


EASA	COMMENT RESPONSE DOCUMENT
	<p>EASA PAD No. 15-103</p> <p>[Published on 06 August 2015 and officially closed for comments on 03 September 2015]</p>

Commenter 1: Cargolux Airlines International S.A. – Jean-Claude Krier – 10/08/2015

Comment # 1

Paragraph (4) of PAD 15-103 has following wording:

(4) From the effective date of this AD, do not release an engine to service unless that engine has a P/N FB500000 LP turbine support roller bearing installed.

CLX would like to understand the exact meaning of 'do not release an engine to service' in this context.

Does the 'do not release an engine to service' apply to engines only that are currently undergoing SHV (C&R , OVH, refurbishment) where the IP/LP turbine module has been removed from the engine? Does the 'do not release an engine to service' also apply to spare engines which are in an assembled state at an airline facility and which are awaiting to release to service for some other reason.

EASA response:

Comment accepted. Paragraph (4) of the Final AD has been amended to clarify that 'release to service' is related to engines that come out of a shop, having been reassembled, not to complete engines held as spare that are ready for installation on an aeroplane.

Commenter 2: Qantas Airways Limited – Simon Beevers – 14/08/2015 and 28/08/2015

Comment # 2

[14/8/2015] With reference to the subject PAD, can you please clarify the intent of the statement:

(4) From the effective date of this AD, do not release an engine to service unless that engine has a P/N FB500000 LP turbine support roller bearing installed.

Is this intended to prevent the release of engines from the overhaul shop only? If we have a completed spare engine that does not have the FB500000 bearing fitted will we be able to install it to an aircraft after the effective date of the AD (but before 24 months after the effective date of the AD)?

[28/8/2015] Qantas is in a fleet run down of their RR powered B747 fleet with the last of the type expected to retire in 2019. We currently have 16 installed engines and have accumulated 16 spare engines, using assets retrieved from aircraft that have already been sold without engines. We expect that the 16 spare engines will be sufficient to take the fleet to retirement without any further engine overhaul activity and also by the time that the fleet retires the remaining engines will have little residual life. We have fitted the FB500000 at every shop opportunity since the end of 2010.

We were aware that there had been discussions around an AD for the FB500000 bearing following the Qantas engine failure in 2010, but we were not aware that this was now planned to happen until it was mentioned by another 524 operator earlier this year. We had not received any briefings from Rolls-Royce that an AD was finally to be issued.

We have a small population (4 engines) of engines with pre-mod bearings.

I would like to make the following comments on the proposed AD.

- a) We currently have two spare engines with FB500000 bearings. We also have two engines flying with FB500000 bearings which may require temporary removal, for example for engine mount change or thrust reverser work. The PAD prohibits the 'release to service' of pre-SB72-B540 engines. Discussions with EASA have confirmed that this statement is intended to prohibit the release of engines from an overhaul facility unless they have a FB500000. When the AD is released Qantas requests that the statement 'release to service' is clarified as 'released to service from an engine overhaul facility'.
- b) Since there have been no further failures of the LPT2 blade since the Qantas failure, can the risk assessment be reassessed to extend the compliance. An end 2018 would enable us to ensure that we are able to exploit the life expectation of our remaining pre SB72-B540 engines.

EASA response:

a) Comment accepted. See EASA answer to Comment #1.

b) Comment not agreed. The compliance time of 24 months has been determined by EASA on the basis of a risk assessment provided by the design approval holder. No changes have been made to the Final AD in response to this comment.

Commenter 3: Cathay Pacific Airways Limited – Anthony Shum – 02/09/2015

Comment # 3

Paragraph 3 of the required action is not easy to understand but as far as I interpret this paragraph basically means once the engine has the FB500000 LP Turbine support roller bearing installed it cannot be reversed to pre mod status. Would it be any chance to rewrite this paragraph to make it simpler?

Paragraph 4 of the required action stated "From the effective date of this AD, do not release an engine to service unless that engine has a P/N FB500000 LP turbine roller bearing installed", does it mean a serviceable spare engine (does not have FB500000 LPT roller bearing installed) cannot be fitted onto aircraft after the effective date of the AD, or it means do not release the engine from overhaul shop visit (without FB500000 LPT roller bearing installed) after the effective date of the AD?

EASA response:

Comment to paragraph (3) understood, but not accepted. It should be noted that an AD is a legal document, which may mean that in some cases (as in this case) wording needs to be used that excludes misinterpretation. Two groups of engines exist, therefore two separate paragraphs with different requirements. The distinction is made to allow the 'old' parts still to be (re)installed on an engine, if necessary to be replaced, until that engine is modified as required by the AD. For an engine that is already post-mod, that option is not available. No changes have been made to the Final AD in response to this comment.

Comment to paragraph (4) accepted. See EASA answer to Comment #1.