RAIL Top 25 1082- IGV Arm Bearing Failure

Initiator: Brian Reed	Owner: John Pursell	Initiation Date: 5/15/2022	Moved to Top 25: APR 2024	Original Commit Date: NA

Estimated Completion Date: Q2 2025

% Completed: 70

Source: GCC

Problem Description:

- Wear of IGV/CGV arms result in loss of spherical bearings
- Excessive bearing loss can contribute to compressor surge

Criteria to Close:

- Honeywell to develop and release improved IGV arm to prevent bearing failure

Status & Dates:

- Released SB 72-9001 to address bearing retention in service
- Incorporated interim SB solution into production at engine
- All LMMs were revised to allow fly-on for 25 hrs with one to ten uniballs missing

Current 3033050-4

Next Steps:

- Corrective action underway
- Improved configuration selected – 3033050-4
- Testing complete
- Test results and certification reports are being prepared for review
- Service bulletin estimated in Q4 2025 based on hardware availability
- Redesign can be mixed with original configuration

Affected OEMs: Bombardier, Embraer, Textron, Gulfstream

Impacted Regions: APAC; EMEAI, Americas

RAIL Top 25 1083- 36-150[CL] MIO Low Reliability

Initiator: Brian Reed	Owner: Cameron Lewis	Initiation Date: 11/11/2022	Moved to Top 25: Nov 2022	Original Commit Date: NA

Problem Description:

High occurrences of MIO detected in SOAP samples; this includes metal findings that may require maintenance activities. Currently evaluating two potential separate sources for Fe and Al in the oil. This appears to be unique to the -150[CL].

Criteria to Close:

- Determine a way to explain or reduce the levels of high Fe and Al found in SOAP sample data

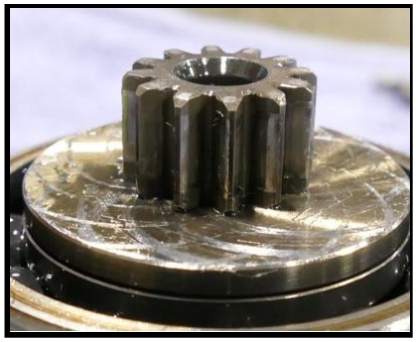
Status & Dates:

- Elevated Fe RCCA – Complete
  - Loose installation of the idler gear mating bushing into the gearbox housing can cause the gear not track as designed and rub with the adjacent surface.
  - OEM drawings and aftermarket CMMs are updated to ensure bushing is cooled and gearbox heated for slip fit at installation, preventing bore damage. Inspection criteria added to CMM for this condition (released Feb 2025)
- Elevated Al RCCA – In progress
  - Further review of shop findings in process to evaluate planetary pin damage/failure and RCCA
  - Evidence of wear through the anodize on the planetary housing is cause of rise in Al levels
  - No indications that pin damage and high Fe levels from bushing/gear rubbing are related

Estimated Completion Date: Q3 2025

% Completed: 75

Source: GCC



Affected OEMs: Bombardier

Impacted Regions: APAC; EMEAI; Americas

RAIL Mechanical Queue 1084- 36-150(EMB) LOP Switch

Initiator: Brian Reed	Owner: Cameron Lewis	Initiation Date: April 2024	Moved to Top 25:NA	Original Commit Date: NA

Estimated Completion Date: Q4 2025

% Completed: 60

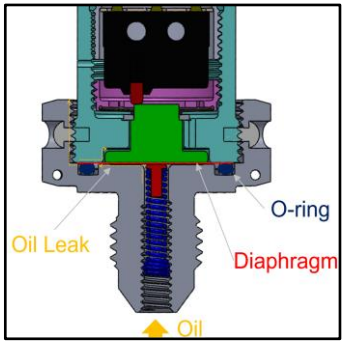
Source: GCC

Problem Description:

3876001-4 Low Oil Pressure switches are failing frequently on the 36-150[EMB] APUs, resulting in No-start and AOG and is a top delay and cancelation driver

Criteria to Close:

- Honeywell to improve the robustness of the -4 LOP switch
  - Improve O-ring to prevent internal oil leakage
    - New internal o-ring selected with improved thermal capability and improved compatibility with APU oils
  - Improve switch body to prevent twisting due to torquing of the hex and body fittings
    - Added extra screw in lower section next to hex nut to increment torque capability.
    - Body structure updates to improve robustness
- There will be no change to the HON P/N; supplier part number will change from 7G1202 to 7G1247. A S/N cut in point will be made with no overlap between the two supplier P/Ns.



Status & Dates:

- HON-CCS (supplier) fault tree & root cause investigation: April 2024
- Fault tree: May 2024
- Root cause approval: May 2024
- Component drawing red lines: May 2024
- CCS Design Changes: June 2024
- Design change PDR: August 2024
- Test Hardware Manufacturing: May 2025
- Design Change CDR: May 2025
- Supplier completion of qual testing: June 2025
- Production cut in: Q4 2025

Affected OEMs: Embraer, Textron

Impacted Regions: Americas

RAIL Top 25 1085- W5 Wire Harness Issues – 3034427-3

Initiator: Brian Reed	Owner: John Pursell	Initiation Date: 11/15/2023	Moved to Top 25: APR 2024	Original Commit Date: NA

Problem Description:

- Increased quantity of W5 harnesses are being rejected

Estimated Completion Date: Q4 2024

% Completed: 95

Source: GCC

Criteria to Close:

- Understand cause of rejections and identify corrective action

Status & Dates:

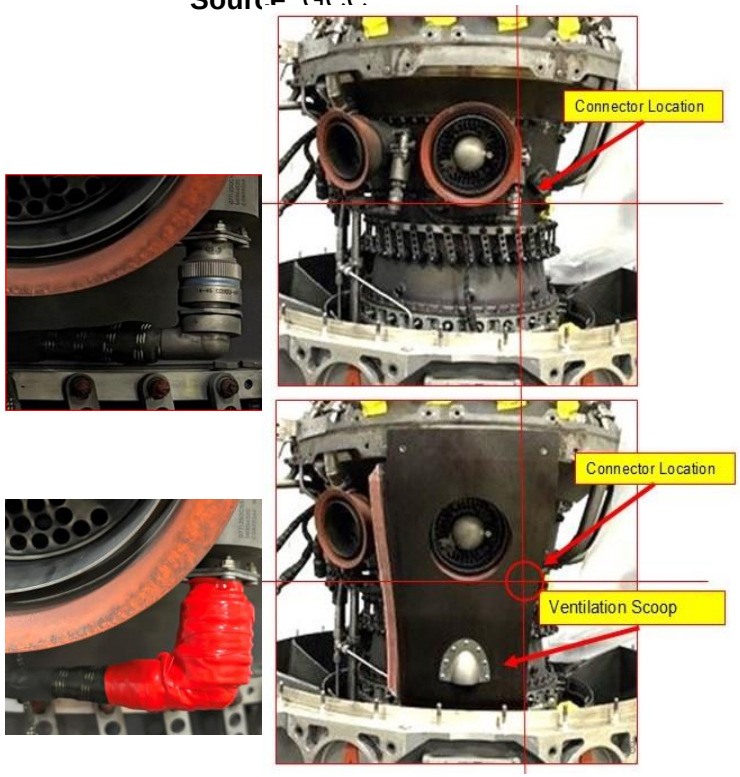
- Harness from engine 136470 has been returned to supplier (Fokker)
- No fault found during two tests - Static and dynamic

Hurdles:

- Lack of specifics (resistance values, inspection results, etc.) during field investigation (grip it and rip it)
- Field investigation (ohmmeter, megger, visual) cannot always identify an issue caused by operational inputs – vibration / heat & expansion

Next Steps:

- Service Information Letter issued
  - SIL D202401004213 Issued Feb 2, 2024
  - "A Discussion Regarding the AS907 Wire Harnesses; Issues and Investigation"
  - Requests specifics; provides investigation steps
- Service bulletin to apply self-vulcanizing silicone tape to surge bleed valve electrical connectors
  - SBV B is near inner fan bypass panel air scoop
  - Subject to water, dirt, etc.
  - Service bulletin in sign off – target Q2 2025
- Will be incorporated into new engine production



Affected OEMs: Bombardier, Embraer, Textron, Gulfstream

Impacted Regions: APAC; EMEAI; Americas

RAIL Top 25 1086- AS907 Thrust Reverser (TR) Long-Term Solution

Initiator: GCC	Owner: John Pursell	Initiation Date: Apr 2024	Moved to Top 25: Apr 2024	Original Commit Date: NA

Problem Description:

The GCC committee has requested HON to provide a long-term solution for the AS907 Thrust Reverser coating issues

Criteria to Close:

- Honeywell to develop a long-term solution for the AS907 thrust reverser for fielded engines

Status & Dates:

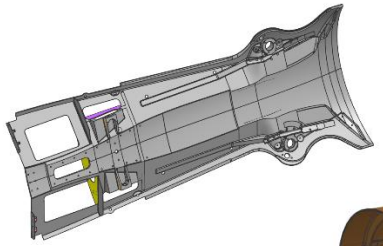
Honeywell TR Improvement Initiative (for STC Incorporation)

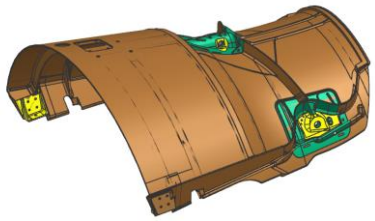
- Thrust Reverser concept development
  - TR Doors composite with embedded titanium interfaces
  - TR Beams dual-pathed with an all-titanium version and a composite/titanium hybrid both being considered
- Replace painted aluminum with materials that won't corrode or require coatings
- Early supplier engagement to ensure manufacturability and reduce design iterations
- The new Doors and Beams design intent to be "drop-in" replacement
  - Assembly will prioritize reuse of existing unaffected components
  - No modifications of existing components/no machining
  - Simplifies upgrade in the field at Service Centers/Channel partners

Estimated Completion Date: ~2 years

% Completed: 10%

Source: GCC





Affected OEMs: Bombardier, Gulfstream, Embraer

Impacted Regions: Americas, APAC, EMEIA

RAIL Top 25 1087- AS907 GKN Inlet Mesh Peeling

Initiator: Brian Reed	Owner: John Pursell	Initiation Date: April 2024	Moved to Top 25: April 24	Original Commit Date: NA

Problem Description: Reports of GKN Inlet Mesh Peeling

Estimated Completion Date: TBD

% Completed:

Source: GCC

Criteria to Close: Understand field issues and determine root cause and any corrective action

Status & Dates:

- Inlet screen peeling addressed by GKN technical variance GKN-TV-9020E Allows repair of inlet peeling 360 around inlet circumference
- Inlet Barrel Screen Blistering, GKN introduced a redesign of the screen installation in Mid 2018
  - Prevents contact between stainless steel mesh screen and aluminum honeycomb

Inlet Screen Peeling at Leading Edge

Inlet Barrel Blistering

No Events or data has been provided to HON engineering

Need help with go forward efforts or close RAIL item 1087

Affected OEMs: Bombardier, Gulfstream, Embraer

Impacted Regions: America, EMEIA, APAC

RAIL Top 25 1088- AS907 Harnesses, Request for Field Repair

Initiator: Brian Reed	Owner: John Pursell	Initiation Date: April 2024	Moved to Top 25: April 24	Original Commit Date: NA

Problem Description:

Request Field Repair for Wire Harnesses

Criteria to Close:

LMM Revision

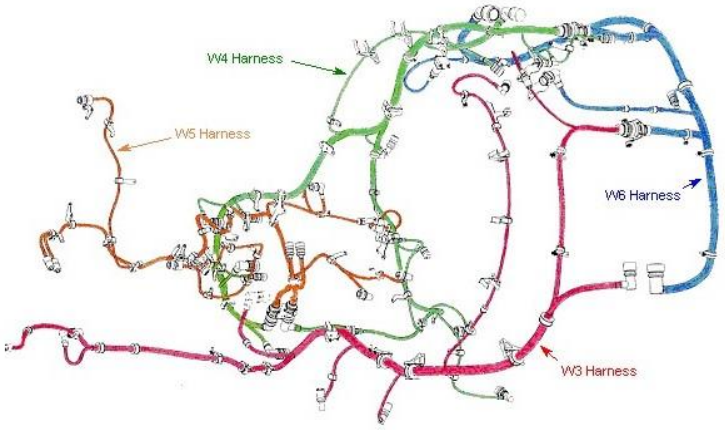
Status & Dates:

- Outer braid repair created for W3 harness
  - Damage from Fan Cowl Door hold open rod
  - SB 76-9033 released January 2025
- Outer braid repair for all wire harnesses
  - LMM revision to harness inspection / check created
  - Refers to Repair Manual for outer braid repair
    - Applies self-adhering silicone tape
  - Will be incorporated as each LMM is revised
- Field electrical repairs: Not allowed / advised

Estimated Completion Date: Q4 2025

80% Completed: NA

Source: GCC



Affected OEMs: Bombardier, Gulfstream, Embraer, Textron

Impacted Regions: America, EMEIA, APAC

RAIL Queue 1089-AS907 Diffuser V-Seal (low time)

Initiator: GCC	Owner: John Pursell	Initiation Date: April 2024	Moved to Top 25: NA	Original Commit Date: NA

Estimated Completion Date: TBD

20% Completed: NA

Source: GCC

Problem Description:

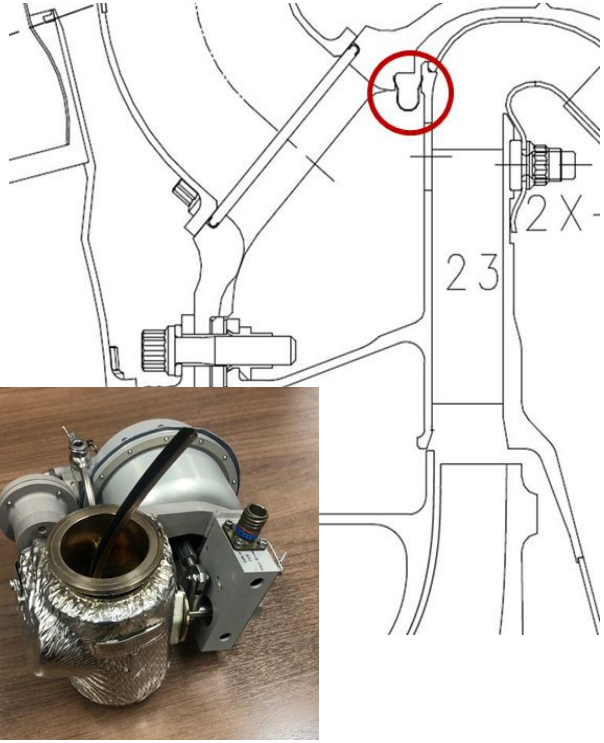
- Field reports of Diffuser "V" seal separation results in AOG situations due to V seal piece lodging in anti-ice valve
- V seal had issue in 2017 – 2019 and was corrected
- Issue has reappeared

Criteria to Close:

Introduce Corrective Action

Status & Dates:

- Chief Engineer has requested complete, in-depth review of V seal interfaces, materials, design intent, temperatures, growth, etc.
- Initial actions have been initiated.
- Timeline of events since initial redeisgn created
- Will be long term, throughout 2025



Affected OEMs: Bombardier, Gulfstream, Embraer, Textron

Impacted Regions: Americas, EMEIA, APAC

RAIL Mechanical Queue 1090-AS907 Anti-Ice Switch (New Switch Availability)

Initiator: GCC	Owner: John Pursell	Initiation Date: April 2024	Moved to Top 25: NA	Original Commit Date: NA

Problem Description:

Anti-ice switch redesign update

Estimated Completion Date: Q3 2025

% Completed: 70

Source: GCC

Criteria to Close:

Introduce redesigned switch

Status & Dates:

- Anti ice valve (ASC) investigated and given green light
- Cause of field events related to anti-ice switch PN WBA3020G103-007
- Investigation determined issue is with activation mechanism
  - Will activate, but not de-activate
- Issues with mechanism identified and redesign identified
  - PN to roll to -009
  - Proving a challenge
  - Unforseen repeatablity issue – delay
  - Target Q1 2026 for availability

Interim Actions:

- Increased production test from 500 to 1000 cycles
- Validates electrical circuit in addition to mechanical mechanism
- Interim actions have screened out infant mortality issue – low time removals almost non-existent

Affected OEMs: Bombardier, Gulfstream, Embraer

Impacted Regions: Americas, EMEIA, APAC

RAIL Mechanical Queue 1091-AS907-3-1E Chip Zap CAS Message Clearing

Initiator: Aaron Edwards	Owner: Yvan Lajoie	Initiation Date: April 2024	Moved to Top 25: NA	Original Commit Date: NA

Estimated Completion Date: TBD

% Completed: NA

Source: GCC

Problem Description:

CAS message is cleared after an ECU power down and back up.

Criteria to Close:

Investigate the AS907-3-1E ECU SW logic for the Chip Zap function

Status & Dates:

- Chip zap counts 20 successful or 5 unsuccessful chip zaps before posting a CAS message (ENGINE OIL CHIP)
  - Counters are not dependent on number of flights or ECU power cycles
  - Counters can only be “reset” with an ECU download
- CAS message will annunciate in cockpit after an ECU power cycle and after the engine is started and has reached ground idle
  - CAS is inhibited during all phases of flight
    - Starts at TO roll of 80 knots
    - Ends at touchdown (AC speed drops to 30 knots) + 30 seconds
- Chip Zap logic is identical in all current AS907 ECU software
- Above functions certified with the FAA and verified with engineering system bench testing in November 2024 for the AS907-3-1E SW version

Needs Update

Affected OEMs: Embraer

Impacted Regions: Americas

RAIL Mechanical Queue 1093- EEI for Forge vs. EEI 3.0 Synchronized Functionality

Initiator: Kellen Bush	Owner: John Pursell	Initiation Date: April 2024	Moved to Top 25: NA	Original Commit Date: NA

Problem Description:

EEI for Forge does not have the same functionalities as the e-Engine Interface (EEI) software version 3.0

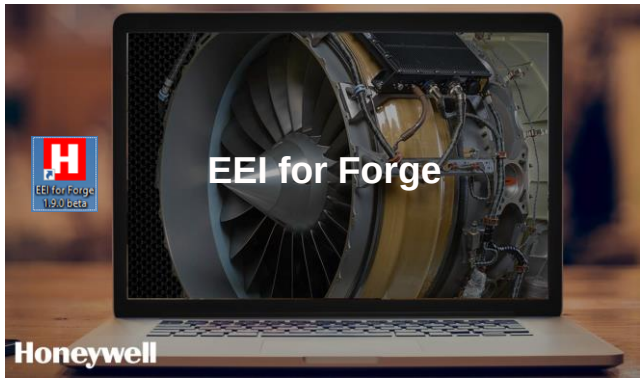
Estimated Completion Date: TBD

% Completed: NA

Source: GCC

Criteria to Close:

Update EEI for Forge



Status & Dates:

- The Honeywell Forge development team is working on several projects to improve the Forge EDV portal
- The new version provides a conversion tool to convert .TAR.GZ to .DLD (EEI 3.0 format)
- Forge 1.9.0 has been released and waiting on SIL approval to publish on the Aerospace portal

Affected OEMs: Bombardier, Gulfstream, Embraer, Textron

Impacted Regions: Americas

RAIL Mechanical Queue 1094- AS907-3-1E MCID 133 Nuisance vs HMU Replacement

Initiator: Aaron Edwards	Owner: Yvan Lajoie	Initiation Date: April 2024	Moved to Top 25: NA	Original Commit Date: NA

Problem Description:

MCID 0133 OMS Message: Fuel System HMU Suspect and the associated CAS message ENG 1 or 2 SHORT dispatch, remove and replace the HMU per LMM instructions

Estimated Completion Date: TBD

% Completed: NA

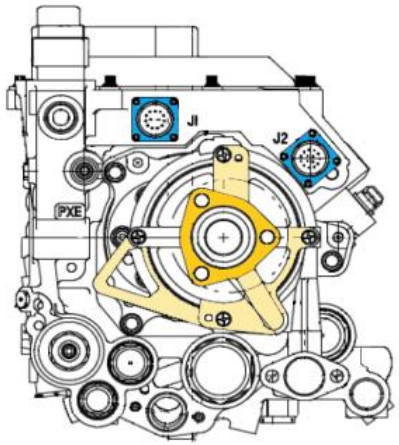
Source: GCC

Criteria to Close:

- Improve HMU spares availability
- Review troubleshooting techniques and possible contributing causes

Status & Dates:

- Review and analyze EEI files – ongoing
- Review HMU P/N 442650 shop findings - 2Q2025



Affected OEMs: Embraer

Impacted Regions: Americas

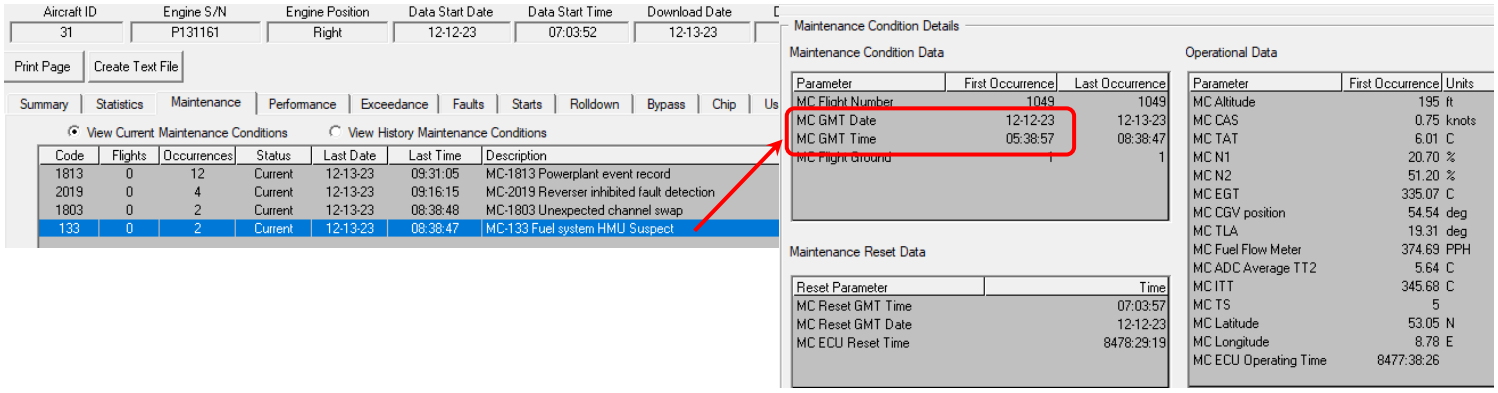
HONEYWELL
APPENDIX FOR 1094

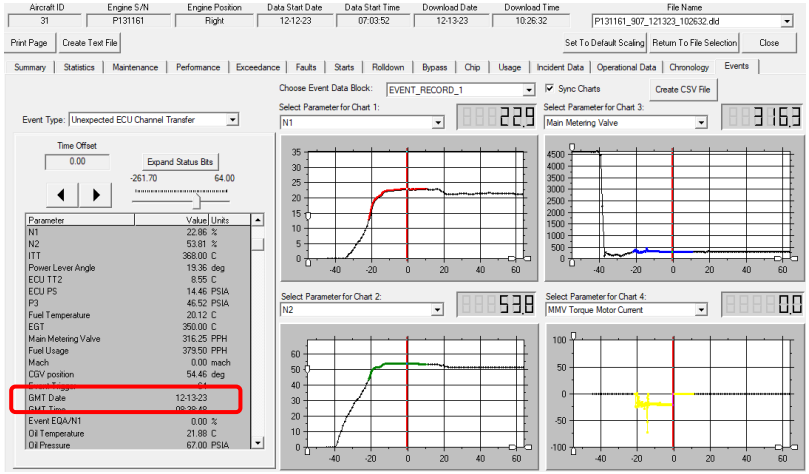
YVAN LAJOIE
HTF PRODUCT SUPPORT ENGINEER

April 25, 2025

Honeywell

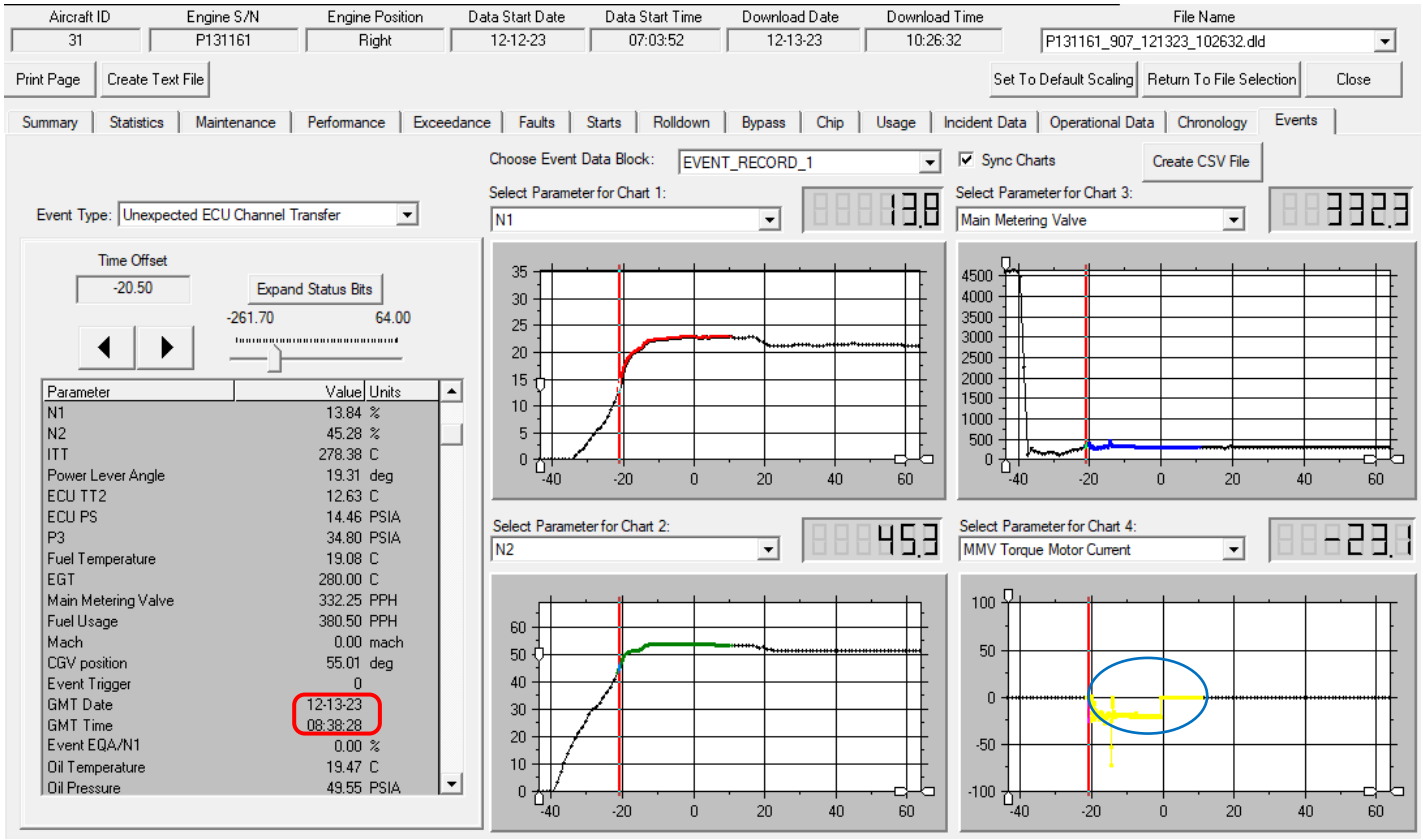
EEI REVIEW ENGINE P131161 – MCID 0133 ON 12/13/2024





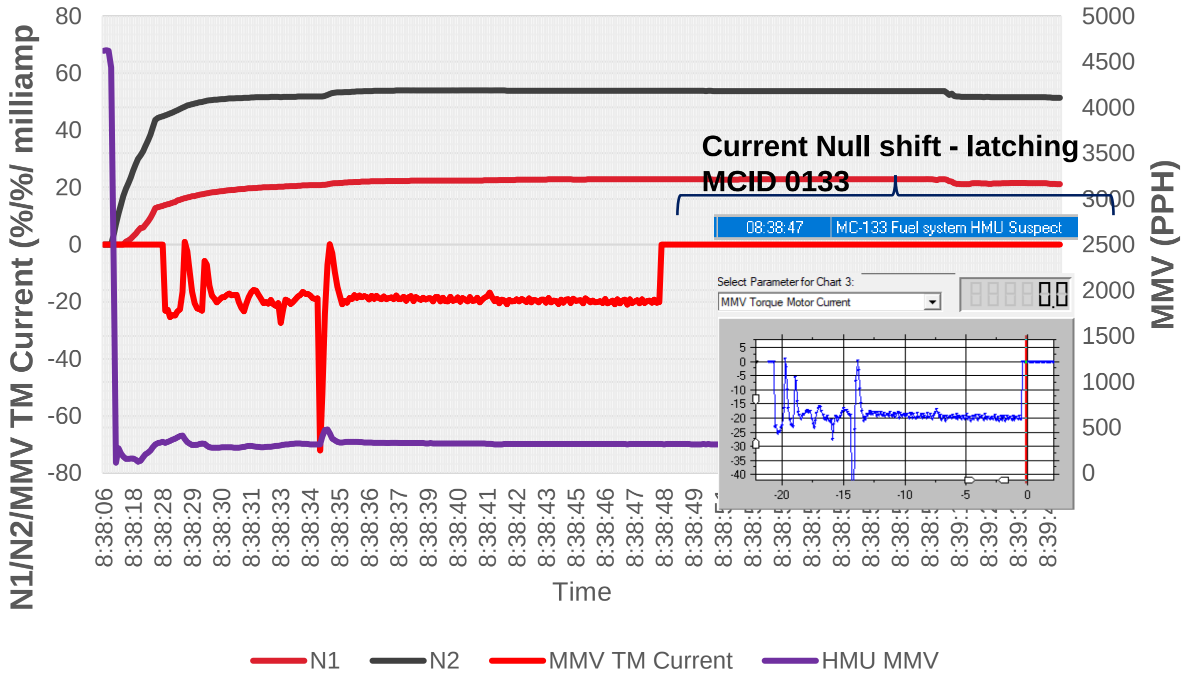
MMV current null MCID 133 occurs at time 05:38:57 after engine start complete

EEI REVIEW ENGINE P131161 – MMV & TM CURRENT



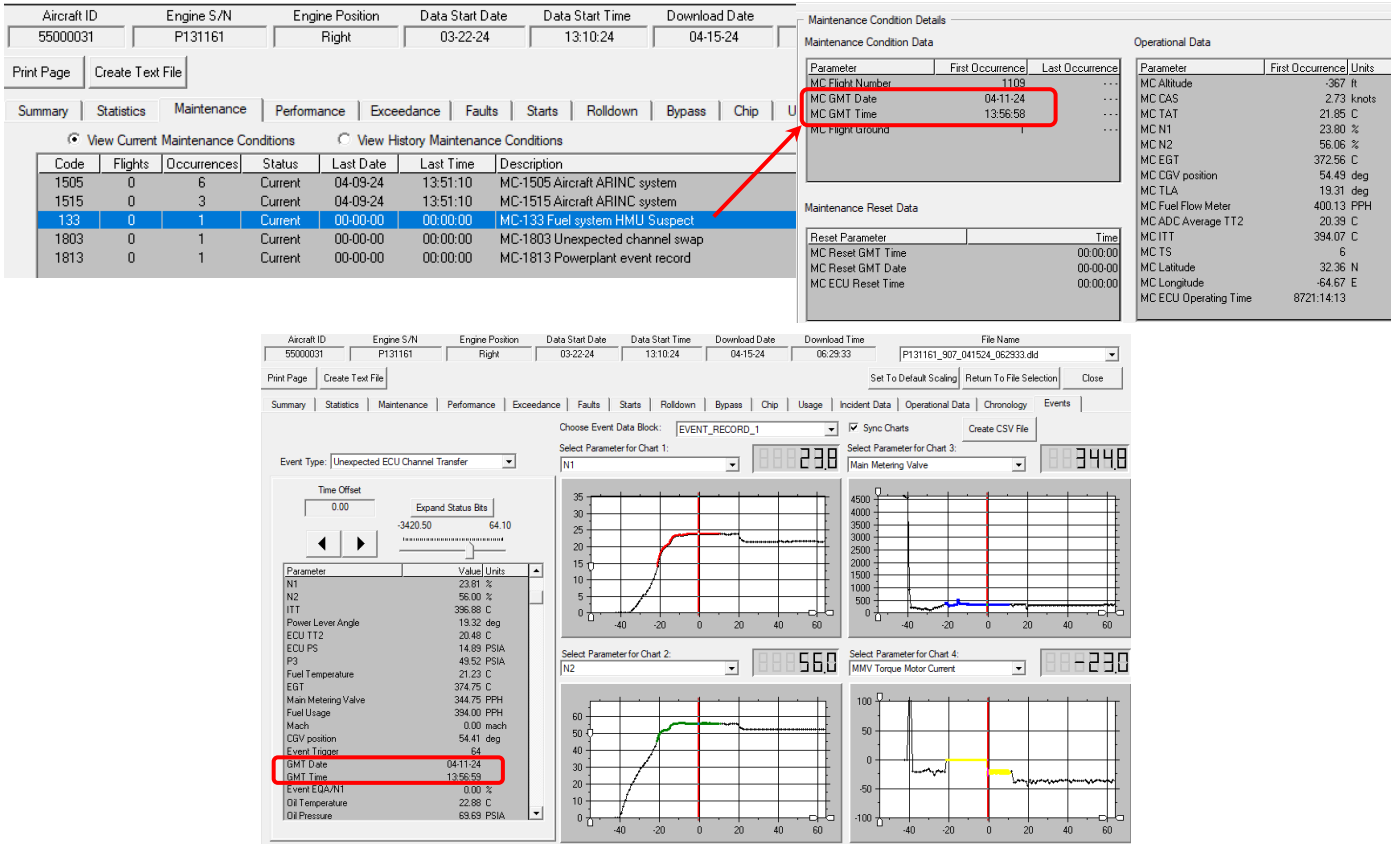
MMV torque motor current erratic follows by Null shift after engine start complete

AS907-3-1E/P131161 - HMU fault MCID 0133
12/13/2023



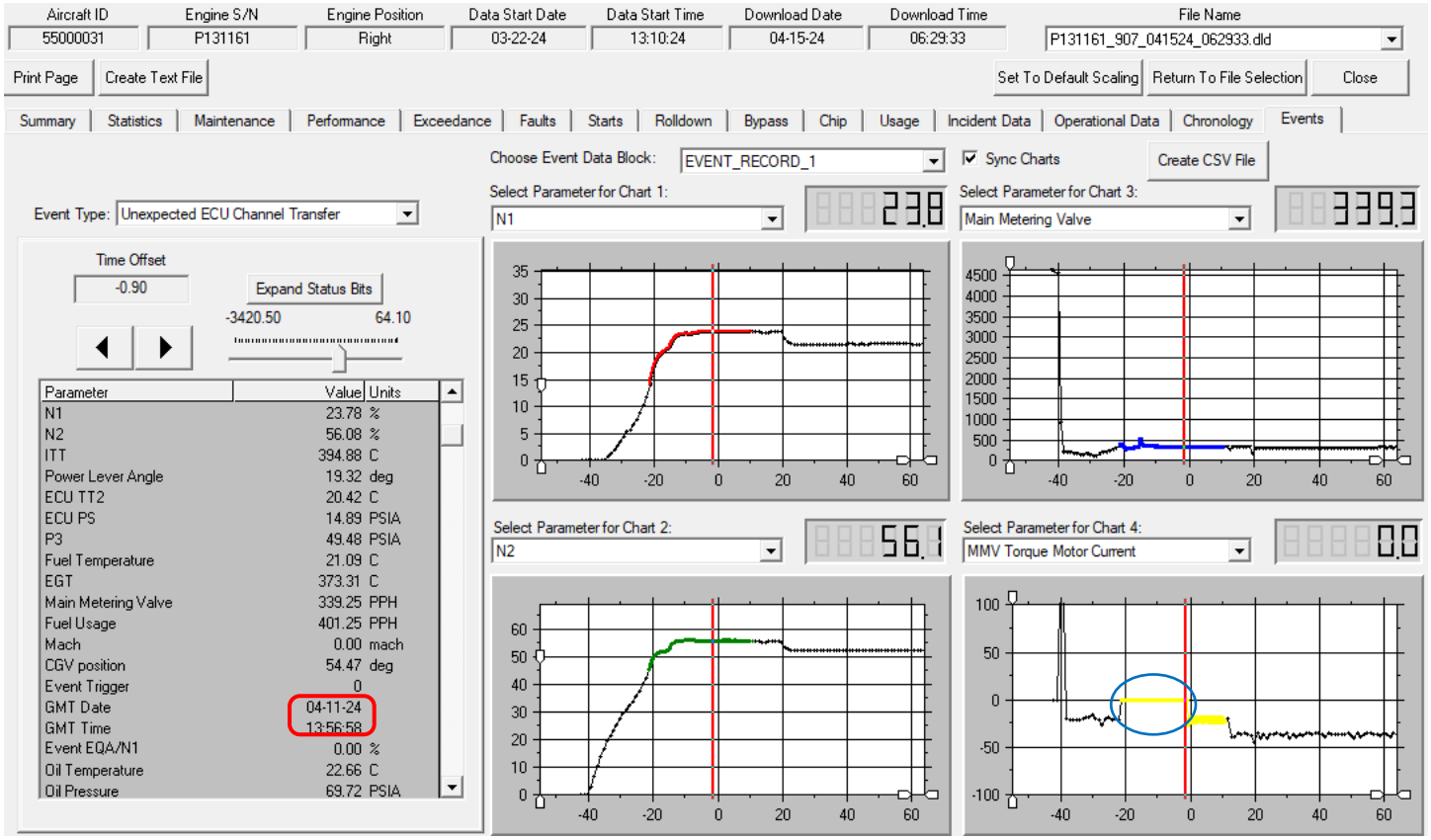
Fault occurs after start (38 secs for the above event)

EEI REVIEW ENGINE P131161 – MCID 0133 ON 4/11/2024

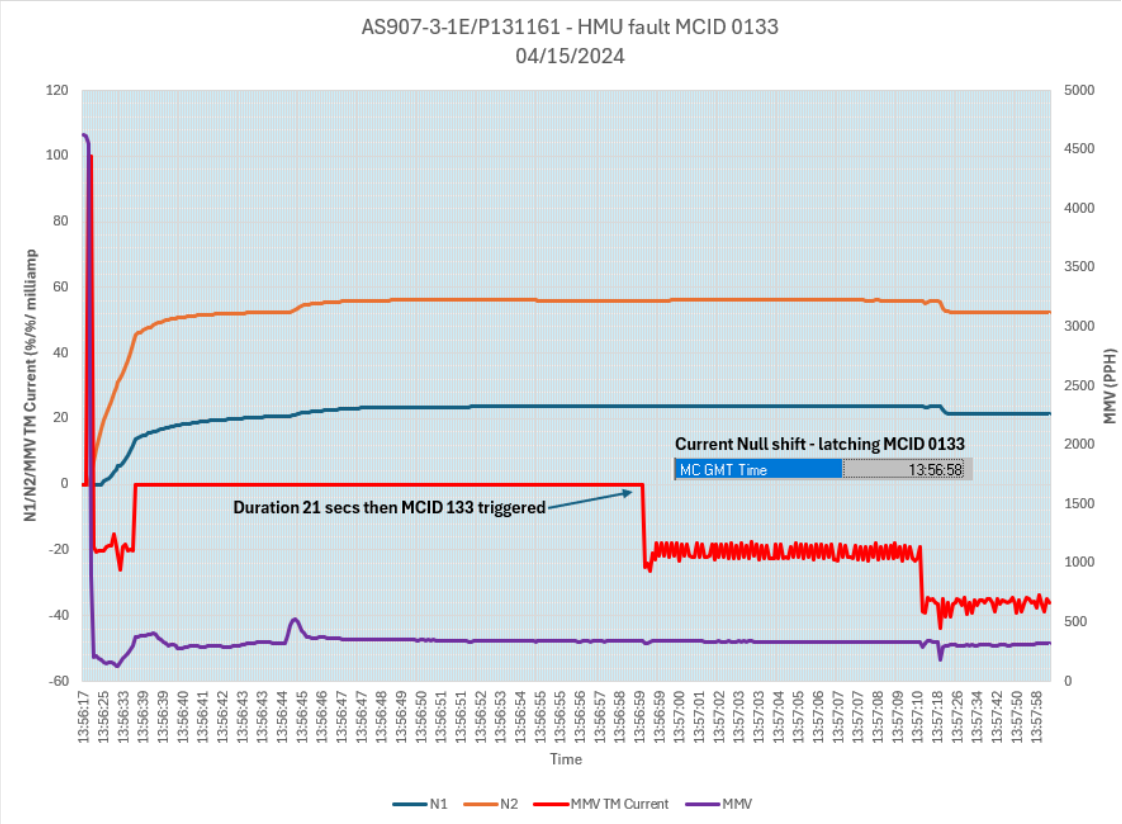


MMV current null MCID 133 only latched at time 13:58:59

EEI REVIEW ENGINE P131161 – MMV & TM CURRENT

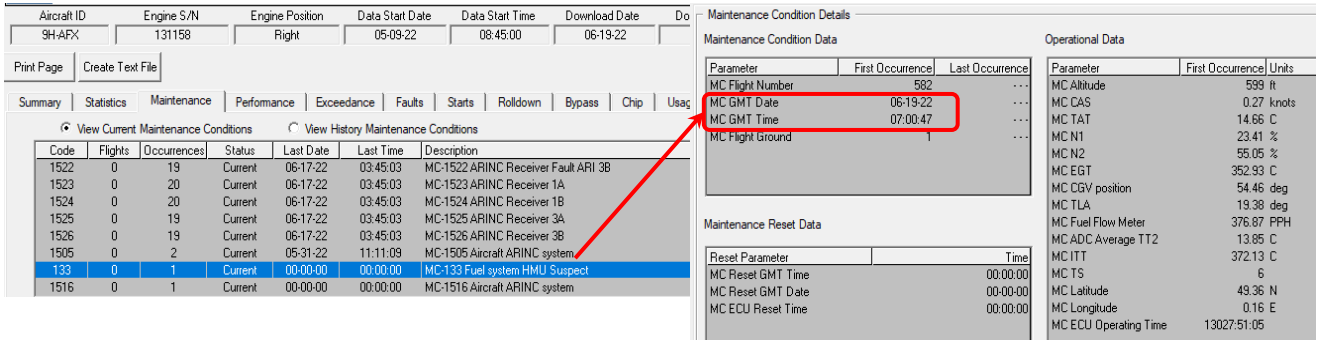


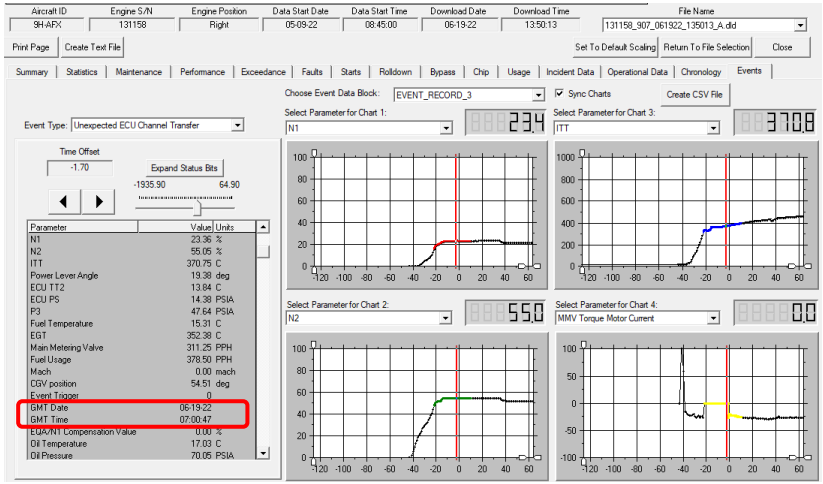
MMV torque motor current Null total time duration 21 seconds during start



MMV torque motor current Null total time duration 21 seconds

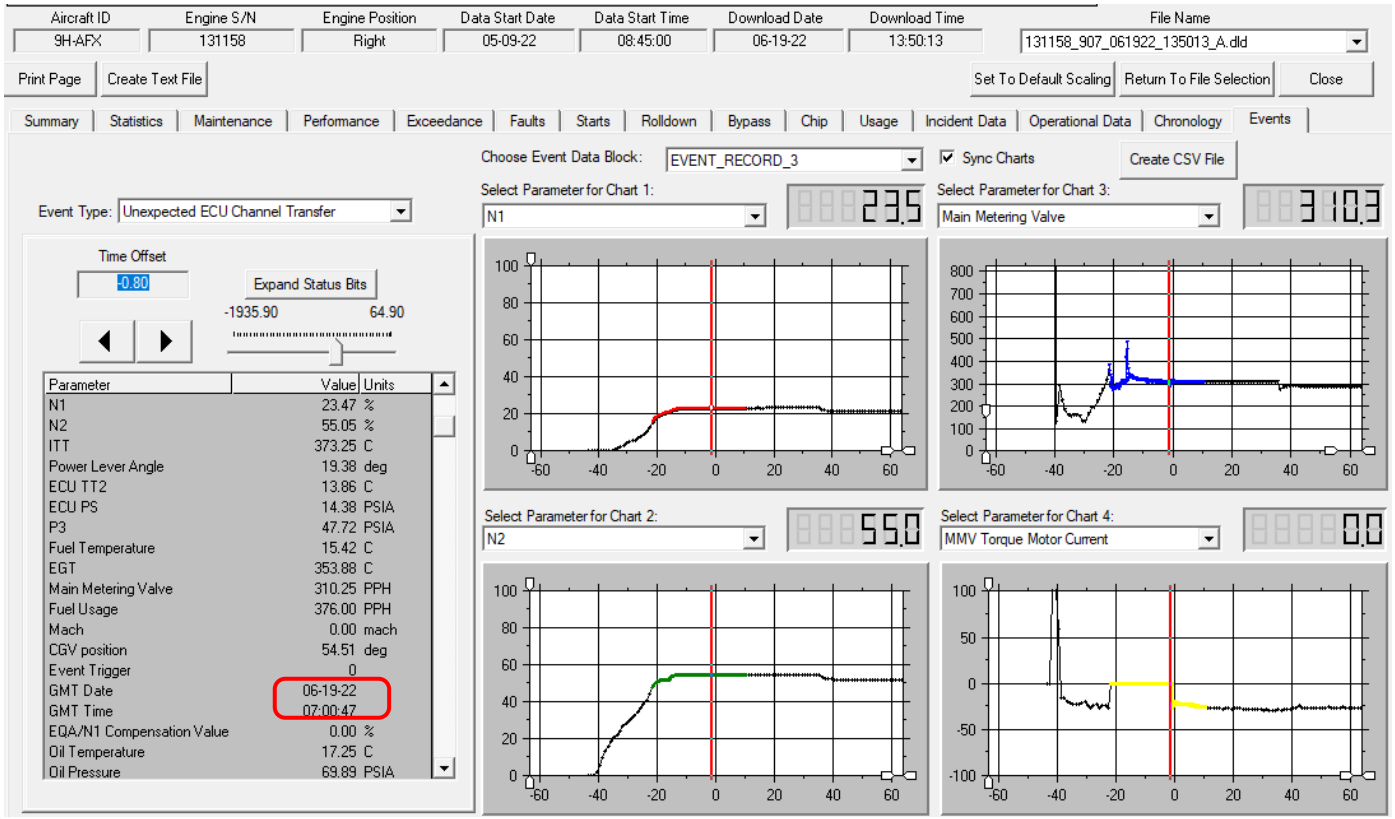
EEI REVIEW ENGINE P131158 – MCID 0133



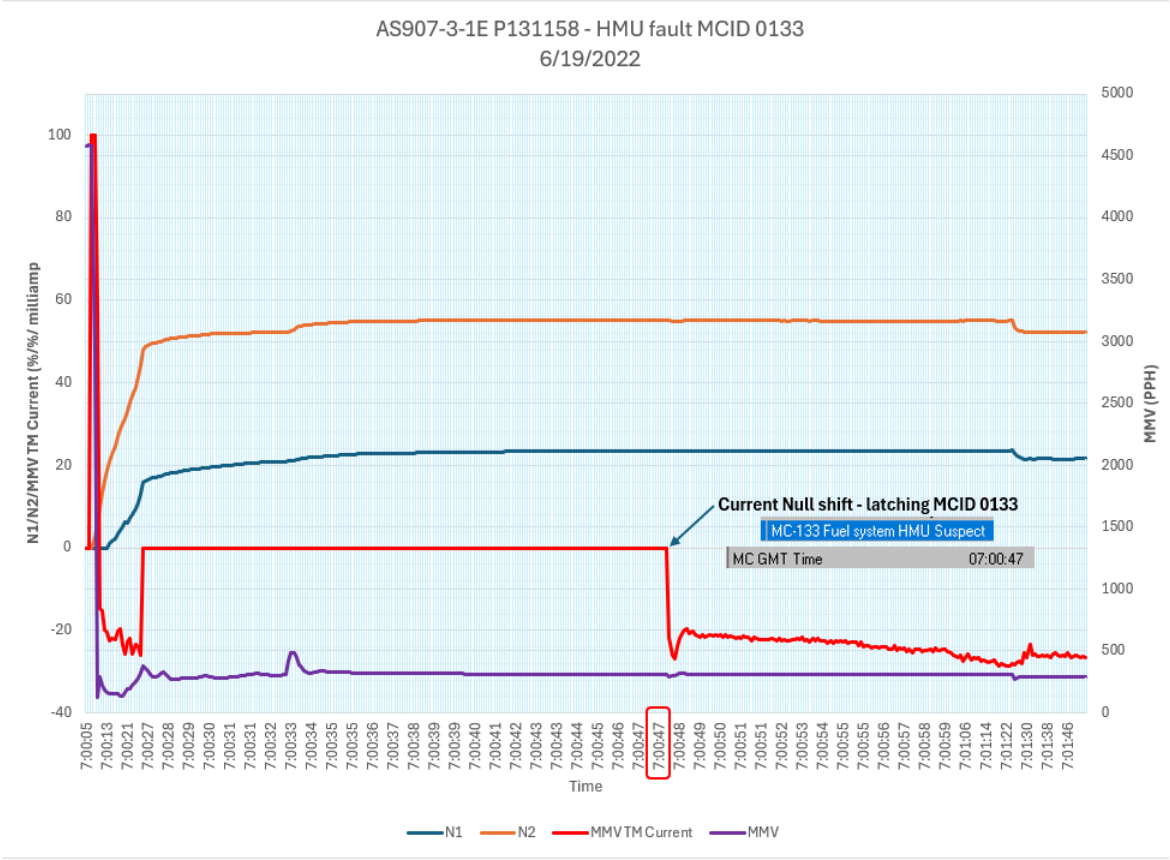


MMV current null MCID 133 only latched at time 7:00:47

EEI REVIEW ENGINE P131158 – MMV & TM CURRENT



MMV torque motor current Null total time duration 21 seconds after engine start complete



MMV torque motor current Null total time duration 20 seconds

HMU S/N 1605 RETURN FOR REPAIR – NO INCOMING TEST

P/N 442650 S/N FHC1605 [RCVD_COND]MISSING ALL PORT SHIPPING CAPS. RECEIVING VISUAL INSPECTION REVEALED NO DAMAGE TO THE EXTERIOR OF THE UNIT DUE TO O/H WORKSCOPE REQUESTED BY THE CUSTOMER, RAR TESTING HAS BEEN WAIVED. SEALS WERE OEM INCOMING PUMP PN 2688676 S/N 15ANL1719. H536868 RW 02/29/24. [WORK_ACCOMPLISHED]DISASSEMBLY & CLEANING COMPLETED IAW 73-20-33 REV 1. H536868 RW 03/01/24. ========== ANALYTICAL COMPLETED IAW 73-20-33 REV 1. H536868 RW 03/01/24. ========== [CAUSE_LONG_TXT] OVERHAUL [REMV_TYPE]SCHEDULED

*****RAR = Run As-Received**

LIGHT MAINTENANCE MANUAL AS907-3-1E (72-05-19) Chapter 05-20-00 Inspections For Every (see below table) Engine Operating Hours Inspection Details Refer to Paragraph 2.P. Periodic Inspections (Subtask 72-00-00-200-015-A01) Step (6). and CMM, report No. 73-20-31.

1. Do a complete inspection of the HMU. The inspection includes the component disassembly, cleaning, inspection, assembly and test***.

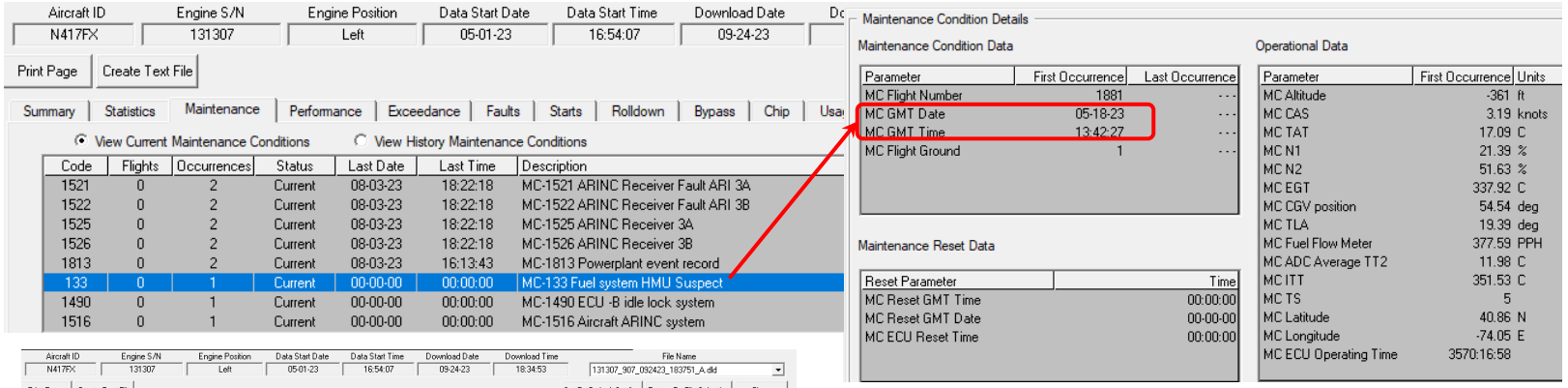
NOTES: *** HMU (integral fuel control and fuel pump). The fuel pump and HMU component card(s) need to be removed from the engine log book and attached to the HMU when returning the components for the XXXX hour inspection.

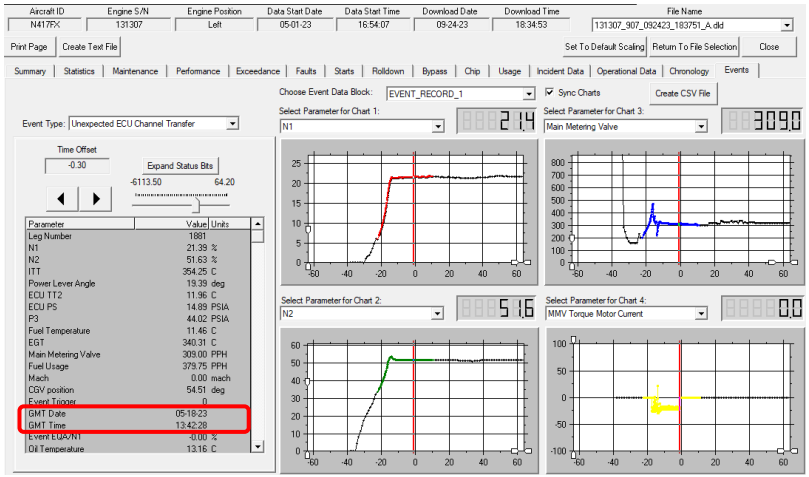
Engine	OEM	LMM Interval	LMM + permitted additional Hrs
AS907-1-1A	Bombardier	7,200 Hrs	7,800 Hrs
AS907-2-1A	Bombardier	7,200 Hrs	7,800 Hrs
AS907-2-1G	Gulfstream	7,200 Hrs	7,800 Hrs
AS907-2-1S	Textron	7,000 Hrs	7,800 Hrs
AS907-3-1E	Embraer	7,000 Hrs	7,750 Hrs

SFDC CASE-27948144: Hello, here is another Praetor with HMU MCID-133 faults. These events seem to all happen right at the first engine start of the day. The engine start time for this event was 18:43:07z the fault happened at 18:43:40z. What are your thoughts on troubleshooting this and no recent history other than reboots? One other point is the flip flopping of faults from short dispatch to no dispatch???? That seems to be a pattern also. Thank You

History:2/15/2024 Cyan (ENG 1 SHORT DISPTACH) on engine start. Mel'ed.
Honeywell e-Engine Interface [Maintenance Conditions]
File Name: 131307_907_021524_234336_a.dld
Aircraft ID: N417FX Engine Serial Number: 131307
Engine Position: Left ECU Channel: A
Download Date: 02-15-24 Download Time: 23:38:59
Code Flights Occurrences Status Last Date Last Time
133 0 2 Current 02-14-24 13:38:14
Description: MC-133 Fuel system HMU Suspect
Maintenance Condition Data:
Parameter First Occurrence Last Occurrence
MC Flight Number 2403 2414
MC GMT Date 02-07-24 02-15-24
MC GMT Time 03:39:44 18:43:40
MC Flight Ground 1 1
****
2/14/2024 Cyan (ENG 1 NO DISPTACH) on engine start. **Rebooted and cleared.**
Honeywell e-Engine Interface [Faults]
File Name: 131307_907_021524_234336_b.dld
Aircraft ID: N417FX Engine Serial Number: 131307
Engine Position: Left ECU Channel: B
Download Date: 02-15-24 Download Time: 23:43:35
Functional Fault Summary:
FF Fault ID Description Date Time
256 Local channel fuel torque motor null shift indicated 02-07-24 03:39:56
458 FF-256;Local channel fuel torque motor null shift indicated; FF- 257; Cross channel fuel torque motor null shift indicated 02-07-24 03:39:56
257 Cross channel fuel torque motor null shift indicated 02-07-24 03:39:44
Honeywell e-Engine Interface [Chronology]
File Name: 131307_907_021524_234336_b.dld
Aircraft ID: N417FX Engine Serial Number: 131307
Engine Position: Left ECU Channel: B
Download Date: 02-15-24 Download Time: 23:43:35
Data Chronology:
18:43:40 02-15-24 _ MC ID: 133
2/06/2024 Cyan (ENG 1 NO DISPTACH) and (ENG 1 SHORT DISPTACH) on engine start. **Rebooted and cleared.**
5/18/2023 Cyan (ENG 1 SHORT DISPTACH) on engine start. **Rebooted and cleared.**
See next slides for EEI detail information

EEI REVIEW ENGINE P131307 – MCID 133

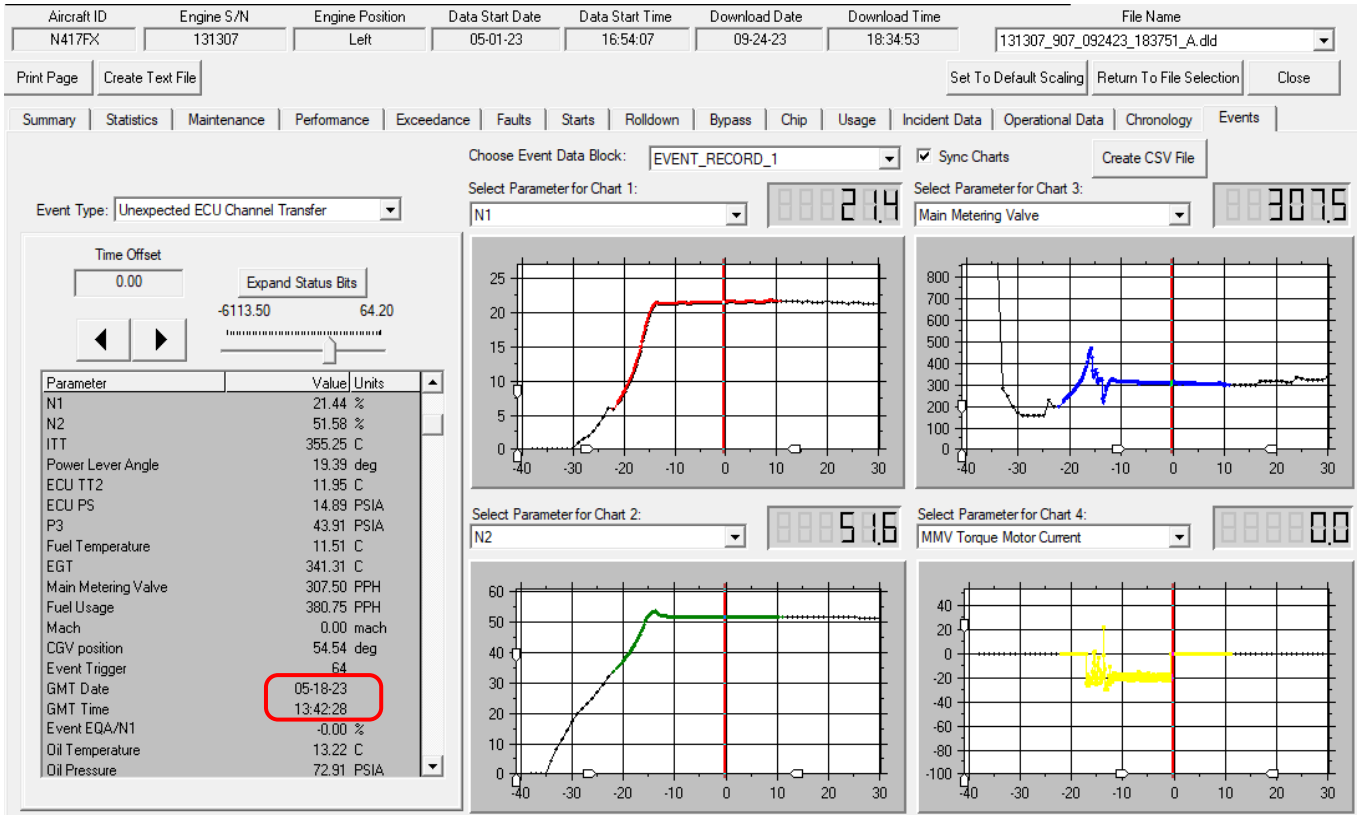




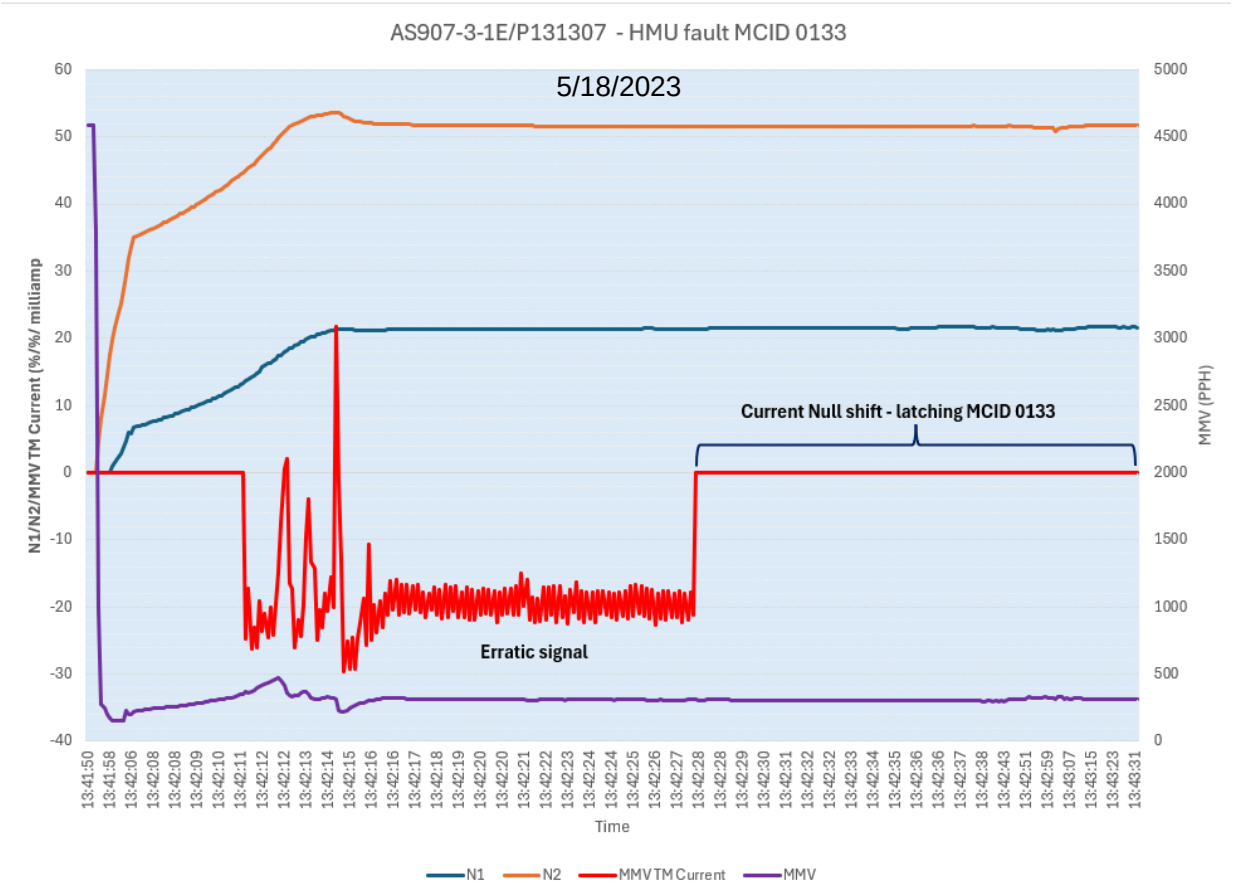
15:30:17	05-18-23	Landing
15:00:51	05-18-23	Cruise
14:33:27	05-18-23	Climb
13:56:39	05-18-23	Take Off
13:42:28	05-18-23	Event Record 64 (Unexpected ECU Channel Transfer)
13:42:28	05-18-23	MC ID: 1803
13:42:28	05-18-23	MC ID: 1813
13:42:27	05-18-23	FF ID: 256
13:42:27	05-18-23	MC ID: 133

MMV current null MCID 133 occurs 8 secs after engine start complete

EEI REVIEW ENGINE P131307 – MMV & TM CURRENT



MMV current null MCID 133 occurs 8 secs after engine start complete



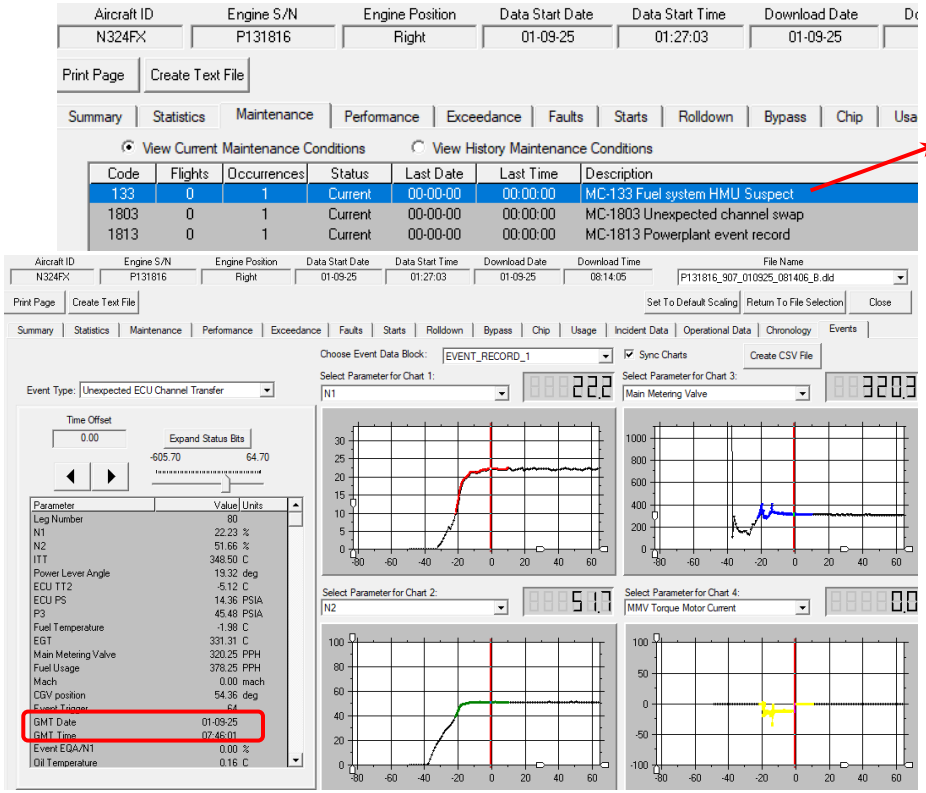
Typically occuring after start (38 secs for the above event)

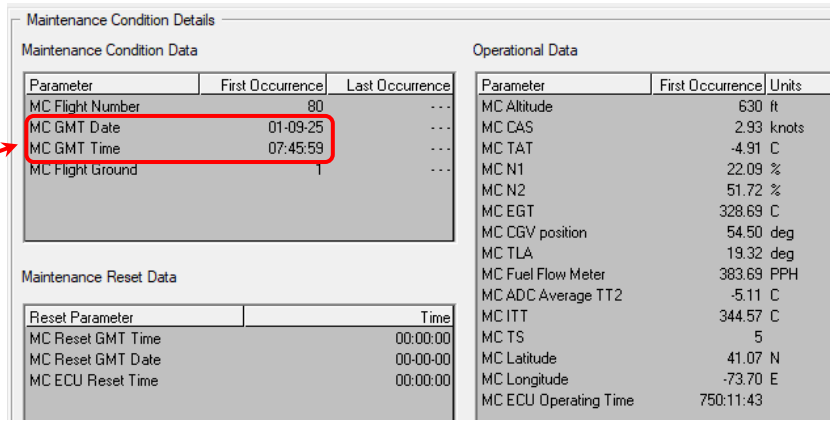
HMU S/N FHC2074 RETURN FOR REPAIR – NO FINDINGS IN HAVREL

SHORT DISPATCH HMU CAS MESSAGE, 5895.8 /1116.4, TAIL #N417FX,EMBRAER LEGACY 500 [REMV_TYPE]UNSCHEDULED[RMV_REASON_CD_DESC]OTHER (DESCRIBE IN REMARKS)

Honeywell PEI shop findings – HAVREL no finfings

EEI REVIEW 1/9/2025 - ENGINE P131816 – MCID 133 DUAL CHANNEL RESULTED IN A NO DISPATCH CAS MESSAGE

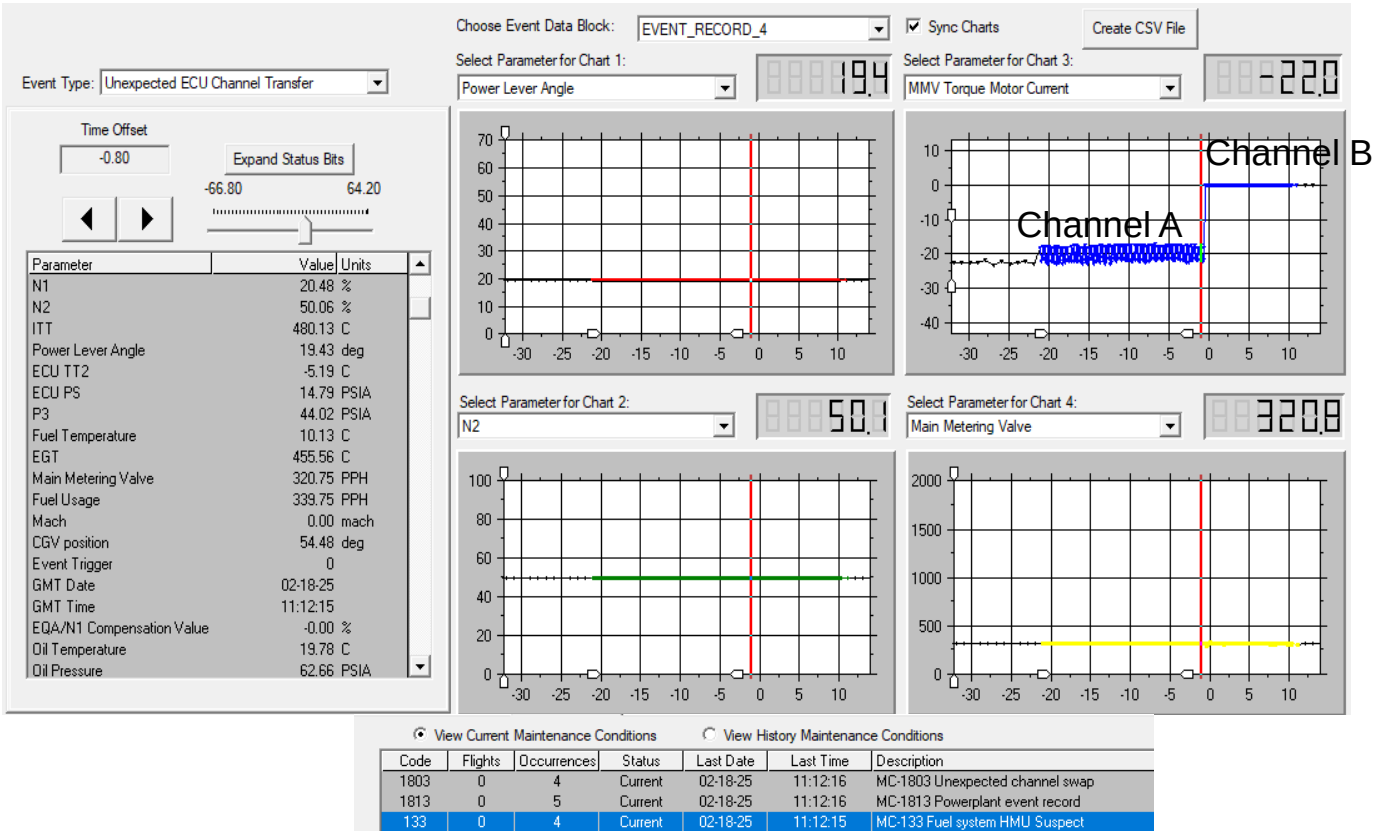




GMT Time	Date	Elapsed Time	Record Type
08:14:05			Download Time
07:56:12	01-09-25		Engine Rolldown
07:46:11	01-09-25		FF ID: 257
07:46:11	01-09-25		FF ID: 458
07:46:01	01-09-25		Event Record 64 (Unexpected ECU Channel Transfer)
07:46:01	01-09-25		MC ID: 1813
07:46:00	01-09-25		MC ID: 1803
07:45:59	01-09-25		FF ID: 256
07:45:59	01-09-25		MC ID: 133
07:45:44	01-09-25		Impending Bypass
01:27:03	01-09-25		ECU Download
00:00:00	00-00-00		MC ID: 133
00:00:00	00-00-00		MC ID: 1803
00:00:00	00-00-00		MC ID: 1813

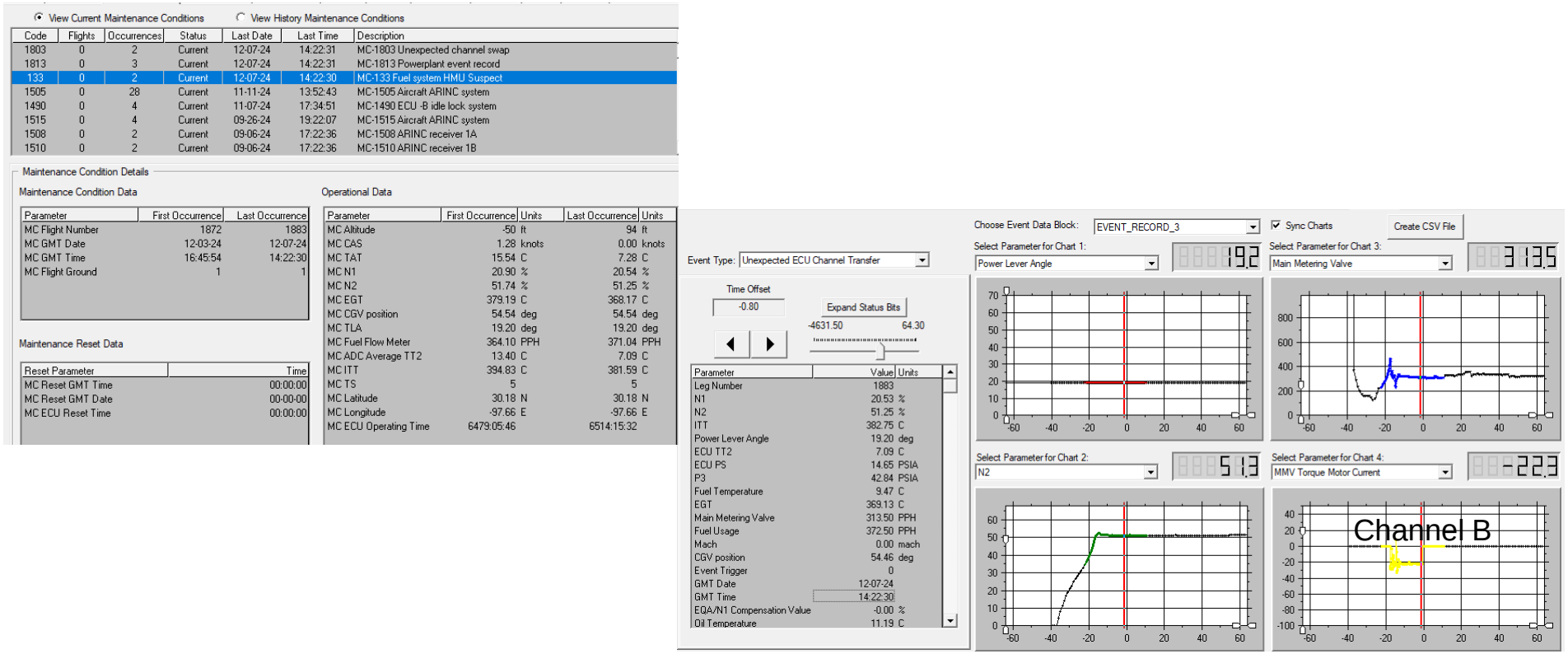
MMV current null MCID 133 occurs 9 secs after engine start complete

MCID 133 – DUAL CHANNEL FAULT



Local and cross channel fuel torque motor null shift indicated

MCID 133 – LOCAL CHANNEL SINGLE FAULT



View Current Maintenance Conditions | View History Maintenance Conditions

Code	Flights	Occurrences	Status	Last Date	Last Time	Description
1803	0	2	Current	12-07-24	14:22:31	MC-1803 Unexpected channel swap
1813	0	3	Current	12-07-24	14:22:31	MC-1813 Powerplant event record
133	0	2	Current	12-07-24	14:22:30	MC-133 Fuel system HMU Suspect
1505	0	28	Current	11-11-24	13:52:43	MC-1505 Aircraft ARINC system
1490	0	4	Current	11-07-24	17:34:51	MC-1490 ECU -B idle lock system
1515	0	4	Current	09-26-24	19:22:07	MC-1515 Aircraft ARINC system
1508	0	2	Current	09-06-24	17:22:36	MC-1508 ARINC receiver 1A
1510	0	2	Current	09-06-24	17:22:36	MC-1510 ARINC receiver 1B

Maintenance Condition Details

Maintenance Condition Data

Parameter	First Occurrence	Last Occurrence
MC Flight Number	1872	1883
MC GMT Date	12-03-24	12-07-24
MC GMT Time	16:45:54	14:22:30
MC Flight Ground	1	1

Maintenance Reset Data

Reset Parameter	Time
MC Reset GMT Time	00:00:00
MC Reset GMT Date	00-00-00
MC ECU Reset Time	00:00:00

Operational Data

Parameter	First Occurrence	Units	Last Occurrence	Units
MC Altitude	-50	ft	94	ft
MC CAS	1.28	knots	0.00	knots
MC TAT	15.54	C	7.28	C
MC N1	20.90	%	20.54	%
MC N2	51.74	%	51.25	%
MC EGT	379.19	C	368.17	C
MC CGV position	54.54	deg	54.54	deg
MC TLA	19.20	deg	19.20	deg
MC Fuel Flow Meter	364.10	PPH	371.04	PPH
MC ADC Average TT2	13.40	C	7.09	C
MC ITT	394.83	C	381.59	C
MC TS	5		5	
MC Latitude	30.18	N	30.18	N
MC Longitude	-97.66	E	-97.66	E
MC ECU Operating Time	6479:05:46		6514:15:32	

Event Type: Unexpected ECU Channel Transfer

Time Offset: -0.80

Expand Status Bits

-4631.50 64.30

Parameter	Value	Units
Leg Number	1883	
N1	20.53	%
N2	51.25	%
ITT	382.75	C
Power Lever Angle	19.20	deg
ECU TT2	7.09	C
ECU PS	14.65	PSIA
P3	42.84	PSIA
Fuel Temperature	9.47	C
EGT	369.13	C
Main Metering Valve	313.50	PPH
Fuel Usage	372.50	PPH
Mach	0.00	mach
CGV position	54.46	deg
Event Trigger	0	
GMT Date	12-07-24	
GMT Time	14:22:30	
EQA/N1 Compensation Value	-0.00	%
Oil Temperature	11.19	C

Choose Event Data Block: EVENT_RECORD_3 | Sync Charts | Create CSV File

Select Parameter for Chart 1: Power Lever Angle — 19.2

Select Parameter for Chart 2: N2 — 51.3

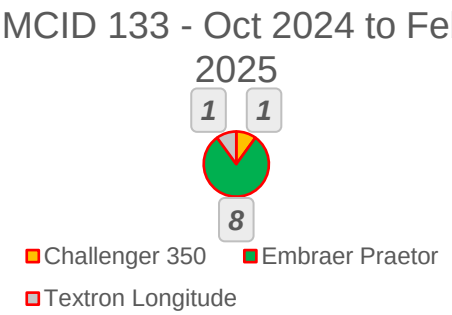
Select Parameter for Chart 3: Main Metering Valve — 313.5

Select Parameter for Chart 4: MMV Torque Motor Current — -22.3

Channel B

Local channel fuel torque motor null shift indicated

HMU REMOVALS PER AIRCRAFT MODEL 3-MONTH PERIOD



Challenging to gather all the required information Date, ESN, MSN, HMU S/N & SFDC case number to correlate shop findings versus the aircraft fault MCID 133.
Unit S/N 3171, Electrohydraulic SERVO VALVE (MV EHSV) P/N 2718972 was replaced during shop visit. The HMU was returned in December 2024 for CAS message - ENG 2 NO DISPATCH

PART_SERIAL	DESC	WORK_ACCOMPLISHED_TEXT
FHC2148	**FAULT CODE 0133**	[REMV_TYPE]UNSCHEDULED[RMV_REASON_CD_DESC]OTHER (DESCRIBE IN REMARKS)
FHC3171	**RH ENG SHORT DISPATCH CAS WITH MCID 0133 (DETECTION OF SUSPECT OPERATION WITHIN THE HMU).OEM HMU, TSN: 471 HOURS**	[WORK_ACCOMPLISHED]REPAIR COMPLETED IAW CMM 73-20-33. REMOVED FMV EHSV LOOL IAW CMM 73-20-33 REV 1, 20-FEB-25 ANALYTICAL COMPLETED IAW 73-20-33 REV [CAUSE_LONG_TXT] DURING RAR THE FOLLOWING TEST POINTS WERE OUT OF SPEC LIMITS: * T/P 410 LOOL, CHECK SHIMMING IN HIGH PRESSURE PUMP RELIEF VALVE * T/P 675B LOOL, ADJUST AT FINAL * T/P 730A LOOL, REPLACE FMV EHSV * T/P 720B LOOL, REPLACE FMV EHSV * T/P 730B LOOL, REPLACE FMV EHSV * ALL OTHER TEST POINTS MET SPECIFICATION LIMITS. * RH ENG SHORT DISPATCH CAS WITH MCID 0133 (DETECTION OF SUSPECT OPERATION WITHIN THE HMU)UNSCHEDULED
FHC2324	**FAULT CODE MC-133 RELATED TO HMU INTERNAL FAILURE.**	[RCVD_COND]RECEIVING VISUAL INSPECTION FOUND MISSING SHIPPING BLOCK/PAD, ELECTRICAL COVER AND INLET COVER/2 SCREWS,2 WASHERS. REPLACED PRIOR TO DISASSEMBLY. SEALS WERE OEM INCOMING PUMP PN 2688676 S/N 18ANL2405, 20-FEB-25[WORK_ACCOMPLISHED]DISASSEMBLED & CLEANED IAW CMM 73-20-33 REV 1 , 20-FEB-25 ANALYTICAL COMPLETED IAW CMM 73-20-33 REV
FHC3142	**ENGINE 1 SHORT DISPATCH CAS MESSAGE MC-133 FUEL SYSTEM**	[ACTION]OVERHAULED[RCVD_COND]RECEIVING VISUAL INSPECTION FOUND RAISED METAL AND SCRATCHES ON MOUNTING SURFACE. SEALS WERE OEM INCOMING PUMP PN 82011224-001 SN 150329-0693, 19-FEB-25[WORK_ACCOMPLISHED]OVERHAUL COMPLETED IAW CMM 73-20-33. DISASSEMBLED AND CLEANED IAW CMM 73-20-33 REV 1, ANALYTICAL COMPLETED IAW CMM 73-20-33 REV, 21-FEB-25 [CAUSE_LONG_TXT] ENGINE 1 SHORT DISPATCHCASMESSAGEMC133FUELSYSTEM[REMV_TYPE]UNSCHEDULED[RMV_REASON_CD_DESC]OTHER (DESCRIBE IN REMARKS)
FHC2175	**HMU TORQUE MOTOR NULL SHIFT CAUSING SHORT DISPATCH CAS MESSAGE MC-133**	[WORK_ACCOMPLISHED]THE INSPECTION/REPAIRS WILL BE ACCOMPLISHED BY OUR VENDOR. THE FINDINGS WILL BE PROVIDED UPON COMPLETION [CAUSE_LONG_TXT] THE INSPECTION/REPAIRS WILL BE ACCOMPLISHED BY OUR VENDOR. THE * FINDINGS WILL BE PROVIDED UPON COMPLETION [REMV_TYPE]UNSCHEDULED[RMV_REASON_CD_DESC]OTHER (DESCRIBE IN REMARKS)

MCID 133 predominantly reported on the Embraer Praetor

RAIL Queue 1095- AS907 W3 Harness Hold Open Rod Interference

Initiator: GCC	Owner: John Pursell	Initiation Date: April 2024	Moved to Top 25: NA	Original Commit Date: NA

Estimated Completion Date: TBD

% Completed: 100

Source: GCC

Problem Description:

Fan cowl door hold open rod may chafe W3 harness over braid

Criteria to Close:

Introduce corrective action

Status & Dates:

- **Service bulletin 76-9033 released Q1 2025**
- Provides for application of anti-chafe sleeve (spiral wrap) and reposition of clamp to ensure adequate harness-to-hold open rod clearance
- Side Bar... Procedures to inspect cloth over-braid and apply anti-chafe sleeve will be added to LMMs and expanded to other areas of the harnesses

Recommend Closure of this RAIL Item

Affected OEMs: Bombardier, Gulfstream, Embraer, Textron

Impacted Regions: Americas