

COMMENT RESPONSE DOCUMENT

EASA PAD No. 20-153

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Commenter 1: Delta Air Lines – Cecilia Teeuwen – 22/10/2020

Comment # 1

References:

- (1) EASA Proposed Airworthiness Directive: PAD No. 20-153, dated 30 SEP 2020
- (2) Rolls-Royce Trent 7000 Time Limits Manual (TLM) T-T7000-1RR, Chapters 05-10 and 05-20, Revision 7 dated 10 July 2020.

Upon reviewing Ref (1) and Ref (2), DAL is unclear of the safety concern that is driving the proposed Airworthiness Directive, Ref (1), specifically:

- A. The changes in the mandatory life section (Chapter 05-10) of Ref (2) are all life limit extensions not reductions. In the mandatory inspection section (Chapter 05-20) of Ref (2), some mandatory inspection tasks are deleted from paragraph 3, and placed into paragraph 2. Since previous revisions of the TLM are not publicly accessible, the reason for the changes to this TLM chapter are not readily apparent to operators. **These changes in the mandatory life and inspection sections do not appear to be safety related. DAL would like EASA to clearly define the safety concerns driving the proposed AD and the corresponding required actions to address these concerns.**
- B. The proposed AD, paragraph (3), Ref. (1), requires incorporation of Ref (2) into the AMP. However, the mandatory inspection section of the TLM Chapter 05-20, Ref (2), is predominantly comprised of piece-part inspections tasks that are not time based, accomplished off-wing and driven by workscope or disassembly level during engine shop visits; and therefore controlled via an operator's off-wing maintenance program. **DAL would like EASA to clarify if the definition of AMP includes off-wing maintenance programs in addition to on-wing maintenance programs, both part of an operator's Continuous Airworthiness Maintenance Program.**

If the AMP definition, in the proposed AD, includes only on-wing maintenance programs, incorporation and tracking of the TLM off-wing piece-part inspection tasks, which are not time based, would put a burden on operators even with the allowance outlined in paragraph (5). Adding these piece-parts off-wing task to an on-wing program would require tracking each piece part inspection individually and establishing a task frequency dependent on variable conditions such as engine disassembly level at a shop visit.

- C. Ref. (1) mandates Revision 7 of the TLM and allows the use of later approved revisions of the TLM to comply with the requirements of this proposed AD. For any U.S. registered aircrafts, mandate of this TLM revision would be driven by an FAA regulatory documents referencing the proposed EASA AD. FAA regulatory documents would not typically approve later revisions that do not yet exist. Therefore, the language in the proposed EASA AD



allowing the use of later approved revisions of the TLM, would not provide any relief for U.S. operators. **Instead of mandating a certain revision level of the TLM, DAL suggests EASA to mandate specific thresholds, intervals or new and/or more restrictive tasks in the latest revision of the TLM, as well as provide technical basis for the safety concern related to the mandatory changes.**

EASA response:

- A. Comment noted, but not agreed. Each item/task in the two specified chapters is related to safety, otherwise they would not have been included. The TLM changes have been approved by EASA and, even though some may not be 'more restrictive' since the previous TLM revision, they nevertheless must be complied with. It should be noted that there have been several revisions to the TLM since Trent 7000 entry into service, and no AD was issued to require implementation of the changes contained in those revisions. The purpose of this AD is to ensure that all task are accomplished, as specified in the current TLM.**
- B. Comment noted. EASA confirms that the AMP, as defined in EU regulation, must include – for engines and components (e.g. TSO parts) installed on an aircraft – the 'required' off-aircraft actions, i.e. those that have been determined necessary to maintain an acceptable level of safety, including threshold and intervals for those actions. Since this is an engine AD, it logically includes all 'required' off-wing (in-shop) actions for the engine, as specified in the two affected TLM Chapters. EASA expect other ICAO States to apply the same (or similar) principles when it comes to continued airworthiness of engines and aircraft components. The definition of AMP in the AD therefore does not need to make this clear.**
- C. Comment not agreed. EASA is aware of the Federal Register restriction (imposed on the FAA approx. 1988), no longer allowing the FAA to refer in their ADs (US regulation) to documents which, at the time of AD issuance, do not exist and are therefore not approved.**
- However, if the FAA (Engine and Propeller Directorate) can see its way clear to apply the latest FAA AD 'standard', made possible by the recent FAA Re-authorization Act (see e.g. [AD 2020-21-04](#)), this would not be a problem. As can be seen from the example, an EASA AD is adopted by incorporating by reference (IBR) the AD itself, effectively allowing the use of 'later approved revisions' of the TLM (which is not IBR) also by the FAA AD. The only parts of the EASA AD which are not part of the IBR are the effective date and the Section 'Remarks'.**

No changes have been made to the Final AD in response to this comment.

