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| EASA | COMMENT RESPONSE DOCUMENT |
|  | EASA PAD No. 11-051 [Published on 09 May 2011 and officially closed for comments on 06 June 2011] |

Commenter 1: Sabena Technics – Eric De Gieter – 20/05/2011

Comment # 1

PAD 11-051 refers two times to PEMCO MDL 2373 revision I:

- applicability : Boeing 737-300 series airplanes,...., modified in accordance with FAA STC SA2969SO by using PEMCO MDL 2373 revision I, or earlier.
- paragraph (1.2): " For aeroplanes that have (been) modified in accordance with FAA STC SA2969SO by using PEMCO MDL 2373 at revision H or revision I, accomplish the instructions of PEMCO SB 737-29-011".

Per PEMCO cargo Mod SA2969SO, rev K (attached file, page 3/29): MDL 2373 revision" I" seems not to exist.

Please check and provide comments.

EASA response:

Comment agreed. The Final AD has been amended to remove references to MDL 2373 Revision I.

Commenter 2: GE Capital Aviation Services – Mark Lynch – 03/06/2011

Comment # 2

GE Capital Aviation Services are the aircraft owner and manager of several aircraft affected by this PAD.

Ref the Required Action and Compliance Time: EASA should consider allowing for an extension period of 24 months beyond the proposed 48 months compliance period for aircraft affected by the AD but scheduled for retirement. Embodiment of such an extensive terminating modification for aircraft that are scheduled for retirement within a short period thereafter is inefficient & costly.

The affected area is already subject to a mandated repetitive inspection. EASA should consider a reduced inspection interval during the 24 month extension period if [mitigation] is necessary to satisfy airworthiness concerns.

EASA response:

EASA concurs. The compliance time of the Final AD has been extended to 72 months due to the extensive modification and the number of aircraft to be

modified. All repetitive inspections as currently required per FAA ADs 95-06-05, 98-04-41, 2001-09-15 and 2004-03-23 remain valid until modification as required by this AD.

Commenter 3: EUROPE AIRPOST (EAP) – Yves Groshenry – 06/06/2011

Comment # 3

References:

- A. FAA STC SA2969SO using PEMCO MDL 2373
- B. FAA AD 98-04-41
- C. FAA AD 2004-03-23
- D. FAA approved SSID (Supplemental Structural Inspection Document) Program, Report N°P03-007MM & Report N°P03-218MM
- E. FAA approved BSMC (Basic Scheduled Maintenance Check) Program, Report N° P03-113IM
- F. FAA approved SCPCP (Supplemental Corrosion Prevention and Control Program), Report N° 2966

EUROPE AIRPOST (EAP) is the first operator worldwide of Boeing 737-300 fitted with PEMCO Main Deck Cargo Door (MDCD). EAP fleet is, among others, composed of 14 aircraft modified in accordance with Ref. A at revision J, or latest.

(A) EAP position is not to agree with this PAD AD requirement [because]:

- (1) The wording of The PAD is not balanced as it is only quoted the position of The UK CAA and is not quoting some certifications issues brought by French DGAC during their approval such as the far 25.783 and the fact that the connection on the hydraulic system B was not wished at this time in 1991. We found the wording of this PAD too critical on the PEMCO design and for EAP the requirement to "copy" after 10 years the CAA standard is not relevant.

- (2) At this time, EAP monitors the PEMCO MDCD by repetitive actions required by:

Ref B. FAA AD (Detailed Visual Inspection every 600 Flight cycles)

Ref C. FAA AD (Frames/Angles Replacement every 7,000 Flight cycles, Frames/Angles HFEC Inspection at 3,000 Flight Cycles after replacement, and subsequent Frames/Angles HFEC Inspection every 1,300 Flight Cycles until new Frames/Angles Replacement).

Ref D. FAA approved SSID Program

Ref E. FAA approved BSMC Program

Ref F. FAA approved SCPCP

EAP monitors findings for Ref B. and Ref C. FAA ADs.

EAP has operated a total of 370 092 cycles in its fleet without damages outside these inspections.

EAP believes that for all these reasons and for Airworthiness reasons it is better to inspect regularly this main cargo door than to have a new door fitted on an old fuselage which could weaken some other parts and for which there is no inspections.

In all the cases the New door shall be inspected and EAP is not willing to trade these inspections to a standard where there is too few inspections.

- (3) EAP draws EASA attention [to] the fact that a PEMCO new door will be installed on an old fuselage. If a PEMCO new design door reduces the crack event on the door structure, we think that the cracks will appear on the MD CD surround structure as the door is installed on an old fuselage and can cause important stress on surround structure like skin, frames, stringers, (most EAP aircraft [are] more than 20 years old and [have accumulated] more than 25,000 flight

cycles, see annex 1 for EAP fleet status).

- (4) The cost of this modification is too high (around 1.4 M US \$ per Aircraft) when compared to the actual value of these aircraft. An old B737-300 is [worth] around 3 M US \$.
- (5) We believe that such AD should be [issued] by FAA as they are the primary airworthiness office and are more in contact than EASA on AD findings due to bilateral agreement between FAA and EASA. By this we mean that we are often in contact with PEMCO on FAA AD and on some repairs as part of an AMOC. So the fact that FAA has not raised the point listed in the PAD is not strengthening EASA position technically speaking. In addition we could think that this is a breach in the bilateral agreement between EASA and FAA on the approval of AMOC.
- (6) [The] FAA should also clarify its requirement to review the STC on the floor reinforcement and the requirement of SBB 737-52-0014. If EASA wants to review the design PEMCO door, all issues have to be put on the table at the same time. EASA should first discuss on all these issues with FAA.
- (7) We do not share the position that the hydraulic system of the door connected to the Hydraulic system B is bringing more safety. The loss of the hydraulic system B is a major issue and this should be reviewed with possible safety cases. We have no evidences that this was conducted by FAA.

(B) If EASA decides to issue this AD, EAP request at least 6 years for compliance time, based on the following:

Estimated cost for aircraft modification is 1,400,000 USD. This cost includes modification cost, associated costs such as ferry flight from Paris, France to Dothan, USA and additional aircraft chartering during modification period (60 days per aircraft). Based on these costs, the total cost modification for EAP fleet is 19,600,000 USD. The phase-out plan for aircraft is consequent (5 aircraft). So, EAP will not engage important costs for these aircraft.

Moreover, EAP has [a] lot of experiences with this PEMCO Door and EAP does not believe that the STC holder will have slots, manpower, parts and willingness to modify, within 48 months, all concerned aircraft as the STC holder has various activities and will not affect all the slots available to this retrofit program. We [estimate] that only three aircraft can be done in one year which will require with the lead time of the door (manufactured in Italy by OMA) around 6 years for the fleet.

(C) Errors detected in the PAD :

In the paragraph "Applicability", MSN 28898 is listed. Please be aware that this aircraft has been initially modified in accordance with RefA. at revision I, or earlier but, on December 2009, PEMCO SBs 737-29-0011 & 737-52-0033 have been applied. So, this aircraft will not be subject to this AD and can be deleted from the paragraph "Applicability".

EASA response:

Partially agreed. The EASA answers to each individual comment are given below:

(A) (1) and (A) (7) The non-compliances with 25.783 and 25.1309 were identified by UK CAA during their review of the FAA STC SA2969SO and are based on the applicable airworthiness requirements that are different from the ones applicable in 1991.

For instance, if you refer to the UKCAA Airworthiness Approval Note 24984 Addendum 1, it is mentioned that NPA 25D-301 have been agreed as providing acceptable means of compliance, which significantly changes the applicable requirement 25.783. As a result, non-compliances were identified in respect of dormant failures within the MDCD that could result in door opening in flight or depressurisation of the aircraft with the door not properly closed, latched and locked. Therefore, CAA UK has identified PEMCO SB 737-29-0011 as an additional requirement for import for existing converted aircraft. The connection of the hydraulic system of the door to the system B is part of the required SB. In addition, FAA confirmed they have approved the PEMCO System Safety assessment report.

Concerning the timeframe, this PAD was issued in the context of the provisions of Basic Regulation (EC) 216/2008 article 14(1) and 14(2) and the

decision was taken by the Agency in 2010 to adopt this one after a thorough review of all the EU member states importing requirements.

(A) (2) The Agency has the policy that if a terminating action for certain repetitive actions exists, it is preferred to require embodiment of such terminating action by AD in order to avoid repetitive inspections. The number of ADs applicable on the MCD and MCD surround structure (in addition to the maintenance programme) is high and application of this AD would terminate various repetitive inspections required by 4 ADs.

(A) (3) EASA does not concur that a new door installed on an old fuselage could result in cracks on the MCD surround structure: First of all, the SB includes instructions to reinforce the upper jamb. Secondly, the new door has machined fittings at the upper and lower terminations of the door which would make the door slightly stiffer for hoop loading. This would cause less hoop load to go through the surround structure therefore the surround structure would be subject to lower loads. This view is also shared by Pemco and FAA.

(A) (4) The Agency agrees that the cost of the modification is very high. However, we have no data that would allow us to compare this cost with the cost of the repetitive inspections of a fleet of 14 aircraft during more than 10 years of compliance with the existing FAA ADs 95-06-05, 98-04-41, 2001-09-15 and 2004-03-23. In order to decrease and smooth the impact, the compliance time is extended to 72 months (see answer to comment #2)).

(A) (5) This AD is issued in the context of the provisions of Basic Regulation (EC) 216/2008 article 14(1) and 14(2). Anyhow, the PAD was developed in close cooperation with FAA as the primary certification authority.

(A) (6) This comment is not relative to the UKCAA finding. It cannot be taken into account in the context of this AD.

(B) As mentioned already in answer to comment (A) (4) above, the agency recognizes that the cost of the modifications mandated by the AD is very high. As mentioned also, EASA does not have data on the costs incurred by the on-going inspections as per FAA ADs 95-06-05, 98-04-41, 2001-09-15 and 2004-03-23. It is once more reminded that embodiment of SB 737-52-0033 constitutes terminating action for all those ADs.

In addition, it was confirmed by PEMCO that they can support the EASA compliance schedule of 48 months.

Anyhow, as already mentioned, the Agency agrees to extend the compliance time to 72 months.

(C) EASA concurs and aircraft MSN 28898 has been removed from the Applicability of the final AD: EASA did not have the correct data on this aircraft.