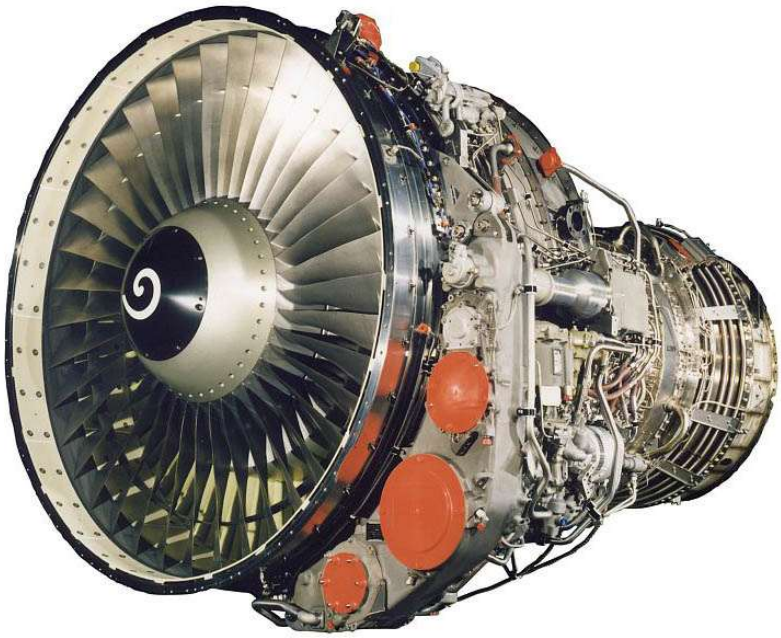
# Engine Mini Pack



| | |
|---|---|
| Engine type | CFM56-3C1 |
| Engine Serial Number | 591 |
| Engine TT | 59928.05 |
| Engine TC | 30279 |
| TSLSV | 9555.05 |
| CSLSV | 5279 |
| LLP Limiter | 3797 |
| As of September 24 2025 | |

# LLP List

| IIN | NOMENCLATURE | PART NUMBER | SERIAL NUMBER | TOTAL HOURS | TOTAL CYCLES | TOTAL CYCLES CATEGORY | | | REMAINING CYCLES CATEGORY | | | LIFE LIMIT(CYCLES) CATEGORY | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | CAT.A | CAT.B | CAT.C | CAT.A | CAT.B | CAT.C | CAT.A | CAT.B | CAT.C |
| 211 | BOOSTER SPOOL | 335-009-306-0 | PA164954 | 15731.1 | 10212 | 5279 | 3165 | 1768 | 19788 | 19788 | 19788 | 30000 | 30000 | 30000 |
| 213 | DSK STG 1 FAN | 335-014-511-0 | BC568629 | 25486.1 | 16307 | 5279 | 3165 | 7863 | 9171 | 7612 | 6145 | 30000 | 24900 | 20100 |
| 221 | SHAFT FAN | 335-006-414-0 | DC329551 | 25525.1 | 19274 | 10098 | 5256 | 3920 | 10726 | 10726 | 10726 | 30000 | 30000 | 30000 |
| | | | | | | | | | | | | | | |
| 312 | SHAFT HPC RTR | 1275M37P02 | GWN0EK9E | 22810.1 | 11627 | 5279 | 368 | 5980 | 8373 | 8373 | 8373 | 20000 | 20000 | 20000 |
| 313 | SPOOL STG 1-2 | 1589M66G02 | GWN0EEK2 | 22810.1 | 11627 | 5279 | 368 | 5980 | 8373 | 8373 | 8373 | 20000 | 20000 | 20000 |
| 314 | DISK STG 3 HPC | 1590M59P01 | XAEH4922 | 22810.1 | 11627 | 5279 | 368 | 5980 | 8373 | 8373 | 8373 | 20000 | 20000 | 20000 |
| 315 | SPOOL HPCR STG 4-9 | 1588M89G03 | GWN0R22M | 22810.1 | 11627 | 5279 | 368 | 5980 | 6783 | 6783 | 5358 | 20000 | 20000 | 15800 |
| 316 | SEAL AIR HPC REAR | 1319M25P02 | GFF5DDGK | 19456.1 | 12223 | 12223 | 0 | 0 | 7777 | 6999 | 5832 | 20000 | 18000 | 15000 |
| | | | | | | | | | | | | | | |
| 521 | SHAFT FWD HPT | 1385M90P04 | XAEJ3132 | 22810.1 | 11627 | 5279 | 368 | 5980 | 7260 | 6280 | 6171 | 20000 | 17300 | 17000 |
| 522 | SEAL AIR HPT FWD | 1282M72P05 | XAE34987 | 22810.1 | 11627 | 5279 | 368 | 5980 | 6334 | 5004 | 4782 | 20000 | 15800 | 15100 |
| 525 | DSK HPT RTR | 1475M29P02 | GWN0AC2N | 22810.1 | 11627 | 5279 | 368 | 5980 | 7118 | 6584 | 5908 | 20000 | 18500 | 16600 |
| 526 | SHAFT REAR HPT | 1864M91P02 | TMT2B433 | 22810.1 | 11627 | 5279 | 368 | 5980 | 8373 | 8373 | 8373 | 20000 | 20000 | 20000 |
| | | | | | | | | | | | | | | |
| 542 | DISC STG 1 LPT | 301-331-126-0 | BC781496 | 26637.1 | 15535 | 5279 | 10256 | 0 | 9465 | 9465 | 9465 | 25000 | 25000 | 25000 |
| 543 | DISC STG 2 LPT | 301-331-227-0 | BC761114 | 26637.1 | 15535 | 5279 | 10256 | 0 | 9465 | 9465 | 9465 | 25000 | 25000 | 25000 |
| 544 | DISC STG 3 LPT | 301-331-322-0 | BC817439 | 26637.1 | 15535 | 5279 | 10256 | 0 | 9465 | 9465 | 9465 | 25000 | 25000 | 25000 |
| 545 | DISC STG 4 LPT | 301-331-429-0 | DD686669 | 26637.1 | 15535 | 5279 | 10256 | 0 | 9465 | 9465 | 9465 | 25000 | 25000 | 25000 |
| 546 | SUPPT CONC LPT | 305-056-116-0 | BB500439 | 37225.1 | 21203 | 5736 | 15467 | 0 | 3797 | 3797 | 3797 | 25000 | 25000 | 25000 |
| 551 | SHAFT LPT | 301-330-067-0 | F001863 | 31554.1 | 20463 | 6527 | 9031 | 4905 | 9537 | 9537 | 9537 | 30000 | 30000 | 30000 |
| 552 | SHAFT STUB LPT | 301-330-626-0 | BC680660 | 22810.1 | 11627 | 5279 | 368 | 5980 | 13373 | 13373 | 13373 | 25000 | 25000 | 25000 |

# Borescope inspection report

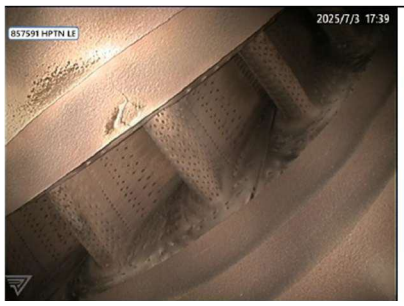
| Fan and Booster Rotor blades | |
|---|---|
| Stage 2 | No damage |
| Stage 3 | No damage |
| Stage 4 | No damage |

| Booster Stator Vanes – limited view | |
|---|---|
| Stage 3 | No damage |
| Stage 4 | No damage |

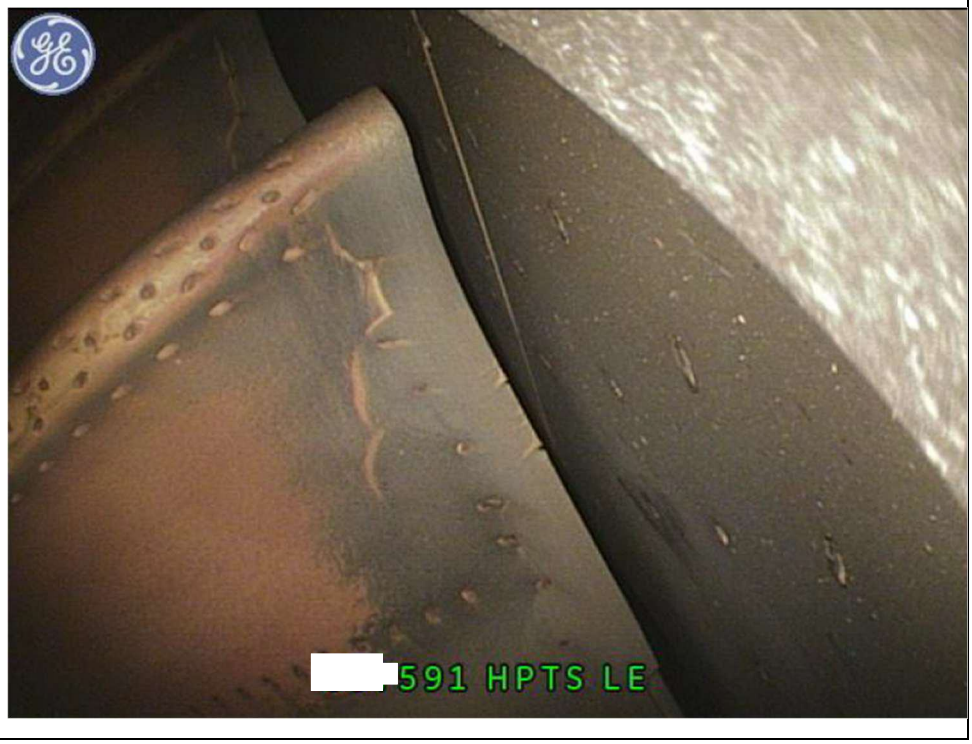
| High Pressure Compressor Rotors | |
|---|---|
| Stage 1 | No damage |
| Stage 2 | No damage |
| Stage 3 | No damage |
| Stage 4 | No damage |
| Stage 5 | No damage |
| Stage 6 | No damage |
| Stage 7 | No damage |
| Stage 8 | No damage |
| Stage 9 | No damage |

| High Pressure Compressor Vanes | |
|---|---|
| IGV | No damage |
| Stage 1 | No damage |
| Stage 2 | No damage |
| Stage 3 | No damage |
| Stage 4 | No damage |
| Stage 5 | No damage |
| Stage 6 | No damage |
| Stage 7 | No damage |
| Stage 8 | No damage |

| Combustion Chamber | |
|---|---|
| Inner Liner | Serviceable damage<br>Cracks no longer than one panel were found<br>(b) Axial cracks on the inner liner(Fig.606)<br>1) The conditions that follow are permitted:<br>a) No maximum number of cracks that go across 1 panel or less |

| | |
|---|---|
| |   |
| Outer Liner | No damage |
| Dome | No damage |
| Fuel Nozzles | No damage |

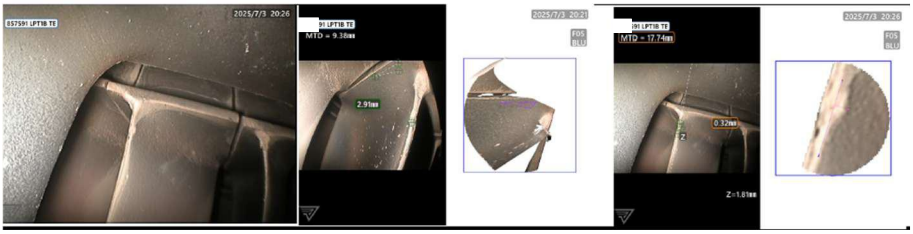
| HPT Nozzle Vanes | |
|---|---|
| Stage 1 | No damage |

| HPT Blade | |
|---|---|
| Stage 1 | Serviceable damage<br>(c) Examine the tip area of the blades<br>b) There is no limit to the quantity of damage if the internal cooling passages are not seen<br>  |

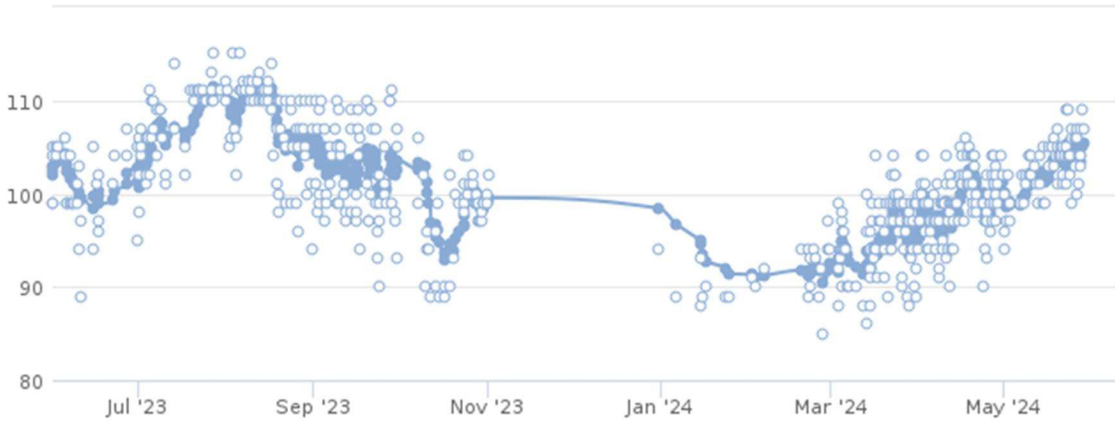
| HPT Shrouds | |
|---|---|
| HPT Shrouds | No damage |

| Low pressure Turbine Nozzle | |
|---|---|
| Stage 1 | Serviceable Damage<br>1. Cracks no longer than 1/3 of the chord length were found on L/E<br>(b) Cracks in the leading edge<br>1) No maximum limit to the quantity if they are less than 0.6 inch (15.2 mm) in length (1/3 of the chord length) on all the vanes of the same nozzle segment.<br>  <br>2. Cracks no longer than 1/3 of the chord length were found on T/E<br>(a) Cracks in the trailing edge<br>1) No maximum limit to the quantity if they are less than 0.6 inch (15.2 mm) in length (1/3 of the chord length) on all the vanes of the same nozzle segment.<br>  <br>3. Burns with cracks were found on one nozzle set<br>1) There is no limit if there is no more than five (5) missing material areas (perforations) on the leading edge per set of nozzles with a maximum dimension for each area that is not more than 0.4 x 0.275 inch (10 x 7 mm). |

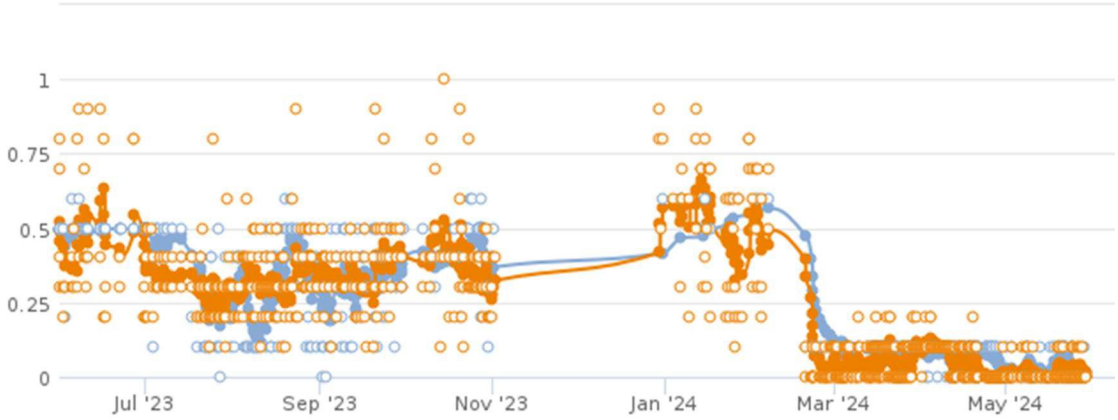
| | |
|---|---|
| |  |

| Low Pressure Turbine Blades | |
|---|---|
| Stage 1 | Serviceable damage<br>One dent was found in Area E T/E<br>1) Nicks or dents in Area E.<br>a) Any amount of nicks or dents are permitted if they are less than 0.02 inch (0.50 mm) deep.<br>  |
| Stage 2 | Repair marks found<br>  <br>  |
| Stage 3 | No damage |
| Stage 4 | No damage |

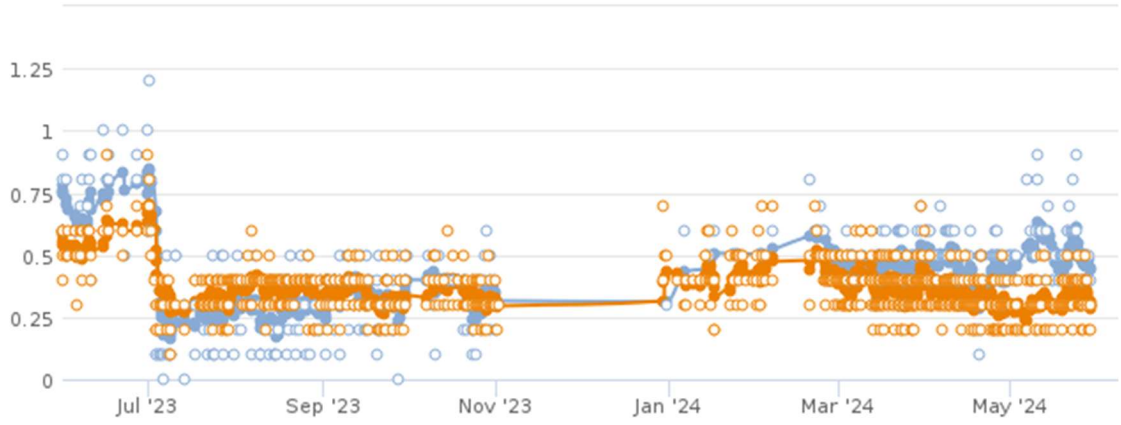
# Engine Health Monitoring



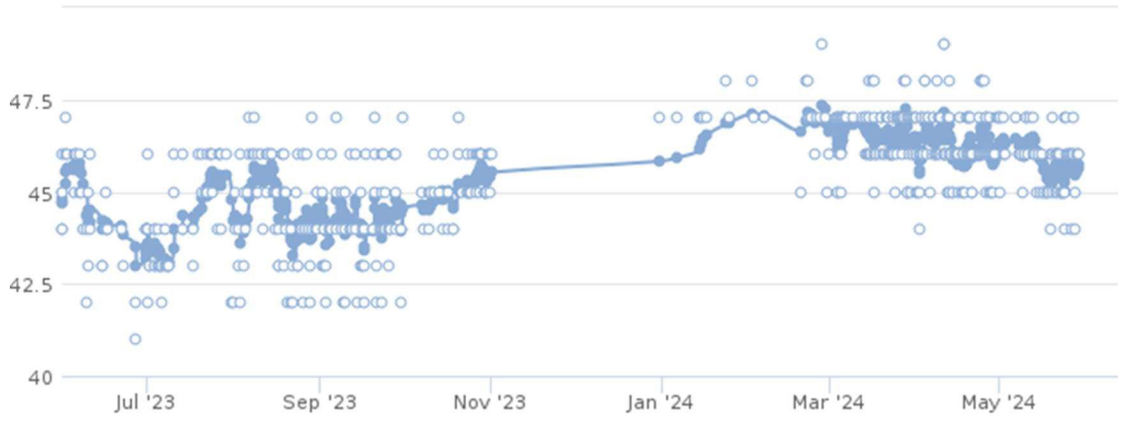

Oil Temperature (DEG_C) - CR - 591



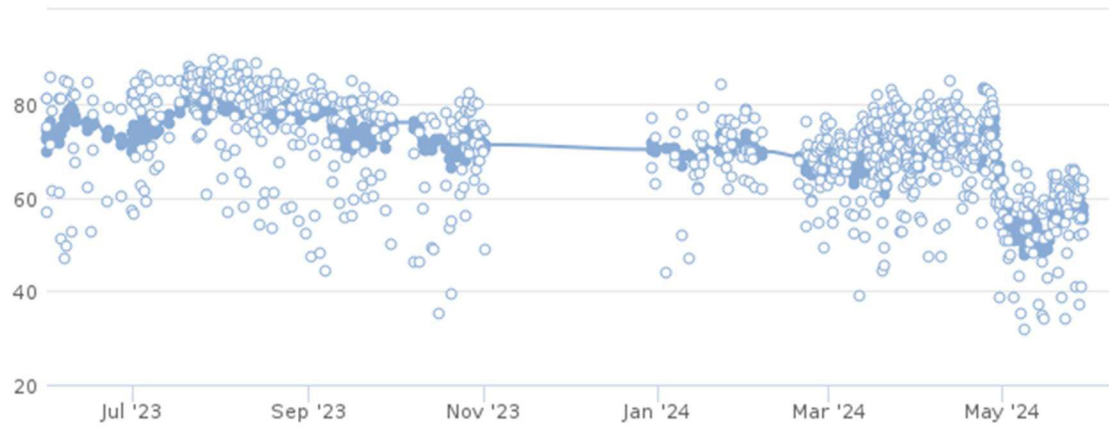

Core Vibe Rear - CR - 591



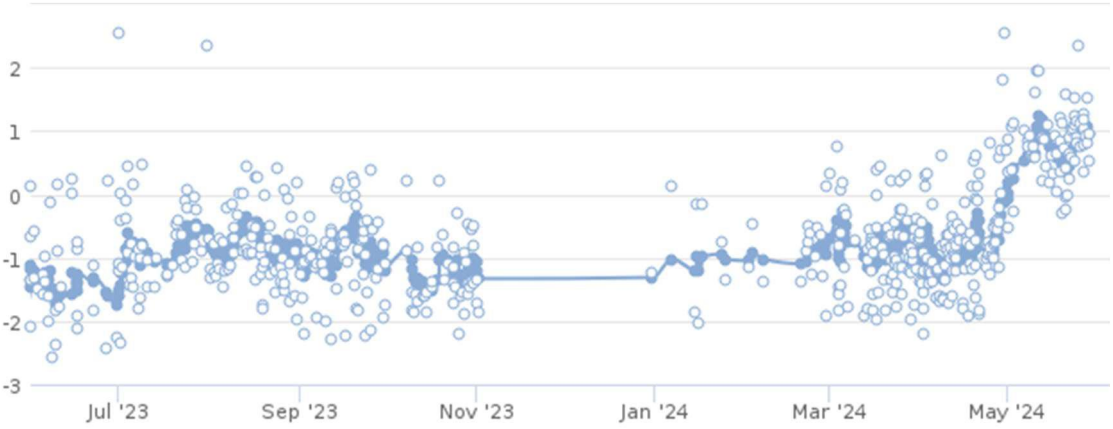

Fan Vibe Fwd - CR - 857591



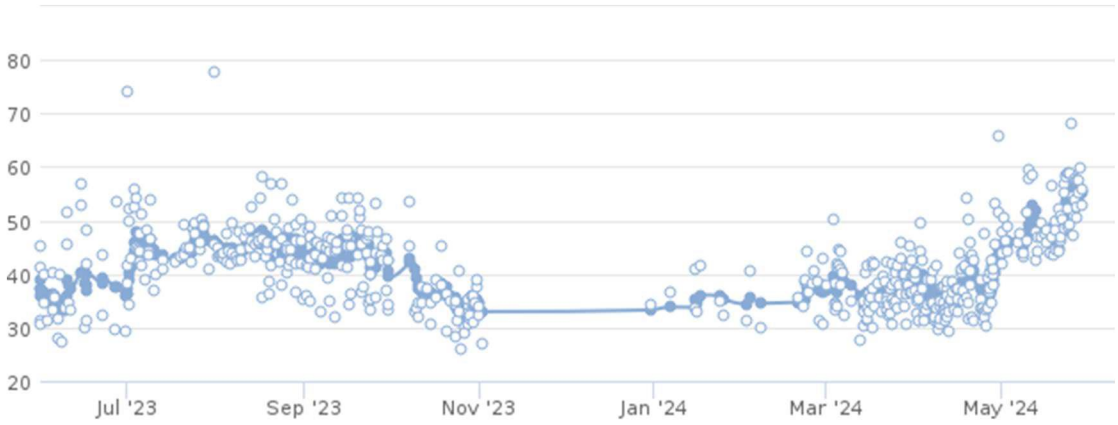

Oil Pressure (PSID) - CR - 591



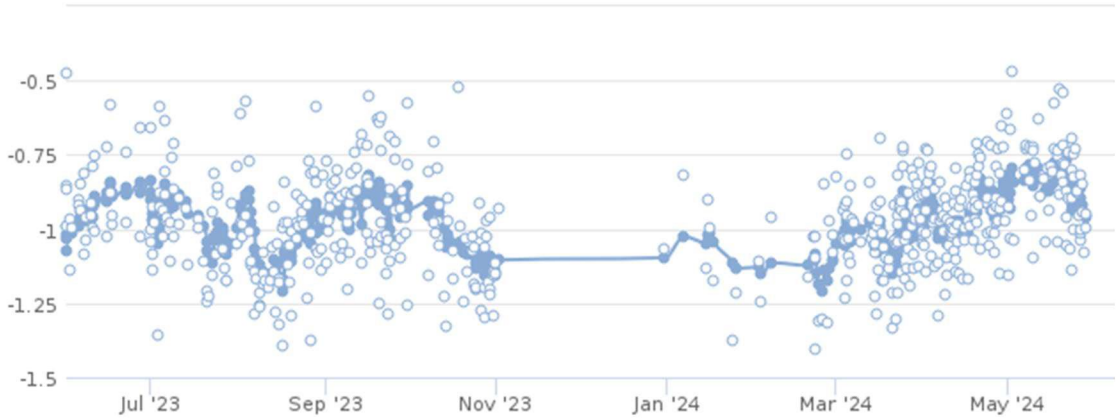

EGT Hot Day Margin (DEG_C) - T0 - '591




Delta Fuel Flow (%) - CR - '591 .




Delta EGT (DEG_C) - CR - 591




Delta Core Speed (%) - CR - '591

| 1. Approving Civil Aviation Authority / Country: | 2. | 3. Form Tracking Numbe |
|---|---|---|
| ***FAA/United States*** | **AUTHORISED RELEASE CERTIFICATE**<br>**FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG** | EMDB000083 |

| 4.Organization Name and Address: | 5. Work Order / Contract / Invoice Number: |
|---|---|
| JatTehnika JAT-TEHNIKA d.o.o. Aerodrom "Nikola Tesla", 11180 Belgrade 59, Serbia (YSMY254J) | 398913 |

| 6. Item: | 7. Description: | 8. Part Number: | 9. Quantity: | 10. Serial Number: | 11. Status/Work: |
|---|---|---|---|---|---|
| 1 | ENGINE ASSY-TURBOFAN CFM56 | CFM56-3C-1 | 1 | 591 | Repaired |

12. Remarks

Engine limited disassembly, inspection and reassembly performed i.a.w. CFM56-3 ESM (CFM-TP.SM.5) Rev. 72, dated December 15, 2014.
Engine tested and accepted on November 30, 2015 i.a.w. ESM 72-00-00. For detailes see Shop Visit Report.

For AD status see Jat Tehnika AD status dated November 30, 2015.
Following LLPs replaced during shop visit Fan Disk, Booster Spool, Fan Shaft, CDP Seal, LPT Disks STG 1, 2, 3, 4, Conical support and LPT Shaft.
Engine is Limited with following LLP: LPT Disk STG 4 with remaining 9076cycles @ CatA, Cat B and 8768 @ Cat C.
For detailes see Jat Tehnika Life Limited Parts Status dated November 30, 2015
For List of Bare Engine components see CFM56-3 Accessories Lists.

Engine delivered with Deffered Item List No: 00128
Engine TSN/CSN: 50373hrs/25000cyc Customer: MTU

| 13a. Certifies that the items identified above were manufactured in conformity to: | | 14a. [X] 14 CFR 43.9 Return to Service [ ] Other regulation specified in block 12 | |
|---|---|---|---|
| [ ] approved design data and are in condition for safe operation<br>[ ] non-approved design data specified in block 12 | | Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12, was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service. | |
| 13b. Authorized Signature: | 13c. Approval / Authorization No: | 14b. Authorized Signature: | 14c. Approval/Certificate No.: **YSMY254J** |
| 13d. Name (Typed or Printed): | 13e. Date (dd/mmm/yyyy): | 14d. Name (Typed or Printed): Zoran Božić | 14e. Date (dd/mmm/yyyy): 24 DEC 2015 |

**User / Installer Responsibilities**

**It is important to understand that the existence of the document alone does not automatically constitute authority to install the aircraft engine/propeller/article. Where the user/installer perform work in accordance with the national regulations of an airworthiness authority different then the airworthiness authority of the countryspecified in Block 1, it isessential that the user/installer ensures that his/her airworthiness authority accepts engine(s)/propeller(s)/article(s) from the airworthiness authority of the country specified in Block 1. Statements in Blocks 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.**

| 1. Approving Competent Authority / Country | 2. | 3. Form Tracking Number |
|---|---|---|
| **European Aviation Safety Agency EASA** | **AUTHORISED RELEASE CERTIFICATE** EASA FORM 1 | EMDB000092 |

| 4. Approved Organisation Name and Address: | 5. Work Order / Contract / Invoice |
|---|---|
| JAT-TEHNIKA d.o.o. Aerodrom "Nikola Tesla", 11180 Belgrade 59, Serbia | 398913 |

| 6. Item | 7. Description | 8. Part Number | 9. Qty | 10. Serial Number | 11. Status/Work |
|---|---|---|---|---|---|
| 1 | ENGINE ASSY-TURBOFAN CFM56 | CFM56-3C-1 | 1 | 591 | Repaired |

12. Remarks

Engine limited disassembly, inspection and reassembly performed i.a.w. CFM56-3 ESM (CFM-TP.SM.5) Rev. 72, dated December 15, 2014.
Engine tested and accepted on November 30, 2015 i.a.w. ESM 72-00-00. For detailes see Shop Visit Report.

For AD status see Jat Tehnika AD status dated November 30, 2015.
Following LLPs replaced during shop visit Fan Disk, Booster Spool, Fan Shaft, CDP Seal, LPT Disks STG 1, 2, 3, 4, Conical support and LPT Shaft.
Engine is Limited with following LLP: LPT Disk STG 4 with remaining 9076cycles @ CatA, Cat B and 8768 @ Cat C.
For detailes see Jat Tehnika Life Limited Parts Status dated November 30, 2015
For QEC and Bare Engine components see CFM56-3 Accessories Lists.

Engine delivered with Deffered Item List No: 00128
Engine TSN/CSN: 50373hrs/25000cyc

Customer: MTU

| 13a. Certifies that the items identified above were manufactured in conformity to: | | 14a. [X] Part-145.A.50 Release to Service [ ] Other regulation specified in block 12 Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, was accomplished in accordance with Part-145 and in respect to that work the items are considered ready for release to service. | |
|---|---|---|---|
| [ ] approved design data and are in condition for safe operation<br>[ ] non-approved design data specified in block 12 | | | |
| 13b. Authorised Signature | 13c. Approval / Authorisation Number | 14b. Authorised Signature | 14c. Certificate / Approval Ref. No. **EASA.145.0304** |
| 13d. Name | 13e. Date (dd mmm yyyy) | 14d. Name Zoran Božić | 14e. Date (dd mmm yyyy) 04 DEC 2015 |

USER/INSTALLER RESPONSIBILITIES

This certificate does not automatically constitute authority to install the item(s).
Where the user/installer works in accordance with regulations of an airworthiness authority different then the airworthiness authority specified in block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts items from the airworthiness authority specified in block 1.

Statements in blocks 13a and 14a do not constitute installation certification. In all cases the aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

## Shop Visit Summary

**Engine Model: CFM56-3C-1**

| Engine S/N: | 591 | TSN: | 50,373 | TSLSV: | 13,255 |
|---|---|---|---|---|---|
| | | CSN: | 25,000 | CSLSV: | 6,348 |

**SV Reason:** Bearing Inspection / Partial Core Performance / LLP Replacement

**Description of the work performed:**

**INCOMING INSPECTION FINDINGS TABLE:**

**ESN 857591 / CFM56-3C-1 / TSN 50373 / CSN 25000 / CUSTOMER: MTU / WO 398913**

| | P/N | S/N | QTY | FINDINGS | PP/BU | ESM | AMM | CMM | REPARABLE | SCRAP | Action taken |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | **BARE ENGINE** | | | | | | | |
| Bracket | 305-272-103-0 | | 1 | Missing | | 72-00-00 FIG 8 ITEM 830 | | | | | Replaced |
| Nipple TC3 on MEC | R267P04 | | 1 | Missing | | 72-00-00 FIG 15 ITEM 350 | | | | | Replaced |
| Fan blades | N.V. | | 4 | Missing | | 72-21-01 | | | | | See config list for SM21X |
| LPT Boroscope plug | 305-381-303-0 | | 1 | Missing | | 72-54-00 FIG 7 ITEM 95 | | | | | Replaced |
| BRACKET, MANIFOLD | 9388M71004 | | 1 | BROKEN | | 72-09-04-200-001 | | | | X | Replaced |
| Harness Wiring 9 Probes Thermocouple | | | | Not Complete - LOWER EGT WIRING HARNESS missing | | 72-00-00-31 | | | X | | See BARE engine acc list |
| VSV Bushing STG | | | 3 • | Damaged | | IPC 72-32-00-01 | | | | X | See config list for SM32X |
| OGV Plastic Seal | | | 1 | crack | | 72-23-00-20 | | | X | | See config list for SM23X |
| Magnetic Chip Detector AGB TGB | | | 1 | Oil Leakage Found ( Customer Tag) | | | | | X | | See BARE engine acc list |
| Ignition Lead LH | | | 1 | Missing Ceramic Insulation | | | Task 74-21-00-200-801-C00 2.G.(7)(d) | | X | | See BARE engine acc list |
| Fan blade #3 | | | 1 | Local Deformation out of limit | | | 72-31-02 2.F.(1)(e)(3b) page 301 | | | | See config list for SM21X |
| TCC Timer | | | | Operational Test U/S (Customer Tag) | | | | | X | | See BARE engine acc list |
| | | | | **QEC** | | | | | | | |
| Primary Exhaust Sleeve | 314A1502-58 | NSN | 1 | Local Deformation | Fig. 11-1, Item 45 | | | | X | | See BARE engine acc list |
| Seals(Extension Ring Assy) | 333A1145-27 | | 2 | Damaged | | | | 78-31-33 IPL Fig 1 Item 270 | | X | Replaced |
| Hydraulic Engin Driven Pump | 823337 | MX-510602 | 1 | Damaged Solenoid out of limit | | | | 29-10-18 Fig 3 ll.60 | X | | See BARE engine acc list |
| Rod End Bearing | P33310 | | 1 | Damaged ( Bearing missing) | Fig. 14-2, Item 25 | | | | | X | Replaced |
| FIRE DETECTOR | 472582 | 2498 | 2 | CERAMIC PART OF THE SENSING ELEMENT TERMINAL LUG - DAMAGED | | | | 26-11-65- CHECK 3.E. | X | | See BARE engine acc list |
| GENERATOR HARNESS | 81-30200-XXX | NSN | 1 | DEMAGED WIRE GENERATOR HARNESS | Fig.18-5,Item 45 | | | | X | | See BARE engine acc list |

WORK PEROFORMED:

- Major modules removed and reinstalled per ESM 72-00-02/03.

**FAN Major Module – MM 01X**

- Fan MM partially disassembled per ESM 72-00-01 (SM 21X, 22X and 61X removed / reinstalled)
- SM 21X – Fully disassembled per ESM 72-00-21 and replaced with serviceable SM21X.
- SM 22X – Fully disassembled per ESM 72-00-22 and piece part inspected.
- SM 23X - Inspected as assembly. Accessed parts piece part inspected.
- SM 61X – Partially disassembled per ESM 72-00-61 due to access to No3 Brg. Parts inspected on SM or piece part level depending of exposure.

**Fan and Booster – SM 21X**

- SM 21X replaced with serviceable
- Rear Spinner Cone repaired per ESM 72-21-05 Rep19
- 10ea blade dampers replaced due to findings
- Fan Blades replaced with OHC
- For details, P/Ns and S/Ns of affected parts see: Engine Configuration list provided as part of Shop Visit Report.

**No1 and No2 Bearing Support Module – SM 22X**

- No1 and No2 Bearings inspected per ESM 72-09-01 and found serviceable
- FWD Stationary Air/Oil seal found damaged and replaced with OHC due to findings.
- FAN Shaft replaced with OHC per customer request.
- For details, P/Ns and S/Ns of affected parts see: Engine Configuration list provided as part of Shop Visit Report. AD 2002-13-03 applied on FAN Shaft before installation

**Fan Frame – SM 23X**

- No3 Brg Fwd Stationary seal repaired per ESM 72-23-19/R001 and R004
- No3 Brg Aft Stationary seal replaced with OHC due to findings.
- For details, P/Ns and S/Ns of affected parts see: Engine Configuration list provided as part of Shop Visit Report.

**IGB – SM 61X**

- No3 Brg replaced with NEW due to findings
- No3 Brg puller nut replaced with OHC due to findings
- No3 Brg puller ring repaired per ESM 72-61-07/Rep001
- No3 Brg locking nut repaired per ESM 72-61-05/Rep002
- For details, P/Ns and S/Ns of affected parts see: Engine Configuration list provided as part of Shop Visit Report.

**Core Major Module – MM 02X**

- Core MM removed and disassembled to Shop Modules per ESM 72-00-02.
- SM 31X inspected on SM level. Rear Rotating CDP Air Seal replaced with OHC per ESN 72-00-31/SP04 per customer request
- SM 32X Inspected on modular level
- SM 33X Inspected on modular level
- SM 41X Disassembled due to access to Combustion Chamber and HPT Inner CDP seal
- SM 42X Replaced with OHC
- SM 51X Inspected on modular level
- SM 52X Debladed per ESM 72-52-00 with no LLP split. Inspected on modular level.
- SM 53X Partially disassembled per ESM 72-53-00 due to HPT Shrouds replacement. Inspected on modular level.

**HPC Rotor – SM 31X**

- 4ea HPC blades replaced per ESM 72-00-31/SP007
- Shaft Retaining Ring Replaced due to findings
- Rear Rotating CDP Air Seal replaced with OHC per ESN 72-00-31/SP04 per customer request
- 10ea HPC blades blend-repaired per ESM 72-00-31/Rep003
- Dynamic balancing performed
- For details, P/Ns and S/Ns of affected parts see: Engine Configuration list provided as part of Shop Visit Report. AD 2002-13-03 applied on CDP Seal before installation

**HPC Forward Stator– SM 32X**

- Seal Retainers Stg:1, 2 and 3 replaced with OHC due to findings per ESM 72-00-32 /Disassembly/Assembly
- For details, P/Ns and S/Ns of affected parts see: Engine Configuration list provided as part of Shop Visit Report.

**HPC Rear Stator– SM 33X**

- Module found serviceable
- For details, P/Ns and S/Ns of affected parts see: Engine Configuration list provided as part of Shop Visit Report.

**Combustion Assy – SM 41X**

- HPT Inner CDP Seal replaced
- For details, P/Ns and S/Ns of affected parts see: Engine Configuration list provided as part of Shop Visit Report.

**Combustion Chamber Assy – SM 42X**

- Replaced with OHC
- For details, P/Ns and S/Ns of affected parts see: Engine Configuration list provided as part of Shop Visit Report. CC post SB 72-919 installed

**HPT Nozzles Assy – SM 51X**

- 10ea Nozzle Segments found with OOL findings. Full set replaced with OHC per ESM 72-00-52/SP001 per customer request.
- Full set of Aft Stator Seals replaced with serviceable set provided by customer.
- Outer Stationary Seal replaced
- HPT Nozzle Aft Inner Support repaired per ESM 72-51-03/Rep001
- HPT Aft Outer Seal Support repaired per ESM 72-51-04/Rep005
- HPT External Pressure Seal replaced with NEW
- For details, P/Ns and S/Ns of affected parts see: Engine Configuration list provided as part of Shop Visit Report.

**HPT Rotor Assembly – SM 52X**

- HPT blades replaced with OHC
- For details, P/Ns and S/Ns of affected parts see: Engine Configuration list provided as part of Shop Visit Report

**HPT Shroud / LPT Nozzle Stg1 – SM 53X**

- All HPT Shroud segments replaced with OHC
- 20ea HPT Nozzles found with OOL findings. 20ea replaced per ESM 72-53-00
- Internal and External Pressure Seals replaced with NEW.
- All Outer and Inner Air Ducts replaced with new.
- For details, P/Ns and S/Ns of affected parts see: Engine Configuration list provided as part of Shop Visit Report. SB 72-0432, SB72-0715 applied

**LPT Major Module – MM 03X**

- LPT MM removed and disassembled to Shop Modules per ESM 72-00-03
- SM 54X Partially disassembled on bladed disks condition per ESM 72-54-00
- SM 55X disassembled on piece part level due to LPT Shaft replacement
- SM 56X inspected on modular level.

**LPT Rotor/Stator – SM 54X**

- All bladed disks replaced with customer provided bladed disks in SVC condition.
- LPT Conical Support replaced with OHC
- Rotating Air Seals replaced with SVC provided by customer
- All LPT Nozzle segments replaced with customer provided set in SVC/OH condition
- All Outer Seal Segments replaced with customer provided set in SVC/OH condition
- ALL Inner Stationary Seals replaced with OHC
- LPT Thermal Insulation kit replaced with new due to findings.
- AD 2002-13-03 applied on conical support before installation.
- For details, P/Ns and S/Ns of affected parts see: Engine Configuration list provided as part of Shop Visit Report.

**LPT Shaft – SM 55X**

- LPT Shaft replaced with OHC per customer request
- No.4 Brg replaced with post SB 72-975 due to findings
- No.5 Brg inspected per ESM 72-09-01 and found serviceable
- AD 2002-13-03 applied on LPT Shaft and LPT Stub Shaft before installation
- For details, P/Ns and S/Ns of affected parts see: Engine Configuration list provided as part of Shop Visit Report.

**LPT Frame – SM 56X**

- SM inspected on modular level per ESM 72-00-56 and found serviceable.
- For details, P/Ns and S/Ns of affected parts see: Engine Configuration list provided as part of Shop Visit Report.

**TGB – SM 62X**

- SM removed per ESM 72-00-62
- SM Partially disassembled per ESM 72-62-00 for bearings visual inspection.
- Input and Horizontal Gearshafts repaired per ESM 72-62-02/Rep005
- For details, P/Ns and S/Ns of affected parts see: Engine Configuration list provided as part of Shop Visit Report.

**AGB – SM 63X**

- SB 72-1129 (AD 2012-0209) applied
- SM partially disassembled per ESM 72-63-00. All pads removed due to visual inspection of all bearings.
- 47 Tooth gearshaft repaired per ESM 72-63-03/Rep003 due to findings.
- For details, P/Ns and S/Ns of affected parts see: Engine Configuration list provided as part of Shop Visit Report.

- **SB 72-1028 applied**

# Engine Shop Visit Report

Work Order 398913
Engine S/N 591
Customer MTU Canada

| | |
|---|---|
| **Engine Life Limited Parts:** | |
| Incoming status: | AeroSvit LLP Status Report dated 13. December 2012. |
| Outgoing status: | JATT LLP status dated 30. November 2015. (JATT) |
| **AD Notes Status Summary:** | |
| Incoming status: | AeroSvit AD Note Compliance List for Engine S/N 857591, dated 13. December 2012. |
| Outgoing status: | Status Summary for Engine S/N 857591 dated 30. November 2015. (JATT) |
| **Engine Test:** | |
| Engine tested to data plate power (CFM56-3C-1) and accepted. For details see performance summary. | |
| **All the work performed in accordance with CFM56-3 WPG Rev01. July, 2013, CFM ESM (CFMI-TP.SM.5) Rev. 72, Dec, 15. 2014. and other approved data.** | |

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|---|---|---|
| Date: 04. Dec, 2015 | Prepared by: Boris Erceg | Approved by: Slavisa Maksimovic |