



COMMENT RESPONSE DOCUMENT

EASA PAD No. 18-046

[Published on 27 March 2018 and officially closed for comments on 24 April 2018]

Commenter 1: Air France – Matthieu Papin – 04/04/2018

Comment # 1

- A. This PAD is based on Airbus SB A380-78-8012 which makes reference to 2 Safran Nacelles SB's in ATA 78. It is an inspection to be done on FEC and FTR only. Therefore, it would be more logical for this AD to be ATA 78 instead of ATA 54.
- B. Pre/Post Mod 77228 and Compliance time:
1. Statement: MOD 77228 is an aircraft modification related to Engine Alliance SB EAGP7-72-338. Aircraft can be considered Post MOD only when all 4 engines are modified.
 2. Statement: Airbus SB A380-78-8012 is to be followed per FEC/FTR position, counted on Component usages (FC), while the PAD does not precise if the Flight Cycles are those of the aircraft or the component. Without further precisions, we could think the AD is talking about aircraft usages.
 3. QUESTION: considering above statements 2a and 2b, is this AD applicable to the aircraft as a whole only, or is applicable to the FEC/FTR components?
- AFR believes that it should be applicable to the components as they can move from one tail to another. Also, if the AD is applicable to the aircraft, it would mean that the operator would have to wait for the 4 engines to be modified before being allowed to increase the interval to 4000 FC (In this case, §(3) (Optional Modification) says the same things, which makes it useless). In real life, the engines will not not be modified all at once. They will be mostly modified one at a time during shop visits. This will take several years to modify all the engines of AFR fleet. AFR does not see any reason not to increase the inspection interval for the 2 FEC/FTR which are installed in front of a modified engine only if another engine on the aircraft is not modified. This point should be clarified in the AD.
4. QUESTION: Airbus SB A380-78-8012 requests a one time inspection of the J-rings in front of an engine which status would change from pre to post MOD. This PAD does not requests such inspection. Is this one time required by the AD ? If yes, this should be precised.
- C. As far as we know, there is no restriction for engine installation regarding SB EAGP7-72-338: Nothing forbids to replace a Post MOD engine by a pre MOD engine (which can happen with unscheduled removals or lease engines). Therefore, optional modification per §(3) of PAD cannot be



considered as permanent to allow extension of the interval to 4000 FC. In case of replacement of a post Mod engine by a pre Mod engine, the J-rings should be inspected and interval reduced to 1250 FC/24 Months.

D. As a general comment, AFR would like to take benefits of this PAD comment to advise EASA that the construction of documents covering such subject is complex and difficult to handle. We have:

- Safran Nacelles SB L70DR78-043 for J-Ring inspection for FEC/FTR installed in front of Pre MOD engines.
- Safran Nacelles SB L70DR78-049 for J-Ring inspection for FEC/FTR installed in front of Post MOD engines. This SB requires the exact same inspection as SB L70DR78-043 (Copy Paste). The only differences with SB L70DR78-043 are the inspection interval and the kit numbers (while the contents of the kits are identical).
- Airbus SB A380-78-8012 requiring to perform either SB L70DR78-043 or SB L70DR78-049 depending on an engine SB status.
- Engine Alliance SB EAGP7-72-338 applicable to the engines.
- An airbus aircraft MOD applicable to the entire aircraft while Safran Nacelles or Engine Alliance SB are applicable to LRU's.
- EASA PAD making reference to the aircraft only.

Such construction and multiplication of documents increases the risks of misunderstanding and mistakes. A unique Safran Nacelles SB would have been sufficient, which would have made Airbus SB less complex. And AD should be more in line with what is requested by SB's, or clearly indicate any deviation from the SB's.

Has EASA performed an end to end document review? The operators must ensure flight safety, but so many documents (and considering sometimes the poor quality of their contents) do not help operators to so.

EASA response:

A. Comment agreed. This typographical error has been corrected in the Final AD.

B.1. Comment noted. EASA concurs, although it should be noted that operating an aeroplane in a mixed configuration (pre- and post-mod engine installations) is acceptable. The Final AD has been amended to emphasise this point.

B.2. Comment agreed. The Final AD has been amended by inserting Note 1, specifying that the FC are those accumulated by the inner J-ring (since first installation on an aeroplane), and by inserting paragraph (5), to regulate engine/parts installation. This also implies that not all inner J-rings installed on an aeroplane need to be inspected 'on-aircraft' concurrently.

B.3. Comment partially agreed. Since the thrust reverser (TR) is part of the aeroplane design, not of the engine design, the AD applies to the aeroplanes. However, as indicated in the EASA answer to point B.2 above, EASA confirms that the time accumulated by the inner J-ring has to be used to determine the first inspection.



B.4. Comment not agreed. The one-time inspection is part of the Airbus SB accomplishment instructions, and therefore required by the AD. New paragraph (5) Parts Installation confirms this requirement.

C. Comment noted. Paragraph (3) has been amended accordingly.

D. Comment noted. The multitude of service publications is due to the divided responsibilities between the various actors. The origins for this situation can largely be traced to commercial interests and legal liabilities. When related to an AD, the modification(s), inspection(s) and corrective action(s) must be approved by EASA, or approved under the privileges of the TC (DOA) holder. All 'vendor' (parts manufacturer) publications referred to in an Airbus SB, except the engine SB, are considered approved under Airbus DOA. The instructions of such a vendor SB, when referred to in the Airbus SB, can be accomplished either when the engine/component is in-shop, or while it is on the aeroplane. Both actions can be credited as 'compliance' with a corresponding action as required by the AD, as long as the related compliance time/interval – at aeroplane level – is not exceeded. EASA suggest that these concerns are addressed to Airbus at an appropriate opportunity, e.g. operator conference.

No changes have been made to the Final AD in response to points B.4 and D of this comment.

Commenter 2: Safran Nacelles – Nicolas Herve – 05/04/2018

Comment # 2

Indeed, we are wondering in regards to the threshold required for inspecting the J-Ring install on the nacelle for a pre-mod version. (without wear pad in the Engine V-groove). Following the proposition mentioned, extract here under:

Aeroplane Configuration	Compliance Time		Inspection Interval
Pre-mod 77228	(whichever occurs later, A or B)		1 250 FC or 24 months, whichever occurs first
	A	Before exceeding 3 750 flight cycles (FC) or 72 months, whichever occurs first since the aeroplane first flight	
	B	Within 1 250 FC or 24 months, whichever occurs first after the effective date of this AD	
Post-mod 77228	Within 4 000 FC since the aeroplane first flight, or after Engine Alliance SB EAGP7-72-338 embodiment (on all engines), as applicable		4 000 FC



⇒ We have to inspect at 1250 FC or 24 Months whichever occurs first.

The main point we would like to highlight is that we have spare items (Fan Exhaust Cowl or Thrust Reverser) in stock and ready to dispatch in case of Airlines need. In this frame we can stock those hardware more than 24 Months without usage. If the 24 Months requirement, is confirmed that means we will be obliged to inspect an hardware which didn't fly. Since this issue is linked to a contact between V-Groove and J-Ring, it is related to "operational" activity, I mean "flying dependant". If I may I would suggest to put an asterisk "*" after 24 months mentioning that this requirement is only applicable for hardware which has flown during this period. This comment is the same for the compliance time.

EASA response:

Comment agreed. See EASA answer to Comment #1, point B.2 above.

Commenter 3: Qatar Airways – Vitto Paolo Sarceno – 06/04/2018

Comment # 3

- A. For airplanes delivered Post-mod 77228 from production, in case the aircraft is installed in-service with an engine that is Pre-mod 77228 / Pre SB EAGP7-72-338, please confirm that the inspection thresholds/interval of the affected TR/FEC needs to be adjusted to Pre-mod configuration. If yes, can this be emphasized in the AD.
- B. Please advise if there are plans to develop a terminating action. If none, please advise why.
- C. We are concerned that even after completing the embodiment of SB EAGP7-72-338 across our fleet, our inspection program can be disrupted in case we receive a Pre-mod engine on AOG LOAN basis. Does EASA plan to mandate SB EAGP7-72-338, in lieu of terminating action? Does EASA monitor the embodiment of SB EAGP7-72-338 worldwide (thru the OEM), to ensure 100% of engines are modified within the next 5-6 years?

EASA response:

- A. Comment agreed. See EASA answer to point B.2 of Comment #1 above.**
- B. There is no terminating action identified today, and there is no plan to develop a terminating action.**
- C. No AD at engine level (FAA = State of Design authority) is expected. SB EAGP7-72-338 is not a terminating action. However, it may be expected that, through attrition, in some years only post-mod parts will remain in service.**

