U.S. Department
of Transportation
**Federal Aviation
Administration**

**Transport Airplane Directorate
Aircraft Certification Service**

1601 Lind Avenue Southwest
Renton, Washington 98057-3356

DEC 18 2008

In Reply
Refer To: 140S-08-404

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 Alternative Methods of Compliance with Airworthiness Directive 2008-10-10

Reference: Boeing Letter BDCO-08-05731, "Alternative Method of Compliance (AMOC) to Airworthiness Directive (AD) 2008-10-10 for Boeing Model 737-600, -700, -700C, -800, -900," dated December 10, 2008

The Federal Aviation Administration (FAA) received the reference letter requesting several AMOC approvals to AD 2008-10-10 on behalf of all operators of Boeing Model 737-600, -700, -700C, -800, and -900 series airplanes. AD 2008-10-10 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 2008-10-10 requires operators to incorporate Boeing Temporary Revision (TR) 09-020, dated March 2008, which is published as Section 9 of the Boeing Maintenance Planning Data (MPD) Document D626A001-CMR, Revision March 2008, Subsection G, "Airworthiness Limitations-Fuel System AWLs" into their FAA-approved maintenance program.

Request #1

You have asked for FAA approval of a revision to the Critical Design Configuration Control Limitations (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 alternative method of compliance with paragraph (g)(3) of AD 2008-10-10.

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 TR 09-020, dated March 2008, published as Section 9 of Document D626A001-CMR, Revision March 2008, Subsection G, when revising the maintenance program as required by paragraph (g)(3)of AD 2008-10-10:

"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."

Request #2

You have asked for FAA approval to delete references to two manufacturer's Component Maintenance Manuals (CMM) cited in 28-AWL-08 for repair and overhaul of the Boeing 737-600, -700, -700C, -800, and -900 Fuel Quantity Indication Systems (FQIS). Specifically, you have proposed that references to CMM 28-41-62 and CMM 28-41-63 be deleted from 28-AWL-08, as they apply only to Boeing Model 747 series airplanes and that the subsequently revised 28-AWL-08 be approved as an AMOC with paragraph (g)(3) of AD 2008-10-10.

The FAA agrees that CMM 28-41-62 and CMM 28-41-63 apply only to Boeing Model 747 series airplanes and do not pertain to maintenance of Boeing Model 737-600, -700, -700C, -800, and -900 airplanes. Removal of the references to non-applicable CMMs corrects an error within 28-AWL-08 and provides an acceptable level of safety.

The FAA approves incorporation of the following wording as an alternative method of compliance to the wording of the final sentence in the description block of 28-AWL-08 of TR 09-020, dated March 2008, published as Section 9 of Document D626A001-CMR, Revision March 2008, Subsection G, when revising the maintenance program as required by paragraph (g)(3)of AD 2008-10-10:

> "Repair and overhaul of FQIS tank units, compensators and densitometers must be per the manufacturer's Component Maintenance Manual (CMM) Numbers 28-41-76 Revision Number 1, 28-41-75 Revision Number 0, 28-40-59 Revision Number 5, or later revisions of these CMMs that have been approved by the FAA Seattle ACO."

Request #3

You have asked for FAA approval to correct a typographical error on several pages of Crane Component Maintenance Manual (CMM) 28-22-08 and CMM 28-22-09 that incorrectly specifies a certain part number. The Alucast Seal Part Number identified as "911H" should be identified as "911" in each identified location. This error is present in CMM 28-22-08, Page 7047, Figure 7013; Page 7004, Table 7002; Page 9007, Table 9002, and in Crane Service Bulletin 60-755100-28-2, Page 29, Figure 9, and Page 8, Table 1. This error also occurs in CMM 28-22-09, Page 7003, Table 7002; Page 9007, Table 9002; and in Crane Service Bulletin 60-989100-28-2, Page 28, Figure 9, and Page 7, Table 1. The reference letter incorrectly identified an error in Alucast Seal Part Number in CMM 28-22-09, on Page 9004, Table 9001 and, therefore, that error is not included in the above list. Your reference letter requests an AMOC to paragraph (g)(2) of AD 2008-10-10, which refers to Page Format of the AWLs. We instead consider this a request for an AMOC for paragraph (g)(3) which pertains to Fuel System AWLs.

The FAA understands that the Crane CMMs refer to the referenced Crane service bulletins within the body of the CMM. Because the Crane Service Bulletins are not referenced directly in either the Airworthiness Directive or the mandated Boeing MPD, these documents do not require an AMOC approval by the Seattle aircraft certification office to revise the noted typographical errors. Otherwise, the FAA has reviewed this request and concurs that this was a typographical error in the noted CMM documentation, and the correction provides an acceptable level of safety.

The FAA approves use of Alucast Seal Part Number 911 as an AMOC to use of Alucast Seal Part Number 911H in Crane CMM 28-22-08 Revision Number 4, and Crane CMM 28-22-09 Revision Number 2, identified in AWL No. 28-AWL-13 of TR 09-020, dated March 2008, published as Section 9 of Document D626A001-CMR, Revision March 2008, Subsection G, when revising the maintenance program as required by paragraph (g)(3) of AD 2008-10-10.

Request #4

You have asked for FAA approval to reword the descriptive actions cited in 28-AWL-16 in two areas. Specifically, you have asked that references to a "phenolic strip" be changed to a "rubber seal," as Airline Maintenance Manual (AMM) tasks 28-11-11-400-801 and 28-11-31-400-801 contain no references to a "phenolic strip positioned around the outermost periphery of the door" but do cite a "rubber seal positioned around the outermost periphery of the door."

The FAA agrees that the proposed rewording more closely reflects the wording present in AMM tasks 28-11-11-400-801 and 28-11-31-400-801, and provides an acceptable level of safety.

Additionally, you state that Corrosion Inhibiting Compound (CIC) BMS 3-38 is now the preferred anti-corrosion compound for access door gasket installations. While MIL-G-25537 anti-corrosion grease can still be used, it should be replaced with BMS 3-38 as soon as practical. You have asked for approval of a revision to allow for use of either grease or anti-corrosion compound.

Since use of either grease or anti-corrosion compound in this installation will provide the required electrical conductive path, your proposal 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 in the three paragraphs prior to the Note in 28-AWL-16 of TR 09-020, dated March 2008, published as Section 9 of Document D626A001-CMR, Revision March 2008, Subsection G, when revising the maintenance program as required by paragraph (g)(3)of AD 2008-10-10:

> "Verify presence of a rubber seal positioned around the outermost periphery of the door that mates with the wing skin inside the tank,
>
> Apply grease or anti-corrosion compound to both sides of the knitted aluminum mesh gasket, and
>
> Install the knitted aluminum mesh gasket between the outside face of the door and the wing skin to establish the electrical conductivity between the access door and the wing skin using the Clamp Ring and fasteners torqued to that specified in the applicable Boeing AMM."

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

In accordance with FAA Order 8110.103, dated September 28, 2007, the following applies to each AMOC approval:

> This approval is applicable only to Boeing Model 737-600, -700, -700C, -800, and -900 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,

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