive (AD) 2008-10-06 for Boeing Model 747-400,
-400D, and -400F Series Airplanes," dated December 10, 2008

The Federal Aviation Administration (FAA) received the reference letter requesting an alternative method of compliance (AMOC) with Airworthiness Directive (AD) 2008-10-06 on behalf of all operators of Boeing Model 747-400, -400D, and -400F Series airplanes. AD 2008-10-06 includes requirements for operators to revise their FAA-approved maintenance program by incorporating new airworthiness limitations (AWL) for fuel tank systems to satisfy Special Federal Aviation Regulation (SFAR) No. 88 requirements. The AD was issued by the FAA to prevent the potential for ignition sources inside fuel tanks caused by certain fuel system failure conditions. Paragraph (g)(3) of AD 2008-10-06 requires operators to incorporate the Boeing 747-400 Maintenance Planning Data (MPD) Document D621U400-9, Revision March 2008, Subsection D, "Airworthiness Limitations-Fuel Systems," AWLs No. 28-AWL-01 through No. 28-AWL-23, and optional AWLs No. 28-AWL-24 through 28-AWL-29.

You have asked for FAA approval of a revision to the Critical Design Configuration Control Limitation (CDCCL) inspections of the electrical wire bundles over the center wing fuel tank (CWT) which is invoked by AWL No. 28-AWL-02 if any maintenance is performed in the area under the main deck floor boards over the center fuel tank. CDCCL 28-AWL-02 requires an inspection of the areas over the entire CWT to be conducted in accordance with 28-AWL-01, regardless of the actual size of the area that is opened up for maintenance. You have proposed that the area requiring this CDCCL inspection should be limited to the areas where maintenance was performed, which you have defined as the "immediate area." Specifically, you have requested for the inclusion of the wording "in the immediate area of the maintenance performed" within the text of 28-AWL-02 to be approved as an AMOC with paragraph (g)(3) of AD 2008-10-06.

The FAA agrees that it was not the intent of 28-AWL-02 to require an inspection of the areas that were not disturbed by maintenance activity and agrees with the intent of your request. However, the specific language you have proposed would still require a full inspection as described in Airplane Maintenance Manual Section 28-11-00 as required by 28-AWL-01. Therefore, we have revised your proposed alternative wording for 28-AWL-02, have determined it meets the intent of your request, and provides an acceptable level of safety.

The FAA approves incorporation of the following wording as an alternative method of compliance to incorporation of the wording identified in 28-AWL-02 of Document D621U400-9, Revision March 2008, when revising the maintenance program as required by paragraph (g)(3) of AD 2008-10-06:

"External Wires Over Center Fuel Tank

Concern: Potential for Wire chafing and arcing to Center Fuel Tank Upper Panel.

If any maintenance is performed in the area under the floor boards and over the center fuel tank, verify the following in the affected areas where maintenance was performed:

1. Maintain the existing wire bundle routing and clamping.
2. Installation of any new wire bundles must be per Boeing Standard Wiring Practices Manual D6-54446.
3. Perform a detailed inspection of the wire bundles routed on main deck over the center fuel tank and under the main deck floor boards in the areas of the performed maintenance to detect damaged clamps, wire chafing, and that the wire bundle is not in contact with the surface of the center fuel tank. If wiring discrepancies are found, repair per the Boeing Standard Wiring Practices Manual D6-54446."

All provisions of AD 2008-10-06 not specifically referenced in the preceding paragraph remain fully applicable and must be complied with.

In accordance with FAA Order 8110.103, dated September 28, 2007, the following applies:

This approval is applicable only to Boeing Model 747-400, -400D, and -400F series airplanes.

This approval is transferable when the airplane is transferred to another operator.

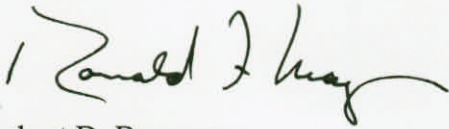
Before using this AMOC, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

This approval is subject to the following condition: If in the future the Seattle Aircraft Certification Office (SACO) determines that this AMOC does not provide an acceptable level of safety, the SACO may revoke or revise the terms of the AMOC following notice to the requester and a seven-day opportunity for the requester to comment on the revocation or proposed revision.

FAA approval of a global AMOC applies only to U.S.-registered aircraft. Approval of this type of AMOC for a foreign-registered aircraft is the responsibility of the appropriate civil aviation authority of the state of registry.

If you have any questions concerning this matter, please contact Mr. Thomas Thorson of the Propulsion Branch, at telephone number (425) 917-6508, or e-mail thomas.thorson@faa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert D. Breneman".

for Robert D. Breneman
Acting Manager, Seattle Aircraft
Certification Office, ANM-100S