

EASA PAD No. 06-082
COMMENT RESPONSE DOCUMENT

PAD / DOC PARAGRAPH COMMENTED	COMMENT / PROPOSAL	AUTHOR OF THE COMMENT	DATE OF COMMENT	PCM RESPONSE
General	I would like to know if the accomplishment limits of this Airworthiness Directive will rebound in a revision to the FAA AD 2002-18-03. This is because the Proposed Airworthiness Directive will supersede to CAA UK AD 005-07-2000 mentioned in Note 3 of FAA AD 2002-18-03.	Name : Alejandro A. Gómez Organisation: AEROMOTO RES SRL	05.04.2006	Noted: FAA decision
	The risk assessment w. r. t. an unsafe condition as a result of an engine deficiency has to be performed on aircraft level. Consequently Part 21 requires an AD to "...mandate actions to be performed on an aircraft..." (ref. 21A.3B (a)), if "...an unsafe conditionto exist in an aircraft, as a result of (ref. 21A.3B (b)1, and therefore " An AD shall contain at least ... an identification of the affected aircraft" (ref. 21A.3B (d)2). The PAD does not identify directly the aircraft types/models affected by the engine deficiency. It is therefore suggested to add/clarify in the box Type/Model designation(s) Spey 555, Spey 506, as installed on (list of affected aircraft types/models).	Name: Jo. Körner Organisation: LBA	05.04.2006	Accepted: Aircraft type / models will be added according to EASA CAP, Annex 1, Item 12. Recommendation: Corresponding change to Part 21 should be considered.
Note	Aircraft TC(DS) affected are (at least) the following: TCDS EASA.A.037 for Fokker F28 series aircraft; and CAA-UK TCDS BA3 for BAC-manufactured "One-Eleven" aircraft (NOT "1-11", as is often mistakenly written), TC now held by Airbus UK Ltd. Whether it is necessary/functional to add these in the AD is optional and for the (Engine) PCM to decide.	Name: Paul van Eenige Organisation: CAA-NL	05.04.2006	Accepted: See response above
Manufacturer(s)	The listed manufacturer's name is highly unlikely to be correct. Only if RRD actually "manufactured" Spey engines after January 7th, 2002, when TC transfer took place, is listing RRD appropriate. Adding at least "Rolls-Royce Aero Engines" and "Rolls-Royce PLC" would be my suggestion. Possibly, Spey engines have been manufactured under yet a different RR company name?	Name: Paul van Eenige Organisation: CAA-NL	05.04.2006	Accepted: The manufacturer's name will be changed to Rolls-Royce plc
Applicability	The AD's applicability does not contain the required (per Regulation	Name: Paul	05.04.2006	Accepted:

	<p>EC 1702/2003 Part 21A.3B paragraph (d) under 2) identification of affected aircraft. May I suggest to write this in a similar way as done in the relevant Service Bulletin :</p> <p>- SPEY 555-15, SPEY 555-15H, SPEY 555-15N and SPEY 555-15P engines, known to be installed in but not limited to Fokker F28 Mark 1000, Mark 2000, Mark 3000 and Mark 4000 series aircraft; and</p> <p>- SPEY 506-14A engines, known to be installed in but not limited to Airbus UK Ltd. (BAC) One-Eleven series aircraft.</p> <p>Note: Whether to add "but not limited to" in the above sentences is optional. It is highly unlikely to find that these engine models are installed in other aircraft.</p>	van Eenige Organisation: CAA-NL		Type and Model designation will be amended
Reason	The safety concern should be described as ".....an unacceptable risk of double occurrence....." rather than an "unacceptable high rate" as the wording is now.	Name: Paul van Eenige Organisation: CAA-NL	05.04.2006	Accepted: Wording will be changed
Compliance	<p>Notes: This section does not contain any credit for engines previously modified by an earlier (suggestion: R1) version of the referenced Service Bulletin. It is also suggested to identify the different sections of the AD by using a "paragraph" structure, either (1), (2), (3), etc. or (a), (b), (c) etc. or such to improve the readability. Wording changes are suggested as follows:</p> <p>"Unless previously accomplished, the incorporation of the new standard of LPT stage 2 blades (Mod 6428) via Rolls-Royce Service Bulletin Sp72-1064 is required by this AD. All necessary actions must be performed in accordance with the instructions of Service Bulletin Sp72-1064 Revision 1 dated February 2001 or a later EASA approved revision. Where the compliance periods of the referenced SB differ from those mentioned in this directive, the requirements of this directive must take precedence."</p> <p>Note: As R2 of the SB is - at the time of writing this comment - not yet issued and therefore not available to operators or any other potential commentors, it would - in my view - be unreasonable to make the final AD effective (April 12, 2006 as proposed) prior to the new document being available, unless the AD text is amended as above, in which case this is not necessary. As a sidenote and a general comment, it is very difficult to comment on any PAD when the referenced TC-holder's service publication is unavailable (even in DRAFT form) for viewing.</p>	Name: Paul van Eenige Organisation: CAA-NL	05.04.2006	<p>Accepted: SB- reference will quote only the SB Number but not the revision status.</p> <p>Noted: Considered as a procedural decision to be made by EASA</p>

	<p>"(1) For affected Fokker F28 Mark 1000, Mark 2000, Mark 3000 and Mark 4000 series aircraft having at least one Rolls-Royce SPEY 555-15, SPEY 555-15H, SPEY 555-15N or SPEY 555-15P engine in pre-SB Sp72-1064 configuration installed, unless previously accomplished, before next flight after the effective date of this directive, amend the approved Flight Handbook in accordance with the instructions contained in Fokker Manual Change Notification - Operational Documentation (MCNO) F28-008 dated March 1, 2000 or Rolls-Royce Spey Operating Instructions document ref. F-Sp2-F, as applicable. When both engines have been modified (RR Mod.6428) in accordance with the requirements of paragraph (2)(b) of this directive, the Flight Handbook changes may be removed. Fokker MCNO F28-012 dated April 1, 2001 also pertains to this subject." <<MCNO F28-008.pdf>> <<MCNO F28-012.pdf>></p> <p>Further suggested wording changes:</p> <p>"(2) For all SPEY 555-15, SPEY 555-15H, SPEY 555-15N and SPEY 555-15P engines, irrespective of aircraft type installation:</p> <p>(a) The incorporation of new standard LPT stage 2 blades (RR Mod.6428) in accordance with Rolls-Royce SB Sp72-1064 Revision 1 dated February 2001 or a later EASA approved revision is required to be completed on at least one engine per aircraft not later than 31 May 2007; and</p> <p>(b) The incorporation of ...(as above)...on both engines not later than 31 December 2009.</p> <p>(3) For all SPEY 506-14A engines, irrespective of aircraft type installation:</p> <p>The incorporation of new standard LPT stage 2 blades (RR Mod.6428) in accordance with Rolls-Royce SB Sp72-1064 Revision 1 dated February 2001 or a later EASA approved revision is required to be completed not later than 30 June 2010."</p>			<p>Noted: Wording adjustments will be made to clarify.</p> <p>Noted: Covered by change to revision status-indiscriminate quotation of the SB</p>
Ref. Publications	As Revision 1 of the SB is the "base" document, I would suggest to list this as well as R2; note that this was published by Rolls-Royce plc (United Kingdom) rather than by RRD; in addition, since compliance with Fokker MCNO F28-008 is to be required, this should be listed as well, as (obviously) should any other document(s) referred to in the body of the AD which is/are deemed by the PCM "worthy" of mentioning	Name: Paul van Eenige Organisation: CAA-NL	05.04.2006	Noted: See above.
Reason	There has never been a "double occurrence" (an LPT stage 2 blade	Name: Jan	10.04.2006	Noted:

	<p>failure on both engines during the same flight). Therefore there is no "unacceptable high rate" of such a double occurrence. The reason for this mandatory action is actually the small risk for a double engine event which emerged from a risk analysis (which was based on extremely conservative assumptions). As a matter of fact, the compliance dates in this proposed AD (which is essentially an extension of the 31 December 2005 compliance date in CAA UK AD 005-07-2000) were derived from the small risk number. Because there has never been a "double occurrence" and therefore no "unacceptable high rate" and because the risk is not "high" or "unacceptable", Fokker Services requests to change "an unacceptable high rate" into "a risk".</p>	<p>Pinson Organisation: Fokker Services</p>		<p>Covered by wording change as above</p>
<p>Compliance</p>	<p>We strongly support the CAA-NL suggestion to use a "paragraph" structure. For example, the current position of the text "Engines operated in a pre Sp72-1064 configuration, the LP speed restrictions stated in MCNO F28-008 issued by Fokker Services must be adhered to." in the PAD incorrectly suggest that this requirement is applicable to both Spey 555 series and Spey 506 engines. We have the following additional comments:</p> <p>Credit should be allowed not only for Revision 1 of the Service Bulletin Sp72-1064 but also for the original issue (issue date July 2000). The original issue and revision 1 were not approved by EASA but by CAA-UK.</p> <p>Fokker Services therefore suggests to remove "Revision 1" and "EASA" from the suggested wording by the CAA-NL. The CAA-NL suggested text then becomes:</p> <p>"Unless previously accomplished, the incorporation of the new standard of LPT stage 2 blades (Mod 6428) via Rolls-Royce Service Bulletin Sp72-1064 is required by this AD. All necessary actions must be performed in accordance with the instructions of Service Bulletin Sp72-1064 dated July 2000 or a later approved revision. Where the compliance periods of the referenced SB differ from those mentioned in this directive, the requirements of this directive must take precedence."</p> <p>We suggest to delete "or Rolls Royce Spey Operating Instructions document ref. F-Sp2-F, as applicable." from the CAA-NL suggested compliance paragraph (1). The F28 Flight Handbook should only be changed i.a.w. the (Fokker Services) change instructions in Fokker Services document MCNO F28-008. The Rolls Royce Operating Instructions document does not include such change instructions for the F28 Flight Handbook.</p>	<p>Name: Jan Pinson Organisation: Fokker Services</p>	<p>10.04.2006</p>	<p>Accepted: Wording adjustments in the compliance statement will be made to clarify</p> <p>Noted: Covered by change to revision status-indiscriminate quotation of the SB</p> <p>Noted: Comments considered to be not relevant for the EASA PAD, but refer to CAA/NL comments</p>

	Change "Rolls-Royce SB Sp72-1064 Revision 1 dated February 2001 or a later EASA approved revision" in the CAA-NL suggested compliance paragraphs (2)(a), (2)(b) and (3) into "Rolls-Royce SB Sp72-1064 dated July 2000 or a later approved revision". Motivation ref. above (credit for mod incorporation i.a.w. earlier CAA-UK approved SB versions).			
Ref. Publications	Because credit should be allowed for mod corporation i.a.w. earlier CAA-UK approved SB versions, the original version, revision1 and revision 2 of Sp72-1064 should be mentioned here.	Name: Jan Pinson Organisation: Fokker Services	10.04.2006	Accepted: Covered by change to revision status-indiscriminate quotation of the SB
General	<p>Merpati Nusantara Airline as a largest operator who operetaed Fokker F28 powered by Engine RR Spey 555 fully support and Merpati had been implemented engine operating limitation and preventive maintenance to prevent the engine experiencing repetitive heavy-duty operation without effecting airworthy aspect. And for your information since 1989, along Merpati operate 25 aircraft F28 has never experienced engine in flight shut down caused by LP2 blade turbine failure.</p> <p>I hope the proposed AD can be formally issue on 12 April 2006, and our aircraft will back to operation wile awaiting the kit available in the market.</p>	Name: Pering Organisation: PT. Merpati Nusantara Airlines	11.04.2006	Noted: No comments.