



A319

Engine Condition Monitoring

Weekly Report

ECM-LWA-Y25/W12-MSN2878

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Via Osteria Grande 57
37066 – Sommacampagna – Verona - Italy

ECM WEEKLY REPORT

A/C Type	A/C MSN	Pos	Engine S/n	Engine Type	Last Data Date	Monitoring Date	Cr. ΔEgt	Cr. ΔN2	Cr. ΔFF	Cr. N1 Vibs	Cr. N2 Vibs	Cr. Oil Tp.	Cr. Oil Press	To.EGT	To.N1	To.N2	Oil consumpt.	CFM Alert
A319-112	2878	1	577744	CFM56-5B6/P	2025-03-14	2025-03-21	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
		2	577751	CFM56-5B6/P	2025-03-14	2025-03-21	OK	OK	OK	OW	OK	OK	OK	OK	OK	OK	OK	OK

Summary / Analysis / Recommendations:

ESN 577744 and ESN 577751 have been checked for primary parameters shifts from baselines and for secondary parameters limits as per approved maintenance manuals.

ESN577751, High N1 Vibrations:

2025_03_21: EO to be issued to perform Vectorial Trim Balance;
 2025_03_14: WC-EO-77-016R00 accomplished on 2025_03_03 without any rebalance due to uncorrect WC execution procedure; this issue has been highlighted to LWA on 2025_03_14 through email;
 2025_03_07: WC-EO-77-016R00 not accomplished yet;
 2025_02_27: WC-EO-77-016R00 not accomplished yet;
 2025_02_14: Also if the trend is showing a little improvement, let's wait for WC-EO-77-015R00 and WC-EO-77-016R00 to continue troubleshooting performing Unbalance data acquisition in flight and Fan trim Balance with EVMU (one shot method) respectively; due date 2025_02_15 and 2025_02_22 respectively;
 2025_02_07: Trend descending a little bit after 2025_01_26 (WC-EO-72-023R00 (WC2104)) but it remains a little bit high; just one more alert CFM alert from the one dated 27/01/2025 for the flight data captured on 17/01/2025 h00:49utc (TO phase): this is dated 03/02/2025 h10:30 for the flight data captured on 30/01/2025 h17:29utc (TO phase);
 Issued WC-EO-77-015R00 and WC-EO-77-016R00 to continue troubleshooting performing Unbalance data acquisition in flight and Fan trim Balance with EVMU (one shot method) respectively; due date 2025_02_15 and 2025_02_22 respectively;
 2025_01_31: Last CFM alert dated 27/01/2025 for the flight data captured on **17/01/2025 h00:49utc** (TO phase); Waiting for updated data;
 2025_01_26: WC-EO-72-023R00 (WC2104) performed (AMM Task 72-00-00-200-006-A Inspection/Check of Foreign Object Damage (FOD) (Bird Strike Included) and TSM Task 77-00-00-810-864-A for Fan Vibrations Higher than or Equal to 6 Units on Engine Pos.02 of WLA) with the following results:
 No damage to the spinner front and rear cones;
 No shingling or damage to the fan rotor blades;
 No wear of abradable material in fan inlet case;
 No damage of acoustical panels that may have been damaged as a result of interference with blade tip;
 No damage to the splitter fairing and booster inlet guide vanes (IGV);
 No damage to the fan outlet guide vanes (OGV) and seals of fan OGV inner shroud;
 No damage to the T12 sensor probe;
 No shingling or damage to the LPT stage 4 blades;
 No damage of the wiring, connectors and receptacles between (Ref. ASM 77-32-02) :
 -the No. 1 vibration sensor (4002EV) to the EVMU (2EV);
 -the TRF vibration sensor (4003EV) to the EVMU (2EV)?;
 No damaged pins or oxidated connectors;
 Cleaning of the connectors using a brush - bristled with stoddard solvent Ref. AMM 73-21-50-210-002: Performed;
 Electrical test of the No. 1 bearing vibration sensor (4002EV) Ref. AMM 77-31-10-720-001.
 Pins 1 and 2: >10GΩ;
 Pins 1 and 3: >10GΩ;
 Pin 1 and connector body: >10GΩ;
 Pin 2 and connector body: >10GΩ;
 Pin 3 and connector body: >10GΩ;

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Summary/ Analysis / Recommendations:

Electrical test of the TRF vibration sensor.

Insulation resistance between:

Pins 1 and 2: >10GΩ;

Pins 1 and 3: >10GΩ;

Pin 2 and connector body: >10GΩ;

Pin 3 and connector body: >10GΩ;

Operational test of the Engine Vibration Monitoring Unit EVMU through the Centralized Fault Display System (CFDS) Ref. AMM 77-32-34-710-040: Passed;

Check and inspect accessories and QEC components, including:

- accessory gearbox mounts;
- links and brackets of the accessories to make sure they are not loose or broken;
- cowling brackets, hinges and rigging;
- pneumatic system for correct condition and rigging.

No worth

Check:

- the Magnetic Chip Detector visual indicator;

- the Magnetic Chip Detector; Ref. AMM 79-00-00-281-002

- the Scavenge Screens Plugs (CAUTION: REMOVE AND INSPECT THE SCAVENGE SCREEN PLUGS ONE BY ONE) Ref. AMM 79-00-00-281-003.

No magnetic particles Or other types of particles.

Borescope inspection of booster assembly Ref. AMM 72-21-00-290-003 and compile the borescope report.

Nothing to report

Do a borescope inspection of the Low Pressure Turbine Ref. AMM 72-54-00-290-005 and Ref. AMM 72-54-00-290-006 and compile the borescope report.

Nothing to report

Perform the DETAILED INSPECTION AND RELUBRICATION OF FAN BLADE DOVETAILS, MIDSPAN SHROUDS, SPACERS, PLATFORMS AND FAN DISK DOVETAIL SLOTS IAW MP TASK 722000-C3-1-RH (WC1550).

Done

2025_01_17: WC-EO-72-023R00 (WC2104), already planned for 12/01/2025, has not been accomplished; Last CFM alert dated 12/01/2025 for the flight data captured on 04/01/2025 h11:16utc (TO phase); the majority of the alerts are in TO phase;

2025_01_10: WC-EO-72-023R00 has been issued to PF the TS for N1 High Vibs on ESN577751 (WLA#01) following CNR_LWA_CFM56-5B_20241221039; Last CFM alert dated 28/12/2024 for the flight data captured on 25/12/2024 h08:43utc (Cruise phase); WC-EO-72-023R00 planned for 12/01/2025;

2025_01_07: WC-EO-72-023R00 has been issued to PF the TS for N1 High Vibs on ESN577751 (WLA#01) following CNR_LWA_CFM56-5B_20241221039;

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Checked by: Francesco De Negri









