



TECHNICAL INFORMATION LETTER

TIL N° T-139-22-006

DATE: July 22, 2022

REV.: /

To: Leonardo Helicopters products
AW139 Owners / Operators / Service Centres

SUBJECT: Tail Rotor Duplex Bearing inspection and replacement

Helicopters Affected: AB/AW139

References:

- [1] T-139-22-004 – “Tail Rotor Duplex Bearing”
- [2] TMI139-559 – “Duplex bearing (sliding control assembly) – Replacement (remove and install a new item)”

Dear Customer,

With the present letter, Leonardo Helicopters (LH) would like to provide information about the Emergency Alert Service Bulletin (EASB) 139-725 that is going to be issued in order to prescribe the inspection of the Tail Rotor Duplex Bearing (TRDB) P/N 3G6430V00151, P/N 3G6430V00152 and P/N 3G6430V00153 and the replacement when necessary.

A case of a TRDB found damaged has been reported from in-service fleet. Following the analysis of maintenance history of subject TRDB, performed with the cooperation of the Customer, it has been noticed that subject TRDB was previously removed from a Tail Rotor Sliding Control Assy and then re-installed; this operation is NOT allowed as per AMP applicable procedures which prescribe to discard the TRDB once it is removed from the Tail Rotor Sliding Control Assy.

As also anticipated with the communication at Reference [1], LH would like to highlight the importance to discard the TRDB once it is removed. For this reason, the maintenance procedure related to TRDB replacement has been reviewed to avoid any potential misinterpretation and the TMI at Reference [2] has been issued to further highlight that TRDB must be discarded once removed from the Sliding Control Assy.

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In addition to the above, the EASB 139-725 will be issued in order to prescribe:

- **Part I:** an inspection for absence of rotation of the castellated trunnion installed on the back-end of the Tail Rotor Actuator (TRA), including the application of a slippage mark, to be performed before next flight and then every 10 FH until the TRDB is replaced.
- **Part II:** a repetitive inspection for TRDB condition, including the roughness check, to be performed within and not later than 10 FH after the issue of the EASB and then every 50 FH until the TRDB is replaced.

Inspections required by Part I and Part II apply to all AB/AW139 helicopters equipped with TRDB that have logged less than 2400 FH and that have been previously removed and reinstalled on Tail Rotor Sliding Control Assy during application of AMPI Chapter 5 task 64-26 (2400 FH inspection) or AMPI Chapter 5 tasks 64-23 or 64-24 (4 Years inspection) or any other reason.

If any of the inspections required by EASB 139-725 Part I or Part II fails, the TRDB must be replaced immediately.

- **Part III:** a repetitive inspection for TRDB condition and absence of rotation of the castellated trunnion installed on the back-end of the TRA, to be performed before next flight and then every 5 FH until the TRDB is replaced.

Inspections required by Part III apply to all AB/AW139 helicopters equipped with TRDB that have logged more than 2400 FH, regardless if they have been previously removed and reinstalled or not during application of AMPI Chapter 5 task 64-26 (2400 FH inspection) or AMPI Chapter 5 tasks 64-23 or 64-24 (4 Years inspection) or any other reason.

If any of the inspections required by EASB 139-725 Part III fails, the TRDB must be replaced immediately.

- **Part IV:** the replacement of the TRDB, both installed and kept in stock, in accordance with a prescribed compliance time. Part IV, either in Effectivity and in Compliance paragraphs, is considering the following five cases, based on the component FH:
 - **Case A:** TRDB that successfully passed all checks requested by Part I and Part II.
 - **Case B:** TRDB with less than 2400 FH and that have NOT been previously removed and reinstalled on Tail Rotor Sliding Control Assy.
 - **Case C:** TRDB that successfully passed the check requested by Part III.
 - **Case D:** TRDB kept in stock and that have been removed from a Tail Rotor Sliding Control Assy.
 - **Case E:** TRDB that have been removed and reinstalled on a Tail Rotor Sliding Control Assy kept in stock.

LH would like to highlight that the EASB 139-725, in advance of the modification of AW139 AMPI Chapter 5, introduces also a Discard Time of 2400 FH of the TRDB.


Customers are invited to procure in advance, if not yet available, the appropriate tooling to comply with the instructions for TRDB replacement (Reference [2]).

Please be also informed that a dedicated Airworthiness Directive (AD) will be issued by EASA on the subject.

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Should you need any additional information, please do not hesitate to refer to LH Engineering Support team (engineering.support.lhd@leonardo.com).

Yours Sincerely,



Gabriele Bordino
Head of Product Support Engineering