


EASA	COMMENT RESPONSE DOCUMENT
	<p align="center">EASA PAD No. 14-019 [Published on 23 January 2014 and officially closed for comments on 20 February 2014]</p>

Commenter 1: Singapore Airlines – Jimmy Aw – 27/01/2014

Comment # 1

The wording "... incorporated in production" in paragraph (1), paragraph (8) and paragraph (14) may not be the intent of the subject PAD and lead to discrepancy with paragraph (6), paragraph (13) and paragraph (19). Suggest to remove the wording " in production" in the affected paragraphs.

EASA response:

Comment agreed. The Final AD has been amended accordingly.

Commenter 2: Singapore Aero Engine Services – Tay Hang Chua – 11/02/2014

Comment # 2

I have the following feedback / query with regards to this PAD.
For the Trent 800 engines:

Scenario 1:

Shop Visit	IPC Rotor Shaft inspection IN-SHOP – AD 2013-002	On wing AD 2013-002	IPC Rotor Shaft inspection IN-SHOP – PAD 14-019	On –Wing PAD 14-019
1st	Per AD para (2) - Balance weights removed per SB 72-AG085 para 3.A, rear flange inspected per SB 72-G085 para 3.B, visual inspection per SB 72-AG085 para 3.C, balance weights re-fitted per SB 72-AG085 para 3.D	Continue with on-wing inspection per AD para (1)	Per PAD para (2) - Balance weights removed per SB 72-AG085 para 3.A, rear flange inspected per SB 72-G085 para 3.B, visual inspection per SB 72-AG085 para 3.C, balance weights re-fitted per SB 72-AG085 para 3.D	Continue with on-wing inspection per PAD para (1)

2 nd IPC module is NOT disassembled sufficiently to expose the rear face of the IPC module	<p><u>Per AD para (2) -</u> Balance weights removed per SB 72-AG085 para 3.A, rear flange Eddy current inspection per SB 72-G085 para 3.B, visual inspection per SB 72-AG085 para 3.C, balance weights re-fitted per SB 72-AG085 para 3.D</p> <p><u>Per AD para (4) -</u> Balance weights located on Stage 8 rear balance flange are removed per SB 72-AG401 para 3.A. Install new balance weights per para 3.B of SB 72-AG401</p>	On wing inspection not required per AD para (5)	<p><u>Per PAD para (2) -</u> Balance weights removed per SB 72-AG085 para 3.A, rear flange Eddy current inspection per SB 72-G085 para 3.B, visual inspection per SB 72-AG085 para 3.C, balance weights re-fitted per SB 72-AG085 para 3.D</p> <p><u>Per PAD para (5) -</u> Re-location of balance weights per SB 72-AG401 is not mandated</p>	Continue with on-wing inspection per PAD para (1)
3 rd IPC module is disassembled sufficiently to expose the rear face of the IPC module	AD is no longer applicable as the engine had SB 72-AG401 incorporated at the last shop visit	On wing inspection not required per AD para (5)	<p><u>Per PAD para (2) -</u> Balance weights removed per SB 72-AG085 para 3.A, rear flange Eddy current inspection per SB 72-G085 para 3.B, visual inspection per SB 72-AG085 para 3.C, balance weights re-fitted per SB 72-AG085 para 3.D</p> <p><u>Per PAD para (5) -</u> Balance weights located on Stage 8 rear balance flange are removed per SB 72-AG401 para 3.A. Install new balance weights per para 3.B of SB 72-AG401</p>	On wing inspection not required per PAD para (6)
4 th			<p>Is inspection of the IPC rotor shaft per PAD para (2) still required?</p> <p>If “Yes”, how to accomplish SB 72-AG085 para 3.A (remove weights) and 3.D (refit weights)? We certainly should NOT be refitting the weights in the Stage 8 rear balance flange location.</p> <p>When will this inspection be terminated?</p> <p>Note – the IPC rotor shaft has not been operated with the balance weights in the rear balance flange since the previous shop visit.</p>	On wing inspection not required per PAD para (6)

Scenario 2:

Shop Visit	IPC Rotor Shaft inspection IN-SHOP – AD 2013-002	On wing AD 2013-002	IPC Rotor Shaft inspection IN-SHOP – PAD 14-019	On –Wing PAD 14-019
1st	<u>Per AD para (2) -</u> Balance weights removed per SB 72-AG085 para 3.A, rear flange inspected per SB 72-G085 para 3.B, visual inspection per SB 72-AG085 para 3.C, balance weights re-fitted per SB 72-AG085 para 3.D	Continue with on-wing inspection per AD para (1)	<u>Per PAD para (2) -</u> Balance weights removed per SB 72-AG085 para 3.A, rear flange inspected per SB 72-G085 para 3.B, visual inspection per SB 72-AG085 para 3.C, balance weights re-fitted per SB 72-AG085 para 3.D	Continue with on-wing inspection per PAD para (1)
2 nd IPC module is disassembled sufficiently to expose the rear face of the IPC module	A NEW IPC rotor shaft is installed during this shop visit <u>Per AD para (2) -</u> Per SB 72-AG085 para C: This NMSB need not be accomplished on IP compressor shafts that have a life of zero cycles since new. <u>Per AD para (4) -</u> Balance weights located on Stage 8 rear balance flange are removed per SB 72-AG401 para 3.A.(Not complied because no balance weights). Install new balance weights per para 3.B of SB 72-AG401	On wing inspection not required per AD para (5)	A NEW IPC rotor shaft is installed during this shop visit <u>Per PAD para (2) -</u> Per SB 72-AG085 para C: This NMSB need not be accomplished on IP compressor shafts that have a life of zero cycles since new. <u>Per PAD para (5) -</u> Balance weights located on Stage 8 rear balance flange are removed per SB 72-AG401 para 3.A.(Not complied because no balance weights). Install new balance weights per para 3.B of SB 72-AG401	On wing inspection not required per PAD para (6)
3 rd IPC module is disassembled sufficiently to expose the rear face of the IPC module	AD is no longer applicable as the engine had SB 72-AG401 incorporated at the last shop visit	On wing inspection not required per AD para (5)	Is inspection of the IPC rotor shaft per PAD para (2) still required? If “Yes”, how to accomplish SB 72-AG085 para 3.A (remove weights) and 3.D (refit weights)? We certainly should NOT be refitting the weights in the Stage 8 rear balance flange location. When will this inspection be terminated? Note- IPC rotor shaft has never operated with the balance weight in the rear flange and is thus not subjected to fretting.	On wing inspection not required per PAD para (6)

Similarly, the questions need to be asked for the following Trent models:

Trent 700 engines (replacing SB 72-AG401 with SB 72-AG402)

Trent 500 engines (replacing SB 72-AG401 with SB 72-AH555)
 Trent 900 engines (replacing SB 72-AG401 with SB 72-AH561)

EASA response:

Comments agreed. The Final AD has been amended accordingly.

Commenter 3: Boeing – Pamela J. Hicks – 14/02/2014

Comment # 3

Boeing has reviewed the subject NPRM and concurs with the contents of the proposed rule. Therefore, no additional comments will be forthcoming.

EASA response:

Comment noted and appreciated.

Commenter 4: American Airlines – John Beavers – 19/02/2014

Comment # 4

References:

1. EASA PAD 14-019
2. Rolls-Royce Alert Service Bulletin (ASB) RB.211-72-AG401, Revision 3

EASA PAD, Reference 1, is issued for comment and was prompted by recent findings that expanded the applicability to a wider range of Trent engine models and a need to clarify requirements regarding in-shop inspections.

AAL has reviewed Reference 1 and is agreement with the content, but would like to suggest that Item (5) under "Required Action(s) and Compliance Time(s)" be revised to reflect Rolls-Royce latest release of ASB RB.211-72-AG401, Revision 3 dated January 28, 2014 (Reference 2). This ASB revision changes slightly the language in the 'Compliance' statement regarding in-shop criteria for accomplishment of this modification. Reference 1 is already in alignment with the ASB change, however references Revision 2.

EASA response:

Comment understood, partially agreed. PAD 14-019 refers, in the RACT section, to the ASB at Revision 2 as the 'required' instructions to be used, because the AD retains required actions, started after January 2011, as previously required by EASA AD 2010-0266R1 and also because, at the time of PAD issuance, Revision 3 did not exist yet. It was decided not to revise PAD 14-019 to introduce Rev.3 as the 'required' instructions. Nevertheless, the 'Ref.

Publication(s)' section of the Final AD has been amended to include reference to Rev.3 of the ASB.

In addition, the AD also contains the standard statement that a 'later approved revision' of a required SB is (unless explicitly stated otherwise) always acceptable for compliance with an EASA AD, which avoids the need for AMOC application.