AIR TRANSPORT ASSOCIATION

May 9, 2005

Docket Management Facility
U.S. Department of Transportation
400 Seventh Street SW
Nassif Building, Room PL-401
Washington, DC 20590

Subject: Docket No. FAA-2005-20689; Directorate Identifier 2004-NM-197-AD; Airworthiness Directives; Boeing Model 757 Airplanes; re: **Spar Bonding Path;** 70 Fed. Reg., Vol. 55, March 23, 2005

Ladies and Gentlemen:

FAA has proposed a new airworthiness directive (AD), applicable to B757-200, -200PF, -200CB, and -300 series airplanes, as identified in Boeing alert service bulletins 757-28A0076 and 757-28A0077, both dated August 27, 2004. The proposed AD would require, for certain airplanes, reworking the spar bonding path; and, for certain other airplanes, testing the electrical bond between the engine fuel feed hose and the wing front spar and, if applicable, reworking the spar bonding path. The proposal also would require, for all airplanes, inspection for an electrical bonding jumper between the engine fuel feed hose and the adjacent wing station.

These actions, which stem from fuel tank system safety reviews of SFAR 88, would be required within 48 months after the effective date of the AD, and compliance would require entry into fuel tanks. FAA estimated that 700 airplanes of U.S. registry would be affected by this proposal, and that the proposed inspection would require 11 to 24 work hours per-airplane.

Member airlines of the ATA concur with the intent of the proposal, but offer the enclosed comments and recommendations. The ATA has categorized and summarized those comments to develop the following recommendations:

- We strongly recommend that FAA revise the proposed compliance time to 72 months after the effective date of the AD. In previous comments to the docket and other venues, ATA and its member airlines have stressed the importance of aligning airworthiness directives that entail fuel tank entry with scheduled heavy maintenance visits (HMV). Effective alignment is needed in order to minimize the exposure of maintenance technicians to tank entry hazards, avoid exposing fuel tank systems to unnecessary disruptions compounded by uncoordinated schedules for accomplishing several SFAR 88-related ADs (most not yet approved), and to control and minimize the unscheduled time out-of-service of the affected airplanes. The proposed 48-month compliance period is not aligned to accomplish these objectives. ATA previously recommended 60 months as a compliance period that would bound the majority of airline HMV schedules, and for a very similar AD that also involves bonding andtank-entry (ie, AD 2004-10-06), FAA accepted that recommendation as providing an acceptable level of safety. However, the attached comments clearly show that a 72-month period would be much more effective in bounding scheduled HMVs. We also believe this period will provide an acceptable level of safety.

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Although the manufacturer safety reviews of SFAR 88 are proprietary, we do note that there have been no fuel tank accidents in large transport jets stemming from lightning or other bonding-related hazards since two that occurred before 1977, and before FAA strengthened certification standards for bonding. There have been no such events in B757 airplanes.

- FAA should revise the proposal to provide a more factual estimate of work hours required. The attached comments assert that the labor hour estimates of the manufacturer's service instructions are inaccurate and low, and that the estimates cited in the proposal are even lower. Further, the proposal's estimates evidently are based on an assumption that defueling, access, and other extensive prerequisites to the proposed actions would be accomplished in the course of preparing the airplane for scheduled maintenance. We note that this assumption is valid only if the proposed compliance period is aligned with HMV schedules. Otherwise, up to 33 percent (ie, (72 (-) 48) / 72) of the applicable airplanes would be brought into compliance completely outside of scheduled maintenance.

We appreciate the opportunity to contribute comments to this proposed rulemaking, and thank you for your consideration of these views.

Sincerely,

Joe White
Director, Engineering

Cc: Tom Thorson, ANM-140S, Seattle ACO, 425-917-6590
B757 Operators

JW/05-AD-134

Encls/

AmericanAirlines®

April 22, 2005

Joe White
Air Transport Association (ATA) of America, Inc.
1301 Pennsylvania Avenue, NW - Suite 1100
Washington, DC 20004-1707, USA

Subject: NPRM – 2005-134 - B757 Spar Bonding Path – Proposed Rule

Reference: 1) NPRM 2004-NM-197-AD
2) Boeing Alert Service Bulletin 757-28A0076, Revision 0, dated August 27, 2004

Dear Mr. White:

NPRM 2004-NM-197-AD states that the FAA proposes to adopt a new Airworthiness Directive (AD) that is applicable to 757 aircraft. The AD would require rework of the spar bonding path and application of sealant for Group 1 aircraft in the areas specified by Ref 2). For Group 2 aircraft, a bonding resistance test needs to be performed. If the test passes, sealant needs to be applied per Ref 2). If the test fails, then the spar bonding path will need to be reworked and sealant applied per Ref 2). All aircraft will be required to have a general visual inspection to ensure an electrical bonding jumper is installed per Ref 2). The FAA has proposed a 48-month compliance time after the effective date of the AD.

The FAA work-hour estimates contained in the NPRM lack explanation for not being consistent with Boeing estimates. For the various tasks listed above, the NPRM estimates 11, 9 and 13 work hours, respectively. The Ref. 2) Service Bulletin for those same identical tasks lists 50.5, 48.5 and 52.5 work hours, respectively. AAL has an extensive history with regard to work hour predictions provided in Boeing S/Bs. This history indicates the work hour predictions are persistently underestimated. AAL estimates that the work hours required for the above tasks could reasonably approach 100 hours each when accounting for normally predictable contingencies. This will increase the cost per airplane nine times from an average of $715 to $6,500. AAL feels the NPRM should be revised to reflect a more accurate representation of the work hours involved.

With regard to the 48-month compliance time, AAL finds that this is not consistent with any current heavy maintenance interval recommended by the MPD or in use by member airlines. The MPD is based on a 72-month heavy check interval where the opportunity for fuel tank entry is normally exercised. Entering the tanks at any other maintenance check would add additional days out of service. This would considerably add to the cost, which is currently not recognized. It would also be contrary to the goals established by Special Federal Aviation Regulation No. 88 ("SFAR 88") which is intend to mitigate similar failure types. Extending the compliance time to 72 months would accommodate the proposed work scope along with normal Heavy C Check maintenance. This would minimize the number of fuel tank entries over the service life of the airplane and therefore provide an equivalent level of safety.

If you have any questions regarding the above comments, please contact William Barrett, B757 Fuel System Engineer, at william.barrett@aa.com, or by telephone at 918-292-2510.

Regards,

H. A. Demarest
Director, Aircraft Engineering
American Airlines

HAD:AWZ:WAB:fmt

Delta

Delta Air Lines, Inc.
P.O. Box 20706
Atlanta, Georgia,30320-6001

File Code 2004NM197AD
April 20, 2005

Mr. Joe White
Director, Operational Engineering
Air Transport Association of America
1301 Pennsylvania Ave., NW
Suite 1100
Washington, DC 20004-1707

SUBJECT: Comments to NPRM 2004-NM-197-AD

REFERENCE: ATA Memorandum 05-AD-134, March 24, 2005: B757 Spar Bonding Path - Proposed Rule
Boeing Alert Service Bulletin 757-28A0076, August 27, 2004

Dear Mr. Joe White:

FAA has proposed a new airworthiness directive (AD), applicable to B757-200, -200PF, -200CB, and -300 series airplanes, as identified in the referenced service bulletins. The proposed AD would require, for certain airplanes, reworking the spar bonding path; and, for certain other airplanes, testing the electrical bond between the engine fuel feed hose and the wing front spar and, if applicable, reworking the spar bonding path. The proposal also would require, for all airplanes, inspection for an electrical bonding jumper between the engine fuel feed hose and the adjacent wing station, this proposed AD would require the following actions, within the compliance times specified.

- For Group 1 airplanes as identified in the service bulletins: Within 48 months after the effective date of the AD, rework the spar bonding path between the end fitting of the fuel feed hose and the front spar, and apply sealant to the hose fitting on the forward and aft side of the front spar and to the fitting and tube coupling on both sides of the dry bay wall, per the bulletins.

- For Group 2 airplanes as identified in the service bulletins: Within 48 months after the effective date of the AD, perform a bonding resistance test between the fuel feed hose and the front spars of the left and right wings, per the bulletins.

For all airplanes as identified in the service bulletins, the AD would require, within 48 months after its effective date, performance of a general visual inspection and applicable corrective actions to ensure that an electrical bonding jumper was installed between the engine fuel feed hose and the adjacent wing station 285.65 rib in the left and right wing fuel tanks, per the bulletins. This action stems from fuel tank systems Safety Reviews of SFAR 88.

Delta has reviewed this proposal and would like to offer the following comments:

After reviewing the differences between the Service Bulletins written for the spar penetrations on the 747 and 767 verses the 737 and 757, although all aircraft have the same concerns due to similar designs they are not being handled identically. It is stated in the NPRM that poor bonding of a spar penetration was found on a 747 necessitating the need to inspect similarly designed penetrations on other Boeing aircraft.

The Service Bulletins for the 747 & 767 penetrations (Everett built aircraft) accomplishes a measurement of the bonding quality of the penetrations. The decision to disassemble the joint is based on the results of the measurement. If the measurement is within limits no further work is required except to increase the sealant area at the joint. The Service Bulletin for some of the 757 penetrations (Renton built aircraft) requires disassembly without regard for the existing quality of the bond. This approach does not take into account the penetrations that may have been reworked since delivery of the aircraft. The operator may have reworked many of these penetrations over the last few years due to dry bay leaks. In addition, the 757 maintenance manual was revised in September 2004, to add the bonding requirements of the NPRM/SB 75728A0076. Aircraft repaired using these procedures will not be able to take advantage of this work if the NPRM does not provide for testing of the bond to determine if disassembly is necessary. This test should be added to the proposed AD.

Additionally, the NPRM states that the "Hose Fitting, Spar Bonding Rework and Sealant Application" can be accomplished within 11 man-hours per aircraft. This level of rework would require that the spar penetration fitting be removed from the spar, the bonding reworked and the system reassembled. To assume that this work could be done in the allotted time is to assume that the aircraft is undergoing a heavy maintenance visit and that the engine is removed and the fuel tanks drained. Accomplishing this work outside of the heavy maintenance environment would be difficult and time consuming with limited access to this area. The 48 month recommendation in the NPRM does not provide adequate time for operators to complete this work at heavy maintenance visit and would require special scheduling for accomplishment. Setting the scheduling to match a 6 year heavy maintenance visit interval would prevent schedule disruptions.

Please forward these comments to the FAA on our behalf. If you have any further questions on this subject, contact Joe Steiper, Program Manager – AD/Regulatory Programs, at (404) 714-1275.

Sincerely,

Ken Lorow
Manager - AD/Regulatory Programs
Department 595

U·S AIRWAYS

Mark R. Rudo
Managing Director – Technical Services

April 21, 2005

405-AV-05-003
Sent Via Email

Mr. Joe White
Director of Engineering
Air Transport Association of America
1301 Pennsylvania Avenue, N.W. Suite 1100
Washington, D.C. 20004-1707

SUBJECT: B757 Engine Fuel Feed Tube – Proposed Rule

REFERENCE: /A/ Airworthiness Directive (AD) Memo 05-AD-134
/B/ FAA NPRM 2004-NM-197-AD
/C/ Boeing Service Bulletin (SB) 757-28A0076

Dear Mr. White:

The Reference /A/ AD Memo advises that the FAA has issued a proposed rule applicable to US Airways' fleet of B757 airplanes. The Reference /B/ proposed rule, if adopted, would require, within 48 months after its effective date, accomplishment of a test of the bonding resistance between the engine fuel feed tube fitting and the front spar, application of sealant on a hex nut inside the dry bay, and before further flight, performance of any applicable corrective actions specified in the Reference /C/ SB. Operators were requested to comment on the proposed rule. In response, US Airways offers the following:

- US Airways currently operates thirty-one B757 airplanes that would be affected this proposed rule.

- US Airways requests the FAA extend the compliance time for the new rule from 48 months to 60 months. The FAA previously issued AD 2004-10-06, which addresses a similar unsafe condition on the 737 and 747 fleets. The FAA determined that a 60-month compliance time maintained an acceptable level of safety for AD 2004-10-06. A 60 month compliance time for this proposed rule is requested to ensure US Airways has the most flexibility in scheduling the work in the proper maintenance environment. The proposed rule could require fuel tank entry, which requires additional provisioning on the maintenance and planning side.

Thank you for the opportunity to comment on this proposed rule.

Sincerely,

/s/ Jon L. Oberdick
for

Mark R. Rudo, Managing Director
Technical Services

MRR/av/mjp

Park Ridge II, RIDC 1, 2000 Commerce Drive Pittsburgh, PA 15275 (412) 747-3882 Fax (412) 747-0246

bcc: Jon Oberdick
Colleen Boesch
Adam Vincent

UNITED AIRLINES

United Services

April 7, 2005

Air Transport Association of America
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Washington, D.C. 20004-1707

Attention: Mr. Joe White
Director, Engineering

Subject: 757 Fuel Feed Hose and Front Spar
Docket No. NPRM 2004-NM-197-AD

Reference: ATA Memo 05-AD-134

Dear Mr. White,

The referenced ATA Memo advised of and requested comments on the subject proposed rule that will require reworking the flexible fuel feed line front spar bonding path between the end fitting of the fuel feed hose and the front spar. We concur with the contents of the proposed rule and offer the following comments.

The proposed compliance time of 48 months will force all operators to accomplish this task at a 'C' Check interval (18 Months) where fuel tank entry is not performed. We suggest extending the compliance time to 6 years. The 6 year extension would be in step with fuel tank entry work normally accomplished at a heavy visit.

Sincerely,

Jim Miccio
Director of Widebody Engineering

cc: R. Bernicchi, United Airlines - INDEG
J. Covington, United Airlines – INDEG
C. Satterlee, United Airlines - SFOEG

San Francisco International Airport, San Francisco, California 94128