16 November 1999

Ref. 991116/16

To: Aviation Rulemaking Advisory Committee -
Transport Airplane and Engine Interest Group (TAEIG)

From: Aviation Rule Making Advisory Committee –
Powerplant Installation Harmonization Working Group (PPIHWG)

Subject: Harmonization of FAR/JAR 25. 903(e) Inflight Starting

Attachments:

1) Draft PPIHWG Report on 25.903(e) – Inflight Starting dated 8/16/99 and AC/ACJ 25.903(e) revision dated 8/12/99
2) Draft NPRM on Engine Inflight Restart Requirements dated September 14, 1999
3) A BETTER PLAN FOR HARMONIZATION: PPSG REVIEW OF CAT 1 AND 2 ITEMS (JAA-PPSG)
4) Airbus/Aerospatiale Comments on the "Package", Issue No. 2 of November 04, 1999.
5) Airbus Industrie letter, Subject: Latest Draft on Inflight Restart ACJ, Dated 13 September 1999 from J. Joye
6) Cessna Minority Position on Draft AC/ACJ 25.903(e) dated August 19, 1999
7) Allied Signal Engines and Systems Comments on Proposed 25.903(e) dated November 2, 1999
8) GEAE Minority Position on proposed AC 25.903(e) dated September 17, 1999
9) P&W Comments on Proposed 25.903(e) dated September 21, 1999
10) GEAE Letter Subject: 25.903(e) response dated October 19, 1999
11) Input on Proposed Harmonization Docs – 23rd PPIHWG Montreal by Gordon Cooper (RR)

In accordance with the 4 June 1999 Better Plan for Harmonization, PPIHWG submits Attachment 1 through 11 related to harmonization of FAR/JAR 25.903(e) – Inflight starting.

As background, the Aerospace Industries Association (AIA) undertook a project on the subject of inflight engine restarting requirements at the request of the Federal Aviation Administration (FAA) in 1991. The project, AIA PC-345, had meetings over several years but was unable to develop a consensus proposal or arrive at a meaningful recommendation. In 1995, the PC345 Project team abandoned their efforts and turned the activity over to the Powerplant Installation Harmonization Working Group. PPIHWG accepted the Task based on FAA encouragement citing the flight safety need, use of generic special conditions, and with the understanding that appropriate tasking was forthcoming. The work to develop a proposed rule change and advisory material to address "all engine out - inflight restarting requirements " was continued under PPIHWG as a separate AIA/AECMA project. The activity was completed, without formal tasking, by consensus agreement at the PPIHWG September 1998 Seattle meeting. The basis for consensus was that all parties thought the proposal was the best that could be developed and was "livable". As agreed, the AIA/AECMA project submitted a draft petition for rulemaking via the AIA to the FAA. Attachment 2 is the NPRM part of that AIA submission. Formal tasking was then delivered by TAEIG in December of 1998. The JAA subsequently completed their review of the AIA/AECMA proposal and the comments were dispositioned in a manner acceptable to the JAA. In the interim, the FAA denied the AIA petition for rulemaking, citing resource problems and the fact that the activity was tasked to be harmonized. A Better Plan Report with the draft AC/ACJ 25.903(e) was prepared and circulated for comments within PPIHWG. A number of unexpected minority positions were submitted at this late stage. It is noted that some but not all of the representatives who submitted minority reports were not members of PPIHWG or the AIA/AECMA Project Team at the September 1998 meeting.

After careful consideration the PPIHWG Co-Chairs consider that there is no ability to disposition the critical comments or to achieve yet another consensus position on the subject of 25.903(e) within the time frame permitted under the Better Plan for Harmonization. In part, the historical difficulty in obtaining an

agreement may be related to the fact that engines certified under FAR Part 33 are not required to demonstrate an inflight engine starting capability [however, a capability is required by JAR-E 910 – Relighting in flight]. This leaves the requirement for inflight engine restarting to mitigate the hazard from an all engine out failure condition to be addressed by engine installers under Part 25.

Attachment 1 was submitted for PPIHWG member review and comment. Attachment 2 had not been changed and no further review was considered to be necessary. The PPIHWG member comments received are presented in Attachments 3 through 11. All attachments are to be dispositioned by the FAA/JAA in preparation of the proposed draft rule and Advisory material in Phase 3 and are then to be considered by PPIHWG in Phase 4.

Respectfully;

G. P. Sallee
(Co-Chair PPIHWG)