



MINIPACK

Model No. | GTCP131-9A
Part No. | 3800708-1
Serial No. | P-2888

CONDITION	Serviceable	TSN	17,393.99
TAGGED BY	TAG TechOps	CSN	50,430
TAG DATE	Fresh Dec 2019	TSLSV	0
TRACE TO	129-SKY Airlines	CSLSV	0
LOCATION	Florida USA		

LLPs

T1 Disk	6,451	CR
T2 Disk	6,451	CR
Impeller	6,451	CR
Tie Shaft	6,451	CR

Additional Information:

INCLUDED	GENERATOR
☒ BOX/STAND	☐ YES ☒ NO

PRESERVATION
☐ 6 MO ☐ 12 MO ☒ 24 MO

APPLICATION	AVAILABILITY
A319/A320/A321	At Shop

TRANSACTION TYPE
☒ LEASE ☒ EXCHANGE
☒ OUTRIGHT

More about your APU



Non-Incident Statement



Santiago, November 18th, 2019

NON INCIDENT REPORT

To:
Whom it may concern

Dear Sir/Madam
From our consideration:

I hereby certify that, the following component:

Item	Part Number	Serial Number
APU GTCP131-9A	3800708-1	P-2888

Was removed from aircraft A319-111, MSN 3331 on Oct 15th, 2019. To the best of our knowledge at the time of removal the Engine had the following time and cycles:

TSN: 17.939,99

CSN: 50.430

TSR: 7.746,99

CSR: 23.549

To the best of our Knowledge, the component above referenced has not been involved in any accident or significant incident, nor was obtained for any US government or military source while being operated by Sky Airline S.A.

Best Regards,


Gonzalo Melo
QA Designated
SKY AIRLINE S.A.



LLP Summary



Santiago, November 18th 2019

LLP STATUS

Description	Part No.	Serial No.	Last Engine Shop Visit		Current		Life Limit	
			TSN	CSN	TSN	CSN	FC Control value	FC Remaining
1st STAGE TURBINE	3840310-3	11-156101-00543	0	0	7.746,99	23.549	30.000	6.451
2nd STAGE ROTOR	3840165-4	12-156101-06792	0	0	7.746,99	23.549	30.000	6.451
2nd STAGE COMPRESSOR ROTOR	3822391-6	12-162053-49409	0	0	7.746,99	23.549	30.000	6.451
TURBINE SHAFT	3822504-3	12P52570	0	0	7.746,99	23.549	30.000	6.451

Sincerely:

Luis Inostroza C.
Fleet and Major Components
SKY AIRLINE S.A.



Santiago, November 18th, 2019

APU UTILIZATION

To:
Whom it may concern

Dear Sir/Madam
From our consideration:

I hereby certify that, the following component:

Ítem	Part Number	Serial Number
APU GTCP131-9A	3800708-1	P-2888

Was removed from aircraft A319-111, MSN 3331 on Oct 15th, 2019. To the best of our knowledge at the time of removal the Engine had the following time and cycles:

TSN: 17.939,99

CSN: 50.430

TSR: 7.746,99

CSR: 23.549



Shop Visits



Shop Visit
TAG TechOps
December 2019

GTCP131 Series Receiving Report



PREVIOUS OPERATOR



FAA / EASA Approved Repair Station #H15R376D / EASA.145.5226

FlyForward[®]

Model: GTCP131-9A
P/N: 3800708-1
S/N: P-2888
WO: 20765



Customer Information

Customer Information		
Customer:	Received Date:	Customer PO No.:
TAG AERO	12/11/2019	8953
APU Model No.:	APU Serial No.:	APU Part No.:
GTCP131-9A	P-2888	3800708-1
TAG TechOps W/O:	Application	Last Operator:
20765	Airbus A320	Sky Airlines
TAG Tech Ops Technician:	Jamie Kuebbeler	

Inbound DMM Readout APU Times and Cycles			
Time Since New:	18,624	Cycles Since New:	49,838

Inbound APU Times and Cycles Reported by Customer			
Time Since New:	17,939.99	Cycles Since New:	50,430
Time Since Overhaul:	Unknown	Cycles Since Overhaul:	Unknown
Time Since Repair:	7,746.99	Cycles Since Repair:	23,549

Inbound LLP Times			
1 st Stage Turbine Rotor	TSN: 7,746.99	CSN: 23,549	Cycles Remaining: 6,451
2 nd Stage Turbine Rotor	TSN: 7,746.99	CSN: 23,549	Cycles Remaining: 6,451
Turbine Shaft	TSN: 7,746.99	CSN: 23,549	Cycles Remaining: 6,451
Engine Compressor Rotor	TSN: 7,746.99	CSN: 23,549	Cycles Remaining: 6,451

Customer Reason for Removal:

Unknown/Not Supplied

Customer Requested Workscope:

Test and recertification with filter replacement and preservation.



Model: GTCP131-9A
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APU Visual Inspection

Log Book	Yes	No
Unit received with logbook	☒	☐

Inbound Shipping Container				
Condition of Container:	☐ Damaged	☒ Not Damaged		
☒ Wood	☐ Cardboard	☐ Metal	☐ Other (See Comments Below)	
☐ OEM Box	☐ OEM Stand			
Comments:				

Tubing / Hoses Condition				
☒ No Damage	☐ Damaged	☐ Dirty	☐ Oily	
Comments:				

Generator Cavity				
☒ No Damage	☐ Bent Stud(s)	☐ Missing Stud(s)	☐ Metal Contamination	☐ Brg Carrier Loose
Comments:				

Accessories / LRUs		
☒ No Damage	☐ Missing Part(s)	☐ Damaged
Comments:		

Inlet / Exhaust Plenums				
☒ No Damage	☐ Bent	☐ Chaffed	☐ Dented	☐ Cracked
Comments:				

Mounts and Brackets		
☒ No Damage	☐ Missing	☐ Damaged
Comments:		



Model: GTCP131-9A
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APU Visual Inspection

Filter System Check

Did the APU arrive with oil?	☐ Yes	☒ No	
Condition of Oil (Residual)	☒ Normal	☐ Burnt	☐ Contaminated
Lube Pump Filter	☒ Normal	☐ Contaminated	☐ N/A
Fuel Control Filter	☒ Normal	☐ Contaminated	☐ N/A
Generator Scavenge Filter	☒ Normal	☐ Contaminated	☐ N/A
Comments:			

System Checks

Magnetic Gearbox Chip Detector	☒ Normal	☐ Contaminated	☐ N/A			
Delta “P” Indicators extended?	☐ Yes	☐ No	☒ N/A			
Starter Brush Indicator	☐ Full	☐ 3/4	☒ 1/2	☐ 1/4	☐ Flush	☐ N/A
Starter Boot installed?	☐ Yes	☒ No	☐ N/A			
Comments:						

Rotation

Rotation	☒ Smooth	☐ Rough	☐ Seized
IGV Assy Pull Test (5 lb. max)	2.5lbs		
Comments:			

Borescope Inspection

Was APU Borescoped?	☒ Yes	☐ No
Load Compressor Rotor	Acceptable	
Engine Compressor Rotor	Acceptable	
1 st Stage Turbine Blades	Acceptable	
2 nd Stage Turbine Blades	Acceptable	
1 st Stage Stator	Acceptable	
Combustion Chamber	Acceptable	
Comments:		



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Inbound LRUs Fitted

Description	Part Number	Serial Number	Notes
Load Control Valve	3291432-1	3158	
Cooling Fan Assy	3616140-7	P-2393	
Data Memory Module	3876287-1	GE3105	
Differential Pressure Sensor	3876227-2	091121420031	
E.G.T Thermocouple	3876271-1	NSN	
E.G.T Thermocouple	3876271-1	NSN	
Fuel Control Unit	441921-5	CUC13037	
Gearbox Assy	3863426-3	NSN	
Generator	N/A	N/A	Not Installed
Generator Wiring Harness	N/A	N/A	Not Installed
Inlet Temp Bulb	MS28034-1	132281	
Oil Temp Bulb	MS28034-3	115228	
Ignitor Plug	305766-4	17021435	
Ignitor Lead	53179-13	NSN	
Ignition Unit	3888058-5	030218039691	
IGV Actuator	3886188-3	6037	
Inlet Pressure Sensor	3876225-2	041121401546	
Low Oil Pressure Switch	3876255-2	NSN	
Lube Module	4131020-4	2947	
Oil Cooler	160494-1	2538	
Oil Heater	3618244-1	Not Visible	
Low Oil Level Switch	3876330-2	NSN	
Stater	2704506-4	6308	
Transducer Motional Pickup	3876223-1	Not Visible	
Surge Control Valve	3291238-2	1649	
Flow Divider	3879006-1	Not Visible	
Solenoid Valve	692546-2	NSN	
Total Pressure Probe Assy	38849971-1	NSN	
Total Pressure Sensor	3876226-1	5132-1A-82	
Wiring Harness	3888438-1	NSN	



Model: GTCP131-9A
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Receiving Photos



APU inbound container: Front



APU inbound container: Left



APU within container: Right



APU within container: Rear



Model: GTCP131-9A
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Receiving Photos



APU: Front



APU: Left



APU: Right



APU: Rear



Model: GTCP131-9A
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Receiving Photos



Compressor Impeller



Compressor Impeller



IGV Vanes



T2 Blades



Model: GTCP131-9A
P/N: 3800708-1
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Receiving Photos



T1 Blades



T1 Blades



T1 Nozzle



T1 Nozzles



Model: GTCP131-9A
P/N: 3800708-1
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APU Visual Inspection Conclusion

Preliminary Comments:

APU Arrived in fair condition with build up of dust segments throughout APU. No defects/damage were noted during visual inspection. Lubrication system found to be satisfactory.

Inbound borescope was found to be satisfactory with no major defects. General wear observed however all within limits and acceptable for inbound test.

Recommended Workscope:

APU to be routed for test for full performance run. If APU passes test, unit to have filters replaced and long-term preservation.

Customer Approval:

Customer agrees with the above findings and approves the recommended workscope to be performed.

Signature: _____

Name: _____

Title: _____

Date: _____



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Findings and Disposition with Recommended Workscope



Model: GTCP131-9A
P/N: 3800708-1
S/N: P-2888
WO: 20765



Findings and Disposition Report

Gearbox Condition

- | | | | |
|--|--|---|-----------------------------------|
| ☐ Metal Contamination | ☐ Bearing Failure | ☐ Gear Failure | ☐ Oil Leak |
| ☐ High Hours/Cycles | ☐ Requires Mod | ☒ No Damage | |
| ☐ Other: | | | |

Gearbox Recommended Workscope

- | | | |
|---------------------------------|-----------------------------------|---|
| ☐ Repair | ☐ Overhaul | ☒ Inspected |
|---------------------------------|-----------------------------------|---|

Load Compressor Condition

- | | | | |
|-----------------------------------|--|---|---|
| ☐ FOD | ☐ Bearing Failure | ☐ IGV Wear/Failure | ☐ Rub Damage |
| ☐ Oil Leak | ☐ Low Performance | ☐ Surge Margin | ☒ No Damage |
| ☐ Other: | | | |

Load Compressor Recommended Workscope

- | | | |
|---------------------------------|-----------------------------------|--|
| ☐ Repair | ☐ Overhaul | ☒ Not Disassembled |
|---------------------------------|-----------------------------------|--|

Power Section Condition

- | | | | |
|---|--|---|--|
| ☐ FOD | ☐ Bearing Failure | ☐ Blade Shift | ☐ Rub Damage |
| ☐ Oil Leak | ☐ High EGT | ☒ High Hours/Cycles | ☐ Hot Section Deterioration |
| ☒ No Damage | ☐ Bearing Failure | ☐ IGV Wear/Failure | ☐ Rub Damage |
| ☐ Other: | | | |

Power Section Recommended Workscope

- | | | |
|---------------------------------|-----------------------------------|--|
| ☐ Repair | ☐ Overhaul | ☒ Not Disassembled |
|---------------------------------|-----------------------------------|--|

Line Replaceable Units

- ☐ Route selected LRU's for test and repair as necessary
- ☐ Route all units for test and repair as necessary
- ☐ No work required
- ☒ Other: Route APU for operational testing

Auxiliary Power Unit Recommended Workscope

- | | | |
|---------------------------------------|---|---|
| ☐ Repair | ☐ Overhaul | ☐ No Fault Found |
| ☐ Return As-Is | ☐ Beyond Economical Repair | ☒ Functional Inspect and Test |
| ☐ Other: | | |



Model: GTCP131-9A
P/N: 3800708-1
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Analysis and Conclusion

Disassembly Findings

APU arrived for operational test and recertification per customer's request. APU was not disassembled; a borescope inspection was performed, and a visual inspection was performed for accessible components.

Probable Cause

- | | | | |
|---|--|--|--|
| ☐ Scheduled Removal | ☐ Due HSI | ☐ Excessive Heat Damage | ☐ FOD |
| ☐ Bearing Failure | ☐ Blade Failure | ☐ Improper Maintenance | ☐ High Hours/Cycles |
| ☐ Oil Leak | | | |
| ☒ Other: N/A – Aircraft removal | | | |

APU Recommended Workscope

- | | | |
|---|---|---|
| ☐ Repair | ☐ Hot Section Inspection (HSI) | ☐ Beyond Economical Repair |
| ☐ Overhaul | ☒ Functional Inspect and Test | ☐ Return As-Is |
| ☐ No Fault Found | | |
| ☒ Other: Customer had requested APU to be operationally tested and recertified. | | |



Model: GTCP131-9A
P/N: 3800708-1
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APU Service Record



Model: GTCP131-9A
P/N: 3800708-1
S/N: P-2888
WO: 20765



Service Bulletins Report

Service Bulletin	Rev	Date	Description	Change No.
49-7997	05	03/FEB/2017	Standard Storage and Preservation Guideline	N/A
–	–	–	–	–
–	–	–	–	–

☐ There are no S.B. Compiled with this shop visit

Air Worthiness Directives Report

A.D	Amendment	Description	Status
–	–	–	–
–	–	–	–
–	–	–	–

☒ No FAA Airworthiness Directives applicable to this APU at the time of shop visit



Model: GTCP131-9A
P/N: 3800708-1
S/N: P-2888
WO: 20765



Accessories Parts Status Report

Received			Installed		
Description	Part Number	Serial No.	Part Number	Serial No.	Status
Load Control Valve	3291432-1	3158	3291432-1	3158	TESTED
Cooling Fan Assy	3616140-7	P-2393	3616140-7	P-2393	TESTED
Data Memory Module	3876287-1	GE3105	3876287-1	GE3105	TESTED
Differential Pressure Sensor	3876227-2	091121420031	3876227-2	091121420031	TESTED
E.G.T Thermocouple	3876271-1	NSN	3876271-1	NSN	TESTED
E.G.T Thermocouple	3876271-1	NSN	3876271-1	NSN	TESTED
Fuel Control Unit	441921-5	CUC13037	441921-5	CUC13037	TESTED
Gearbox Assy	3863426-3	NSN	3863426-3	NSN	TESTED
Generator	N/A	N/A	N/A	N/A	N/A
Generator Wiring Harness	N/A	N/A	N/A	N/A	N/A
Inlet Temp Bulb	MS28034-1	132281	MS28034-1	132281	TESTED
Oil Temp Bulb	MS28034-3	115228	MS28034-3	115228	TESTED
Ignitor Plug	305766-4	17021435	305766-4	17021435	TESTED
Ignitor Lead	53179-13	NSN	53179-13	NSN	TESTED
Ignition Unit	3888058-5	030218039691	3888058-5	030218039691	TESTED
IGV Actuator	3886188-3	6037	3886188-3	6037	TESTED
Inlet Pressure Sensor	3876225-2	041121401546	3876225-2	041121401546	TESTED
Low Oil Pressure Switch	3876255-2	NSN	3876255-2	NSN	TESTED
Lube Module	4131020-4	2947	4131020-4	2947	TESTED
Oil Cooler	160494-1	2538	160494-1	2538	TESTED

SV = Repaired

OH = Overhauled

RP = Replaced

N/A = Not applicable

TESTED = Functionally tested on APU

BC = Bench Checked

VI = Visually Inspected

CS = Customer Supplied



Model: GTCP131-9A
P/N: 3800708-1
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Accessories Parts Status Report

Received			Installed		
Description	Part Number	Serial No.	Part Number	Serial No.	Status
Oil Heater	3618244-1	Not Visible	3618244-1	Not Visible	TESTED
Low Oil Level Switch	3876330-2	NSN	3876330-2	NSN	TESTED
Stater	2704506-4	6308	2704506-4	6308	TESTED
Transducer Motional Pickup	3876223-1	Not Visible	3876223-1	Not Visible	TESTED
Surge Control Valve	3291238-2	1649	3291238-2	1649	TESTED
Flow Divider	3879006-1	Not Visible	3879006-1	Not Visible	TESTED
Solenoid Valve	692546-2	NSN	692546-2	NSN	TESTED
Total Pressure Probe Assy	38849971-1	NSN	38849971-1	NSN	TESTED
Total Pressure Sensor	3876226-1	5132-1A-82	3876226-1	5132-1A-82	TESTED
Wiring Harness	3888438-1	NSN	3888438-1	NSN	TESTED

SV = Repaired

OH = Overhauled

RP = Replaced

N/A = Not applicable

TESTED = Functionally tested on APU

BC = Bench Checked

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CS = Customer Supplied



Model: GTCP131-9A
P/N: 3800708-1
S/N: P-2888
WO: 20765



Replacement and Repaired Component Report

Work Performed				
Description	Part Number	Serial No.	QTY	Status
Boot Terminal	2710489-1	NSN	1	Replaced /NE

SV = Repaired

OH = Overhauled

RP = Replaced

N/A = Not applicable

TESTED = Functionally tested on APU

BC = Bench Checked

VI = Visually Inspected

CS = Customer Supplied



Model: GTCP131-9A
P/N: 3800708-1
S/N: P-2888
WO: 20765



LLP Summary

Description	Part No.	Serial No.	TSN	CSN	Life Limit	Cycles Remaining
1 ST Stage Turbine	3840310-3	11-156101-00543	7,746.99	23,549	30,000	6,451
2 nd Stage Rotor	3840165-4	12-156101-06792	7,746.99	23,549	30,000	6,451
2 nd Stage Compressor Rotor	3822391-6	12-162053-49409	7,746.99	23,549	30,000	6,451
Turbine Shaft	3822504-3	12P52570	7,746.99	23,549	30,000	6,451

Information was supplied by customer, trace documents, and/or APU's log book.

Preservation

Note: APU is preserved in accordance with Honeywell SB 49-7997 Rev 05. Preservation duration is dependent on owner/operator compliance with SB requirements. Fuel system preserved for long or extended term storage must be de-preserved in accordance with the applicable CMM.

☐ Immediate Use (Less than two weeks of storage)

☐ Short Term (2-6 Months or Less)

☒ Long-Term (2 Years or Less).....Date of Preservation 20/DEC/2019

APU Corrective Action:

The APU was inspected and tested in accordance with ATA 49-27-29 Revision 12, dated August 14,

2018. TSN: 17,939.99 CSN: 50,430

Quality Control Approval:

Date:

20/DEC/2019



Model: GTCP131-9A
P/N: 3800708-1
S/N: P-2888
WO: 20765



Post-Test BSI

December 20, 2019

Subject: GTCP131-9A P/N: 3800708-1 S/N: P-2888 WO# 20765

To Whom it May Concern,

This letter is to confirm that a post-test borescope inspection of the compressor and turbine was performed on subject APU with no visual defects noted.

Thank you,

A handwritten signature in black ink, appearing to read "Nick Wetherington", with a long horizontal stroke extending to the right.

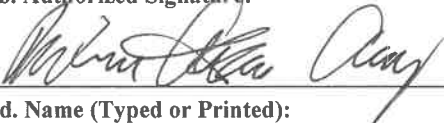
Nick Wetherington

Quality Assurance Manager

Model: GTCP131-9A
P/N: 3800708-1
S/N: P-2888
WO: 20765



APU 8130-3

1. Approving Civil Aviation Authority/Country: FAA/United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG			3. Form Tracking Number: 2019-3338	
4. Organization Name and Address:  TAG TechOps 660 Garden Commerce Parkway, Winter Garden, FL 34787 FAA CRS # H15R376D					5. Work Order/Contract/Invoice Number: 20765	
6. Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status/Work:	
1	APU, GTCP131-9A	3800708-1	1	P-2888	TESTED	
12. Remarks: This component has been inspected and tested in accordance with current Honeywell publications manual ATA 49-27-29 revision 12, dated August 14, 2018. TSN: 17,393.99 CSN: 50,430 Full details held on WO 20765.  No Airworthiness Directives applicable to this APU at this current shop visit. Complied with 24-month preservation in accordance with Service Bulletin 49-7997 revision 05. Date of preservation 20/DEC/2019. TAG TechOps Certifies that the work specified in blocks 11 and 12 was performed in accordance with EASA implementation rule part 145 approval and with respect to that work, the aircraft component is considered ready for release to service under EASA approval number EASA.145.5226						
13a. Certifies the items identified above were manufactured in conformity to: Approved design data and are in a condition for safe operation. Non-approved design data specified in Block 12.			14a. ☒ 14 CFR 43.9 Return 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 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.: H15R376D	
13d. Name (Typed or Printed):		13e. Date (dd/mm/yyyy):	14d. Name (Typed or Printed): RUBEN CASTRO CRUZ		14e. Date (dd/mm/yyyy): 20/DEC/2019	
User/Installer Responsibilities						
It is important to understand that the existence of this document alone does not automatically constitute authority to install the aircraft engine/propeller/article. Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts aircraft 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.						



FAA# H15R376D / EASA 145.5226

LOGBOOK ENTRY

P/N: 3800708-1 **S/N:** P-2888 **MODEL** GTCP131-9A **W/O** 20765

This component has been inspected and tested in accordance with current Honeywell Publication ATA 49-27-29 revision 12, dated August 14, 2018. Reference annexed shop report WO 20765 for further details of work performed at this shop visit.

Complied with 24-month preservation in accordance with Service Bulletin 49-7997 Rev 05. Date of preservation 20/DEC/2019.

No Airworthiness Directive applicable to this APU at this shop visit.

A handwritten signature in black ink, appearing to read "Nick Wetherington", with a stylized flourish at the end.

Nick Wetherington
Quality Assurance Manager
20/DEC/2019

TSN: 17,393.99

CSN: 50,430

Model: GTCP131-9A
P/N: 3800708-1
S/N: P-2888
WO: 20765



Test Data Sheet



**TAG TechOps - APU TEST CELL****ACCEPTANCE TEST DATA SHEET**

PAGE 1 OF 2
DATE 16/12/2019
TIME 8:56:35

APU MODEL	131-9A	PART NO.:	3800708-1
CMM	49-51-07 REV 6 JAN 05-2018	DATE:	Jan 12/17
SOFTWARE REV:	5.0	DATE:	NOV. 2017
MODEL NO.:	131-9A	SERIAL NO.:	P-2888
OIL USED:	MIL-F-23699	WORK ORDER:	WO 20765
ECB UNIT PART NO.:	3888394-221204	FUEL USED:	JP1
		SERIAL NO.:	0

AUTOMATIC STARTS 8.H: START 1 46 SEC
START 2 45 SEC
START 3 44 SEC

TOTAL NUMBER OF STARTS (DURING ATP): 4
TOTAL OPERATING TIME (DURING ATP): 1.5

OIL SYSTEM PRESERVATION: NO
FUEL SYSTEM PRESERVATION: YES

NO FUEL / OIL LEAKS: NO

REMARKS

INITIAL IGV POSITION	8.D.3:	91,09	DEG	INITIAL PBCOR:	41,9	PSIA
FINAL IGV POSITION	8.D.3:	91,08	DEG	FINAL PBCOR:	40,9	PSIA
ECS OFFSET (FINAL IGV - INITIAL IGV):		#VALUE!	DEG		-3	DEG
FLOW SENSOR CHECK	8.E.8:		WBCDNA:	50,9	PPM	
FLOW SENSOR CHECK	8.E.11:		WBCDNA:	50,8	PPM	
FLOW SENSOR CHECK	8.E.12:		WC:	50,8	PPM	#VALUE! 1%
SCV STABILITY	8.F:		SCV IS STABLE?	YES		
MINIMUM SURGE MARGIN	8.F:		DID THE UNIT SURGE?	NO		
LOAD CONTROL VALVE TEST:	8.I.8:		IS OK?	YES		
LOAD CONTROL VALVE TEST:	8.I.10:		IS OK?	YES		

UNIT STATUS:

TECHNICIAN: EDWARD NEGRON
SUPERVISOR: JUAN YANEZ
QUALITY ASSURANCE:

DATE: 12/17/2019
DATE: 12/17/2019
DATE:

TAG TechOps - APU TEST CELL

ACCEPTANCE TEST DATA SHEET

PAGE 2 OF 2
DATE 12/16/2019
TIME 8:56:35

MODEL NO.:

131-9A

SERIAL NO.:

P-2888

WORK ORDER:

WO 20765

CMM REFERENCE			8.D.1	8.D.2	8.D.4	8.D.5
DIGITAL DATA POINT NO.			0001	0002	0003	0004
PARAMETER	UNITS	NO	SHAFT	COMB.	MES	
		LOAD	LOAD	LOAD	MODE	
		H:M:S	9:57:06	10:03:17 AM	10:14:26 AM	10:18:02 AM
BAROMETRIC PRESSURE	PSIA	14,75	14,75	14,75	14,76	
CELL PRESSURE	PSIA	14,71	14,71	14,71	14,71	
T1	T1 - APU INLET TEMPERATURE (AVG)	DEG F	88,7	82,2	91,5	92,5
TENIVA	UNIT INLET TEMPERATURE (T2)	DEG F	77,7	73,3	91,1	90,5
POIL	OIL PRESS - LUBE PUMP DISCHARGE	PSIG	58	59	57	59
TOIL	OIL TEMP - LUBE PUMP DISCHARGE	DEG F	211	208	220	215
PSGBX	GEARBOX PRESSURE - SUMP	IN H2O	1	1	3	4
TFUEL	FUEL INLET TEMPERATURE	DEG F	70	71	72	73
PFUEL	FUEL INLET PRESSURE	PSIG	25,5	25,4	25,7	25,9
VIBGBA	UNIT VIBRATION - GEARBOX	IN/SEC	0,12	0,15	0,13	0,14
VIBTHA	UNIT VIBRATION - TURBINE	IN/SEC	0,53	1,21	0,29	0,11
VIBCFA	UNIT VIBRATION - COOLING FAN	IN/SEC	0,51	0,54	0,53	0,53
XNL	SHAFT SPEED	RPM	48160	48796	48793	48882
PIGV	INLET GUIDE VAN POSITION	DEG	91,14	22,30	91,07	72,10
PCDFD	COMP. DISCH. STATIC PRESS	PSIA	103,1	103,5	105,6	104,7
TCDFD	COMP. DISCHARGE TEMPERATURE	DEG F	602	592	615	612
TTDEA	TURBINE DISCHARGE TEMPERATURE	DEG F	1122	913	1118	1077
TTDEB	(UNIT EGT)	DEG F	1190	936	1182	1133
EGT	LAB EGT (AVG)	DEG F	1145	766	1139	1080
PS9	EXHAUST STATIC PRESSURE	PSIA	14,71	14,70	14,70	14,70
PBORFA	BLEED AIR ORIFICE PRESSURE	PSIA			41,5	41,2
TBORFA	BLEED ORIFICE TEMPERATURE	DEG F			395	394
PDBORA	BLEED AIR ORIFICE DELTA P	PSID			3,55	3,00
WB	BLEED AIRFLOW	PPM			133,3	123,1
WBCDNA	CORRECTED DISCHARGE AIRFLOW	PPM			57,6	54,7
PG	BLEED PRESSURE (AVG)	PSIA			44,2	42,9
TB	BLEED TEMPERATURE (AVG)	DEG F			417	417
WF	FUEL FLOW	PPH	304	241	311	291
PWGEN	GENERATOR LOAD - PFACTOR = 1	KW			84,9	71,7
SHPSL	GENERATOR LOAD, SEA LEVEL	KW			98	83
PBCOR	BLEED PRESSURE, SEA LEVEL	PSIA			42,0	38,5
WBCOR	BLEED ARIFLOW, SEA LEVEL	PPM			125,8	108,0
TBCOR	BLEED TEMPERATURE, SEA LEVEL	DEG F			470	505
EGTCOR	EGT CORRECTED, SEA LEVEL	DEG F			1147	1136
WFCOR	FUEL FLOW CORRECTED, SEA LEVEL	PPH			349,9	268
REQUIREMENTS		MIN WBCOR			148,9	
		MIN PBCOR			50,2	50,1
		MAX IGV			92,5	
		MAX WFCOR				269
		MAX. EGTCOR			1150	1145
		SHPSL REQUIRED				
					98	83
						54

TECHNICIAN:

EDWARD NEGRON

QUALITY ASSURANCE:



Model: GTCP131-9A
P/N: 3800708-1
S/N: P-2888
WO: 20765



DMM Readout



12/20/2019 Data Conversion For ENGINE S/N P2888
WINDMM.EXE Version 3.04.03 BuildVersion 180117 131-9A Overhaul Version 04.51

1	Item Count	472	472	NUMBER ENTRIES IN DMM
2	SW Version	009A	009A	ECB SOFTWARE VERSION (SV)
3	APUser.pre	P	P	APU SERIAL NUMBER PREFIX
4	APUser.num1	00	00	APU SERIAL NUMBER (FIRST 2 DIGITS)
5	APUser.num2	00	00	APU SERIAL NUMBER (NEXT 2 DIGITS)
6	APUser.num3	28	28	APU SERIAL NUMBER (NEXT 2 DIGITS)
7	APUser.num4	88	88	APU SERIAL NUMBER (LAST 2 DIGITS)
8	APUser.suf			APU SERIAL NUMBER (SUFFIX 2 DIGITS)
9	APUhours_LO	18624	18624	APU HOURS Low Word
10	APUminutes	49	49	APU MINUTES
11	APUcycles_LO	49838	49838	APU CYCLES Low Word
12	ECS_OFFSET	-500	-5	ECS OFFSET DEGREES (SV)
13	FUELOFF100	1020	10.200	FUEL FLOW OFFSET AT 100 POUNDS PPH
14	FUELOFF200	-314	-3.140	FUEL FLOW OFFSET AT 200 PPH
15	ABSTARTS	130	130	NUMBER OF UNSUCCESSFUL STARTS
16	APU_OPTIONS	9	9	APU OPTION FLAGS
	BIT 0:	TRUE	A321	ECS Min Derate
	BIT 3:	TRUE	A318/319/320	ECS Min Derate
17	FLTSTARTS	41	41	NUMBER OF INFLIGHT STARTS
18	ABFLTSTARTS	2	2	NUMBER OF UNSUCCESSFUL INFLIGHT STARTS
19	TURB_CYCLES	22931	22931	CYCLES SINCE TURBINE REPAIR (TB)
20	LC_CYCLES	22931	22931	CYCLES SINCE LOAD COMP REPAIR (LC)
21	EC_CYCLES	22918	22918	CYCLES SINCE ENGINE COMP REPAIR (EC)
22	CLOG_FILTER	2	2	NUMBER OF CLOGGED OIL FILTER
INDICATIONS				
23	OVRHAUL_HR	8359	8359	HOURS SINCE SHOP VISIT (SV)
24	OVRHAUL_MIN	181	18.100	MINUTES SINCE SHOP VISIT (SV)
25	INSTALL_HR	8356	8356	HOURS SINCE AIRPLANE INSTALLATION (SV)
26	INSTALL_MIN	57	5.700	MINUTES SINCE AIRPLANE INSTALLATION
(SV)				
27	ECS_HOURS	8377	8377	OPERATING TIME IN ECS HOURS
28	ECS_MINUTES	166	16.600	OPERATING TIME IN ECS MINUTES
29	FLT_HOURS	417	417	OPERATING TIME IN FLIGHT HOURS
30	FLT_MINUTES	313	31.300	OPERATING TIME IN FLIGHT MINUTES
31	HOT_TIME	795	79.500	OPERATING HOURS T2 GREATER 100 DEGF
32	COLD_TIME	797	79.700	OPERATING HOURS T2 LESS 0 DEGF
33	NMES	45732	45732	NUMBER OF MAIN ENGINE STARTS
34	HIGHSTARTS	8	8	NUMBER OF START ATTEMPTS ABOVE 25000 FT
35	BRRSTARTS	19	19	NUMBER OF STARTS OILTEMP LESS 0 DEGF
36	BRRRRSTARTS	0	0	NUMBER OF STARTS OILTEMP LESS -40 DEGF
37	LOWOILPR	1	1	NUMBER OF LOW OIL PRESSURE SHUTDOWNS
38	NUM3LOP	0	0	NUMBER OF 3 CONSECUTIVE LOP SHUTDOWNS
39	CONSECLOP	0	0	NUMBER OF CONSECUTIVE LOP SHUTDOWNS
40	HOT	2	2	NUMBER OF HIGH OIL TEMPERATURE
SHUTDOWNS				
41	OVRTMPGOV	1	1	NUMBER OF ONSPEED OVERTEMP SHUTDOWNS
42	OVRTMPSTRT	0	0	NUMBER OF STARTING OVERTEMP SHUTDOWNS

43	REVFLOW	0	0	NUMBER OF REVERSE FLOW SHUTDOWNS
44	NO_ACCEL	5	5	NUMBER OF NO ACCELERATION SHUTDOWNS
45	OVERSPEED	0	0	NUMBER OF OVERSPEED SHUTDOWNS
46	UNDERSPEED	2	2	NUMBER OF UNDERSPEED SHUTDOWNS
47	FILTER_SDN	2	2	NUMBER OF CLOGGED OIL FILTER SHUTDOWNS
48	NO_FLAME	39	39	NUMBER OF NO FLAME SHUTDOWNS
49	INLET_HOT	7	7	NUMBER OF INLET HOT SHUTDOWNS
50	INFLIGHT_SD	9	9	NUMBER OF INFLIGHT SHUTDOWNS
51	AT4ECS(1)	100	655.360	AVERAGE T4 ECS DEG F* (PS)
52	AT4ECS(2)	53918	5.392	AVERAGE T4 ECS DEG F (PS)
53	AT4MES(1)	144	943.718	AVERAGE T4 MES DEG F* (PS)
54	AT4MES(2)	10537	1.054	AVERAGE T4 MES DEG F (PS)
55	AT4FLT(1)	237	1553.203	AVERAGE T4 INFLIGHT DEG F* (PS)
56	AT4FLT(2)	31986	3.199	AVERAGE T4 INFLIGHT DEG F (PS)
57	T1800	3350	335	HOURS T4 > 1800 DEG F (PS)
58	T1850	1109	110.900	HOURS T4 > 1850 DEG F (PS)
59	T1900	194	19.400	HOURS T4 > 1900 DEG F (PS)
60	T1950	26	2.600	HOURS T4 > 1950 DEG F (PS)
61	T2000	2	0.200	HOURS T4 > 2000 DEG F (PS)
62	RECT4R	20609	2060.900	HIGHEST T4 ONSPEED DEGF (PS)
63	RECT5S	17730	1773	HIGHEST T5 DURING START DEGF (PS)
64	ABRTCLDN	20	20	NUMBER OF ABORTED COOLDOWNS
65	CT5AVE	25030	1150.300	AVERAGE CORR T5 DURING MES DEGF (SV)
66	MDNCT5AVE	10564	1005.640	MAIDEN CORR T5 DURING MES DEGF
67	CT5AVE500	7652	976.520	CORR T5 MES AT 500 HOURS DEGF
68	CT5AVE1000	9548	995.480	CORR T5 MES AT 1000 HOURS DEGF
69	CT5AVE1500	10400	1004	CORR T5 MES AT 1500 HOURS DEGF
70	CT5AVE2000	11242	1012.420	CORR T5 MES AT 2000 HOURS DEGF
71	CT5AVE2500	10884	1008.840	CORR T5 MES AT 2500 HOURS DEGF
72	CT5AVE3000	0	900	CORR T5 MES AT 3000 HOURS DEGF
73	CT5AVE3500	0	900	CORR T5 MES AT 3500 HOURS DEGF
74	CT5AVE4000	0	900	CORR T5 MES AT 4000 HOURS DEGF
75	CT5AVE4500	0	900	CORR T5 MES AT 4500 HOURS DEGF
76	CT5AVE5000	0	900	CORR T5 MES AT 5000 HOURS DEGF
77	CT5AVE6000	0	900	CORR T5 MES AT 6000 HOURS DEGF
78	CT5AVE7000	12038	1020.380	CORR T5 MES AT 7000 HOURS DEGF
79	CT5AVE8000	13788	1037.880	CORR T5 MES AT 8000 HOURS DEGF
80	CT5AVE9000	17962	1079.620	CORR T5 MES AT 9000 HOURS DEGF
81	CT5AVE10000	21936	1119.360	CORR T5 MES AT 10000 HOURS DEGF
82	CPTAVE	56352	56.352	AVERAGE CORR PT DURING MES PSIA (SV)
83	MDNCPTAVE	59458	59.458	MAIDEN CORR PT DURING MES PSIA
84	CPTAVE500	57626	57.626	CORR PT DURING MES AT 500 HOURS PSIA
85	CPTAVE1000	57422	57.422	CORR PT DURING MES AT 1000 HOURS PSIA
86	CPTAVE1500	58404	58.404	CORR PT DURING MES AT 1500 HOURS PSIA
87	CPTAVE2000	58100	58.100	CORR PT DURING MES AT 2000 HOURS PSIA
88	CPTAVE2500	58008	58.008	CORR PT DURING MES AT 2500 HOURS PSIA
89	CPTAVE3000	0	0	CORR PT DURING MES AT 3000 HOURS PSIA
90	CPTAVE3500	0	0	CORR PT DURING MES AT 3500 HOURS PSIA
91	CPTAVE4000	0	0	CORR PT DURING MES AT 4000 HOURS PSIA
92	CPTAVE4500	0	0	CORR PT DURING MES AT 4500 HOURS PSIA

93	CPTAVE5000	0	0	CORR PT DURING MES AT 5000 HOURS PSIA
94	CPTAVE6000	0	0	CORR PT DURING MES AT 6000 HOURS PSIA
95	CPTAVE7000	58970	58.970	CORR PT DURING MES AT 7000 HOURS PSIA
96	CPTAVE8000	57432	57.432	CORR PT DURING MES AT 8000 HOURS PSIA
97	CPTAVE9000	55652	55.652	CORR PT DURING MES AT 9000 HOURS PSIA
98	CPTAVE10000	57084	57.084	CORR PT DURING MES AT 10000 HOURS PSIA
99	CWFAVE	33508	335.080	AVERAGE CORR FUEL FLOW DURING MES PPH
(SV)				
100	MDNCWFAVE	29290	292.900	MAIDEN CORR FUEL FLOW DURING MES PPH
101	CWFAVE500	27512	275.120	CORR FUEL FLOW MES AT 500 HOURS PPH
102	CWFAVE1000	27472	274.720	CORR FUEL FLOW MES AT 1000 HOURS PPH
103	CWFAVE1500	28022	280.220	CORR FUEL FLOW MES AT 1500 HOURS PPH
104	CWFAVE2000	28166	281.660	CORR FUEL FLOW MES AT 2000 HOURS PPH
105	CWFAVE2500	27982	279.820	CORR FUEL FLOW MES AT 2500 HOURS PPH
106	CWFAVE3000	0	0	CORR FUEL FLOW MES AT 3000 HOURS PPH
107	CWFAVE3500	0	0	CORR FUEL FLOW MES AT 3500 HOURS PPH
108	CWFAVE4000	0	0	CORR FUEL FLOW MES AT 4000 HOURS PPH
109	CWFAVE4500	0	0	CORR FUEL FLOW MES AT 4500 HOURS PPH
110	CWFAVE5000	0	0	CORR FUEL FLOW MES AT 5000 HOURS PPH
111	CWFAVE6000	0	0	CORR FUEL FLOW MES AT 6000 HOURS PPH
112	CWFAVE7000	28716	287.160	CORR FUEL FLOW MES AT 7000 HOURS PPH
113	CWFAVE8000	29248	292.480	CORR FUEL FLOW MES AT 8000 HOURS PPH
114	CWFAVE9000	29620	296.200	CORR FUEL FLOW MES AT 9000 HOURS PPH
115	CWFAVE10000	32214	322.140	CORR FUEL FLOW MES AT 10000 HOURS PPH
116	IGVMES	11567	115.670	IGV POSITION DURING MES DEGREES
117	SPEEDDROOPS	48	48	NUMBER OF SPEED DROOPS BELOW 85% SPEED
118	START_TIME	43	43	Start Time for current APU Run
119	STARTTIME_1	44	44	Start Time for last APU Run
120	STARTTIME_2	45	45	Start Time for last-1 APU Run
121	STARTTIME_3	44	44	Start Time for last-2 APU Run
122	STARTTIME_4	41	41	Start Time for last-3 APU Run
123	STARTTIME_5	46	46	Start Time for last-4 APU Run
124	STARTTIME_6	45	45	Start Time for last-5 APU Run
125	STARTTIME_7	43	43	Start Time for last-6 APU Run
126	STARTTIME_8	42	42	Start Time for last-7 APU Run
127	STARTTIME_9	45	45	Start Time for last-8 APU Run
128	STRTTIMEAVE	41	41	Average Start Time for last 10 Starts
129	ECS_0P_HR	503	503	Operating Time in ECS Zero Pack (hr)
130	ECS_0P_MIN	14241	23.735	Operating Time in ECS Zero Pack (min)
131	ECS_1P_HR	3324	3324	Operating Time in ECS One Pack (hr)
132	ECS_1P_MIN	3020	5.033	Operating Time in ECS One Pack (min)
133	ECS_2P_HR	4530	4530	Operating Time in ECS Two Pack (hr)
134	ECS_2P_MIN	8785	14.642	Operating Time in ECS Two Pack (min)
135	ECS_G75_HR	1000	1000	Operating Time in ECS with ARC_DMD >
75%				
136	ECS_G75_MIN	18837	31.395	Operating Time in ECS with ARC_DMD >
75%				
137	ECS_L75_HR	6556	6556	Operating Time in ECS with ARC_DMD <
25%				
138	ECS_L25_MIN	12615	21.025	Operating Time in ECS with ARC_DMD <

25%

139	T1800_HR	335	335	Time T4_ONSPEED_FIL > 1800 DEG F (HR)
(PS)				
140	T1800_MIN	446	0.743	Time T4_ONSPEED_FIL > 1800 DEG F (MIN)
(PS)				
141	T1850_HR	110	110	Time T4_ONSPEED_FIL > 1850 DEG F (HR)
(PS)				
142	T1850_MIN	35093	58.488	Time T4_ONSPEED_FIL > 1850 DEG F (MIN)
(PS)				
143	T1900_HR	19	19	Time T4_ONSPEED_FIL > 1900 DEG F (HR)
(PS)				
144	T1900_MIN	16383	27.305	Time T4_ONSPEED_FIL > 1900 DEG F (MIN)
(PS)				
145	T1950_HR	2	2	Time T4_ONSPEED_FIL > 1950 DEG F (HR)
(PS)				
146	T1950_MIN	24566	40.943	Time T4_ONSPEED_FIL > 1950 DEG F (MIN)
(PS)				
147	T2000_HR	0	0	Time T4_ONSPEED_FIL > 2000 DEG F (HR)
(PS)				
148	T2000_MIN	10321	17.202	Time T4_ONSPEED_FIL > 2000 DEG F (MIN)
(PS)				
149	T2050_HR	0	0	Time T4_ONSPEED_FIL > 2050 DEG F (HR)
(PS)				
150	T2050_MIN	45	0.075	Time T4_ONSPEED_FIL > 2050 DEG F (MIN)
(PS)				
151	T2000_HR	0	0	Time T4_ONSPEED_FIL > 2100 DEG F (HR)
(PS)				
152	T2100_MIN	0	0	Time T4_ONSPEED_FIL > 2100 DEG F (MIN)
(PS)				
153	T2200_HR	0	0	Time T4_ONSPEED_FIL > 2200 DEG F (HR)
(PS)				
154	T2200_MIN	0	0	Time T4_ONSPEED_FIL > 2200 DEG F (MIN)
(PS)				
155	CT5_CYC_NUM	48612	48612	Last cycle where the average corrected
EGT during MES was outside of the control limit				
156	CT5_CL_OFFSET	0	0	CT5 Control Limit Offset
157	CT5_AVE	12564	1150.304	CT5_AVE (SV)
158	CT5_MR_BAR	169	15.473	CT5_MR_BAR (SV)
159	M_CT5_UCLT	11755	1076.235	Maiden upper Control Limit for CT5 (SV)
160	C_CT5_UCLT	12667	1159.734	Corrected upper Control Limit for CT5
(SV)				
161	M_CT5_XBAR	11306	1035.127	Maiden CT5_XBAR (SV)
162	R_CT5_XBAR	12370	1132.542	Running CT5_XBAR (SV)
163	CT5_A_N1	13257	1213.752	CT5_A_N1 (SV)
164	CT5_A_N2	12615	1154.973	CT5_A_N2 (SV)
165	CT5_A_N3	12245	1121.097	CT5_A_N3 (SV)
166	CT5_A_N4	12304	1126.499	CT5_A_N4 (SV)
167	CT5_A_N5	12296	1125.767	CT5_A_N5 (SV)
168	CT5_A_N6	12594	1153.050	CT5_A_N6 (SV)
169	CT5_A_N7	12224	1119.175	CT5_A_N7 (SV)

170	CT5_A_N8	12501	1144.536	CT5_A_N8 (SV)
171	CT5_A_N9	12244	1121.006	CT5_A_N9 (SV)
172	CT5_A_N10	12539	1148.015	CT5_A_N10 (SV)
173	CT5_A_N11	12226	1119.358	CT5_A_N11 (SV)
174	CT5_A_N12	12279	1124.210	CT5_A_N12 (SV)
175	CT5_A_N13	12289	1125.126	CT5_A_N13 (SV)
176	CT5_A_N14	12231	1119.816	CT5_A_N14 (SV)
177	CT5_A_N15	12292	1125.401	CT5_A_N15 (SV)
178	CT5_A_N16	12264	1122.837	CT5_A_N16 (SV)
179	CT5_A_N17	12088	1106.723	CT5_A_N17 (SV)
180	CT5_A_N18	12316	1127.598	CT5_A_N18 (SV)
181	CT5_A_N19	12215	1118.351	CT5_A_N19 (SV)
182	CT5_A_N20	12386	1134.007	CT5_A_N20 (SV)
183	CT5OLD0	12236	1120.273	CT5AVE 0 Hours ago (SV)
184	CT5OLD50	12263	1122.745	CT5AVE 50 Hours ago (SV)
185	CT5OLD100	12215	1118.351	CT5AVE 100 Hours ago (SV)
186	CT5OLD150	12284	1124.668	CT5AVE 150 Hours ago (SV)
187	CT5OLD200	12278	1124.119	CT5AVE 200 Hours ago (SV)
188	CT5OLD250	12377	1133.183	CT5AVE 250 Hours ago (SV)
189	CT5OLD300	12275	1123.844	CT5AVE 300 Hours ago (SV)
190	CT5OLD350	12318	1127.781	CT5AVE 350 Hours ago (SV)
191	CT5OLD400	12407	1135.929	CT5AVE 400 Hours ago (SV)
192	CT5OLD450	12515	1145.817	CT5AVE 450 Hours ago (SV)
193	CT5OLD500	12463	1141.057	CT5AVE 500 Hours ago (SV)
194	CT5_X1000	11341	1038.331	"CT5AVE at X1000 Hours (for x = 0,1, 2, ..., 6)"
195	CT5_X1500	11239	1028.993	"CT5AVE at X1500 Hours (for x = 0,1, 2, ..., 6)"
196	CT5_X2000	11675	1068.911	"CT5AVE at X2000 Hours (for x = 0,1, 2, ..., 6)"
197	CT5_X2500	11823	1082.461	"CT5AVE at X2500 Hours (for x = 0,1, 2, ..., 6)"
198	CT5_X3000	11646	1066.256	"CT5AVE at X3000 Hours (for x = 0,1, 2, ..., 6)"
199	CT5_X3500	12086	1106.540	"CT5AVE at X3500 Hours (for x = 0,1, 2, ..., 6)"
200	CT5_X4000	12067	1104.801	"CT5AVE at X4000 Hours (for x = 0,1, 2, ..., 6)"
201	CT5_X4500	12032	1101.596	"CT5AVE at X4500 Hours (for x = 0,1, 2, ..., 6)"
202	CT5_X5000	11975	1096.377	"CT5AVE at X5000 Hours (for x = 0,1, 2, ..., 6)"
203	CT5_X6000	12047	1102.969	"CT5AVE at X6000 Hours (for x = 0,1, 2, ..., 5)"
204	CT5_X7000	12363	1131.901	"CT5AVE at X7000 Hours (for x = 0,1, 2, ..., 5)"
205	CT5_X8000	12524	1146.641	"CT5AVE at X8000 Hours (for x = 0,1, 2, ..., 5)"
206	CT5_X9000	11792	1079.623	"CT5AVE at X9000 Hours (for x = 0,1, 2, ..., 5)"

207 CT5_X0000	12226	1119.358 "CT5AVE at X0000 Hours (for x = 1, 2, ..., 6)"
208 CPT_CYC_NUM	49836	49836 Last cycle where the average corrected pressure during MES was outside of the control limit
209 CPT_CL_OFFSET	0	0 CPT Control Limit Offset
210 CPTAVE	15388	56.354 CPTAVE (SV)
211 CPT_MR_BAR	117	0.428 CPT_MR_BAR (SV)
212 M_CPT_LCLT	15989	58.555 Maiden lower Control Limit for CPT (SV)
213 M_CPT_XBAR	16300	59.694 Maiden CPT_XBAR (SV)
214 R_CPT_XBAR	15817	57.925 Running CPT_XBAR (SV)
215 CPT_A_N1	14169	51.890 CPT_A_N1 (SV)
216 CPT_A_N2	15311	56.072 CPT_A_N2 (SV)
217 CPT_A_N3	16091	58.929 CPT_A_N3 (SV)
218 CPT_A_N4	16012	58.639 CPT_A_N4 (SV)
219 CPT_A_N5	15782	57.797 CPT_A_N5 (SV)
220 CPT_A_N6	15741	57.647 CPT_A_N6 (SV)
221 CPT_A_N7	15950	58.412 CPT_A_N7 (SV)
222 CPT_A_N8	16003	58.607 CPT_A_N8 (SV)
223 CPT_A_N9	13873	50.806 CPT_A_N9 (SV)
224 CPT_A_N10	16190	59.291 CPT_A_N10 (SV)
225 CPT_A_N11	16250	59.511 CPT_A_N11 (SV)
226 CPT_A_N12	16039	58.738 CPT_A_N12 (SV)
227 CPT_A_N13	16148	59.138 CPT_A_N13 (SV)
228 CPT_A_N14	16187	59.280 CPT_A_N14 (SV)
229 CPT_A_N15	16213	59.376 CPT_A_N15 (SV)
230 CPT_A_N16	16057	58.804 CPT_A_N16 (SV)
231 CPT_A_N17	16148	59.138 CPT_A_N17 (SV)
232 CPT_A_N18	16120	59.035 CPT_A_N18 (SV)
233 CPT_A_N19	16129	59.068 CPT_A_N19 (SV)
234 CPT_A_N20	15937	58.365 CPT_A_N20 (SV)
235 CPTOLD0	16091	58.929 CPTAVE 0 Hours ago (SV)
236 CPTOLD50	16005	58.614 CPTAVE 50 Hours ago (SV)
237 CPTOLD100	16157	59.171 CPTAVE 100 Hours ago (SV)
238 CPTOLD150	15982	58.530 CPTAVE 150 Hours ago (SV)
239 CPTOLD200	15811	57.903 CPTAVE 200 Hours ago (SV)
240 CPTOLD250	15979	58.519 CPTAVE 250 Hours ago (SV)
241 CPTOLD300	15777	57.779 CPTAVE 300 Hours ago (SV)
242 CPTOLD350	15566	57.006 CPTAVE 350 Hours ago (SV)
243 CPTOLD400	15962	58.456 CPTAVE 400 Hours ago (SV)
244 CPTOLD450	14913	54.615 CPTAVE 450 Hours ago (SV)
245 CPTOLD500	14744	53.996 CPTAVE 500 Hours ago (SV)
246 CPT_X1000	16327	59.793 "CPTAVE at X1000 Hours (for x 0 1, 2, ..., 6)"
247 CPT_X1500	16210	59.365 "CPTAVE at X1500 Hours (for x 0 1, 2, ..., 6)"
248 CPT_X2000	16462	60.287 "CPTAVE at X2000 Hours (for x 0 1, 2, ..., 6)"
249 CPT_X2500	16210	59.365 "CPTAVE at X2500 Hours (for x 0 1, 2, ..., 6)"
250 CPT_X3000	16328	59.797 "CPTAVE at X3000 Hours (for x 0 1, 2, ..., 6)"

..., 6)"			
251 CPT_X3500	16298	59.687	"CPTAVE at X3500 Hours (for x 0 1, 2,
..., 6)"			
252 CPT_X4000	16050	58.779	"CPTAVE at X4000 Hours (for x 0 1, 2,
..., 6)"			
253 CPT_X4500	15933	58.350	"CPTAVE at X4500 Hours (for x 0 1, 2,
..., 6)"			
254 CPT_X5000	15607	57.156	"CPTAVE at X5000 Hours (for x 0 1, 2,
..., 6)"			
255 CPT_X6000	15648	57.306	"CPTAVE at X6000 Hours (for x 0 1, 2,
..., 5)"			
256 CPT_X7000	15565	57.002	"CPTAVE at X7000 Hours (for x 0 1, 2,
..., 5)"			
257 CPT_X8000	14936	54.699	"CPTAVE at X8000 Hours (for x 0 1, 2,
..., 5)"			
258 CPT_X9000	15197	55.655	"CPTAVE at X9000 Hours (for x 0 1, 2,
..., 5)"			
259 CPT_X0000	15588	57.087	"CPTAVE at X0000 Hours (for x 0 1, 2,
..., 6)"			
260 CWFAVE	21445	335.088	CWFAVE (SV)
261 CWFOLD0	21096	329.635	CWFAVE 0 Hours ago (SV)
262 CWFOLD50	21106	329.791	CWFAVE 50 Hours ago (SV)
263 CWFOLD100	21128	330.135	CWFAVE 100 Hours ago (SV)
264 CWFOLD150	21401	334.401	CWFAVE 150 Hours ago (SV)
265 CWFOLD200	21183	330.994	CWFAVE 200 Hours ago (SV)
266 CWFOLD250	21274	332.416	CWFAVE 250 Hours ago (SV)
267 CWFOLD300	21053	328.963	CWFAVE 300 Hours ago (SV)
268 CWFOLD350	21133	330.213	CWFAVE 350 Hours ago (SV)
269 CWFOLD400	21289	332.651	CWFAVE 400 Hours ago (SV)
270 CWFOLD450	21494	335.854	CWFAVE 450 Hours ago (SV)
271 CWFOLD500	21404	334.448	CWFAVE 100 Hours ago (SV)
272 CWF_X1000	18729	292.650	"CWFAVE at X1000 Hours (for x= 0 1, 2,
..., 6)"			
273 CWF_X1500	18658	291.540	"CWFAVE at X1500 Hours (for x= 0 1, 2,
..., 6)"			
274 CWF_X2000	19458	304.041	"CWFAVE at X2000 Hours (for x= 0 1, 2,
..., 6)"			
275 CWF_X2500	19378	302.790	"CWFAVE at X2500 Hours (for x= 0 1, 2,
..., 6)"			
276 CWF_X3000	19449	303.900	"CWFAVE at X3000 Hours (for x= 0 1, 2,
..., 6)"			
277 CWF_X3500	20166	315.103	"CWFAVE at X3500 Hours (for x= 0 1, 2,
..., 6)"			
278 CWF_X4000	20228	316.072	"CWFAVE at X4000 Hours (for x= 0 1, 2,
..., 6)"			
279 CWF_X4500	20295	317.119	"CWFAVE at X4500 Hours (for x= 0 1, 2,
..., 6)"			
280 CWF_X5000	20106	314.166	"CWFAVE at X5000 Hours (for x= 0 1, 2,
..., 6)"			
281 CWF_X6000	20378	318.416	"CWFAVE at X6000 Hours (for x= 0 1, 2,

..., 5)"			
282 CWF_X7000	20887	326.369	"CWFAVE at X7000 Hours (for x= 0 1, 2,
..., 5)"			
283 CWF_X8000	21404	334.448	"CWFAVE at X8000 Hours (for x= 0 1, 2,
..., 5)"			
284 CWF_X9000	18957	296.212	"CWFAVE at X9000 Hours (for x= 0 1, 2,
..., 5)"			
285 CWF_X0000	20617	322.150	"CWFAVE at X0000 Hours (for x= 1, 2,
..., 6)"			
286 LOWFUELPR	81		81 Number of Low Fuel Pressure Faults (SV)
287 SDN_LFP	2		2 Number of Shutdowns with Low Fuel
Pressure Fault (SV)			
288 NO_SPEED	60		60 Number of No Speed S/D
289 NOSPDNOBATRY	25		25 Number of No Speed Shutdowns with Main
or Backup Start Contactor open faults (SV)			
290 EMERGENCY	62		62 Number of Emergency S/D (SV)
291 SNSR_FAIL	0		0 Number of Sensor Fail S/D
292 RECT4R_CYC	42981		42981 APU Cycle of RECT4R entry (PS)
293 RECT5S_CYC	29029		29029 APU Cycle of RECT5S entry (PS)
294 LOP_SDN_1	40391		40391 APU Cycle of Low Oil Pressure Sdn(1)
295 LOP_EVT_1	00EF		00EF Event Word for Low Oil Pressure Sdn(1)
296 LOP_SDN_2	0		0 APU Cycle of Low Oil Pressure Sdn(2)
297 LOP_EVT_2	0000		0000 Event Word for Low Oil Pressure Sdn(2)
298 LOP_SDN_3	0		0 APU Cycle of Low Oil Pressure Sdn(3)
299 LOP_EVT_3	0000		0000 Event Word for Low Oil Pressure Sdn(3)
300 LOP_SDN_4	0		0 APU Cycle of Low Oil Pressure Sdn(4)
301 LOP_EVT_4	0000		0000 Event Word for Low Oil Pressure Sdn(4)
302 LOP_SDN_5	0		0 APU Cycle of Low Oil Pressure Sdn(5)
303 LOP_EVT_5	0000		0000 Event Word for Low Oil Pressure Sdn(5)
304 HOT_SDN_1	21114		21114 APU Cycle of High Oil Temp Sdn(1)
305 HOT_EVT_1	31EF		31EF Event Word for High Oil Temp Sdn(1)
306 HOT_SDN_2	5611		5611 APU Cycle of High Oil Temp Sdn(2)
307 HOT_EVT_2	00EF		00EF Event Word for High Oil Temp Sdn(2)
308 HOT_SDN_3	0		0 APU Cycle of High Oil Temp Sdn(3)
309 HOT_EVT_3	0000		0000 Event Word for High Oil Temp Sdn(3)
310 HOT_SDN_4	0		0 APU Cycle of High Oil Temp Sdn(4)
311 HOT_EVT_4	0000		0000 Event Word for High Oil Temp Sdn(4)
312 HOT_SDN_4	0		0 APU Cycle of High Oil Temp Sdn(5)
313 HOT_EVT_5	0000		0000 Event Word for High Oil Temp Sdn(5)
314 OVRTMPG_SDN_1	16906		16906 APU Cycle of Overtmp Onspeed Sdn(1)
315 OVRTMPG_EVT_1	41EF		41EF Event Word for Overtmp Onspeed Sdn(1)
316 OVRTMPG_SDN_2	0		0 APU Cycle of Overtmp Onspeed Sdn(2)
317 OVRTMPG_EVT_2	0000		0000 Event Word for Overtmp Onspeed Sdn(2)
318 OVRTMPG_SDN_3	0		0 APU Cycle of Overtmp Onspeed Sdn(3)
319 OVRTMPG_EVT_3	0000		0000 Event Word for Overtmp Onspeed Sdn(3)
320 OVRTMPG_SDN_4	0		0 APU Cycle of Overtmp Onspeed Sdn(4)
321 OVRTMPG_EVT_4	0000		0000 Event Word for Overtmp Onspeed Sdn(4)
322 OVRTMPG_SDN_5	0		0 APU Cycle of Overtmp Onspeed Sdn(5)
323 OVRTMPG_EVT_5	0000		0000 Event Word for Overtmp Onspeed Sdn(5)
324 OVRTMPS_SDN_1	0		0 APU Cycle of Overtmp Start Sdn(1)

325	OVRTMPS_EVT_1	0000	0000	Event Word for Overtmp Start Sdn(1)
326	OVRTMPS_SDN_2	0	0	APU Cycle of Overtmp Start Sdn(2)
327	OVRTMPS_EVT_2	0000	0000	Event Word for Overtmp Start Sdn(2)
328	OVRTMPS_SDN_3	0	0	APU Cycle of Overtmp Start Sdn(3)
329	OVRTMPS_EVT_3	0000	0000	Event Word for Overtmp Start Sdn(3)
330	OVRTMPS_SDN_4	0	0	APU Cycle of Overtmp Start Sdn(4)
331	OVRTMPS_EVT_4	0000	0000	Event Word for Overtmp Start Sdn(4)
332	OVRTMPS_SDN_5	0	0	APU Cycle of Overtmp Start Sdn(5)
333	OVRTMPS_EVT_5	0000	0000	Event Word for Overtmp Start Sdn(5)
334	REVFLOW_SDN_1	0	0	APU Cycle of Reverse Flow Sdn(1)
335	REVFLOW_EVT_1	0000	0000	Event Word for Reverse Flow Sdn(1)
336	REVFLOW_SDN_2	0	0	APU Cycle of Reverse Flow Sdn(2)
337	REVFLOW_EVT_2	0000	0000	Event Word for Reverse Flow Sdn(2)
338	REVFLOW_SDN_3	0	0	APU Cycle of Reverse Flow Sdn(3)
339	REVFLOW_EVT_3	0000	0000	Event Word for Reverse Flow Sdn(3)
340	REVFLOW_SDN_4	0	0	APU Cycle of Reverse Flow Sdn(4)
341	REVFLOW_EVT_4	0000	0000	Event Word for Reverse Flow Sdn(4)
342	REVFLOW_SDN_5	0	0	APU Cycle of Reverse Flow Sdn(5)
343	REVFLOW_EVT_5	0000	0000	Event Word for Reverse Flow Sdn(5)
344	NOACCEL_SDN_1	45899	45899	APU Cycle of No Accel Sdn(1)
345	NOACCEL_EVT_1	01BF	01BF	Event Word for No Accel Sdn(1)
346	NOACCEL_SDN_2	39925	39925	APU Cycle of No Accel Sdn(2)
347	NOACCEL_EVT_2	01AF	01AF	Event Word for No Accel Sdn(2)
348	NOACCEL_SDN_3	39147	39147	APU Cycle of No Accel Sdn(3)
349	NOACCEL_EVT_3	00BF	00BF	Event Word for No Accel Sdn(3)
350	NOACCEL_SDN_4	39147	39147	APU Cycle of No Accel Sdn(4)
351	NOACCEL_EVT_4	00AF	00AF	Event Word for No Accel Sdn(4)
352	NOACCEL_SDN_5	37616	37616	APU Cycle of No Accel Sdn(5)
353	NOACCEL_EVT_5	01BF	01BF	Event Word for No Accel Sdn(5)
354	OVRSPD_SDN_1	0	0	APU Cycle of Overspeed Sdn(1)
355	OVRSPD_EVT_1	0000	0000	Event Word for Overspeed Sdn(1)
356	OVRSPD_SDN_2	0	0	APU Cycle of Overspeed Sdn(2)
357	OVRSPD_EVT_2	0000	0000	Event Word for Overspeed Sdn(2)
358	OVRSPD_SDN_3	0	0	APU Cycle of Overspeed Sdn(3)
359	OVRSPD_EVT_3	0000	0000	Event Word for Overspeed Sdn(3)
360	OVRSPD_SDN_4	0	0	APU Cycle of Overspeed Sdn(4)
361	OVRSPD_EVT_4	0000	0000	Event Word for Overspeed Sdn(4)
362	OVRSPD_SDN_5	0	0	APU Cycle of Overspeed Sdn(5)
363	OVRSPD_EVT_5	0000	0000	Event Word for Overspeed Sdn(5)
364	UNDRSPD_SDN_1	28418	28418	APU Cycle of Underspeed Sdn(1)
365	UNDRSPD_EVT_1	05AF	05AF	Event Word for Underspeed Sdn(1)
366	UNDRSPD_SDN_2	17500	17500	APU Cycle of Underspeed Sdn(2)
367	UNDRSPD_EVT_2	0DAF	0DAF	Event Word for Underspeed Sdn(2)
368	UNDRSPD_SDN_3	0	0	APU Cycle of Underspeed Sdn(3)
369	UNDRSPD_EVT_3	0000	0000	Event Word for Underspeed Sdn(3)
370	UNDRSPD_SDN_4	0	0	APU Cycle of Underspeed Sdn(4)
371	UNDRSPD_EVT_4	0000	0000	Event Word for Underspeed Sdn(4)
372	UNDRSPD_SDN_5	0	0	APU Cycle of Underspeed Sdn(5)
373	UNDRSPD_EVT_5	0000	0000	Event Word Underspeed Sdn(5)
374	CLFLTR_SDN_1	34179	34179	APU Cycle of Clogged Oil Filter Sdn(1)

375 CLFLTR_EVT_1	00EF	00EF Event Word for Clogged Oil Filter
Sdn(1)		
376 CLFLTR_SDN_2	34178	34178 APU Cycle of Clogged Oil Filter Sdn(2)
377 CLFLTR_EVT_2	00EF	00EF Event Word for Clogged Oil Filter
Sdn(2)		
378 CLFLTR_SDN_3	0	0 APU Cycle of Clogged Oil Filter Sdn(3)
379 CLFLTR_EVT_3	0000	0000 Event Word for Clogged Oil Filter
Sdn(3)		
380 CLFLTR_SDN_4	0	0 APU Cycle of Clogged Oil Filter Sdn(4)
381 CLFLTR_EVT_4	0000	0000 Event Word for Clogged Oil Filter
Sdn(4)		
382 CLFLTR_SDN_5	0	0 APU Cycle of Clogged Oil Filter Sdn(5)
383 CLFLTR_EVT_5	0000	0000 Event Word for Clogged Oil Filter
Sdn(5)		
384 NOFLAM_SDN_1	45413	45413 APU Cycle of No Flame Sdn(1)
385 NOFLAM_EVT_1	003F	003F Event Word for No Flame Sdn(1)
386 NOFLAM_SDN_2	45413	45413 APU Cycle of No Flame Sdn(2)
387 NOFLAM_EVT_2	003F	003F Event Word for No Flame Sdn(2)
388 NOFLAM_SDN_3	45413	45413 APU Cycle of No Flame Sdn(3)
389 NOFLAM_EVT_3	003F	003F Event Word for No Flame Sdn(3)
390 NOFLAM_SDN_4	45413	45413 APU Cycle of No Flame Sdn(4)
391 NOFLAM_EVT_4	003F	003F Event Word for No Flame Sdn(4)
392 NOFLAM_SDN_5	45413	45413 APU Cycle of No Flame Sdn(5)
393 NOFLAM_EVT_5	003F	003F Event Word for No Flame Sdn(5)
394 INLTHOT_SDN_1	23384	23384 APU Cycle of Inlet HOT Sdn(1)
395 INLTHOT_EVT_1	0003	0003 Event Word for Inlet HOT Sdn(1)
396 INLTHOT_SDN_2	23382	23382 APU Cycle of Inlet HOT Sdn(2)
397 INLTHOT_EVT_2	0007	0007 Event Word for Inlet HOT Sdn(2)
398 INLTHOT_SDN_3	23381	23381 APU Cycle of Inlet HOT Sdn(3)
399 INLTHOT_EVT_3	05EF	05EF Event Word for Inlet HOT Sdn(3)
400 INLTHOT_SDN_4	23380	23380 APU Cycle of Inlet HOT Sdn(4)
401 INLTHOT_EVT_4	31EF	31EF Event Word for Inlet HOT Sdn(4)
402 INLTHOT_SDN_5	23379	23379 APU Cycle of Inlet HOT Sdn(5)
403 INLTHOT_EVT_5	0007	0007 Event Word for Inlet HOT Sdn(5)
404 EMERG_SDN_1	49384	49384 APU Cycle of Emergency Sdn(1)
405 EMERG_EVT_1	08AF	08AF Event Word for Emergency Sdn(1)
406 EMERG_SDN_2	48531	48531 APU Cycle of Emergency Sdn(2)
407 EMERG_EVT_2	00BF	00BF Event Word for Emergency Sdn(2)
408 EMERG_SDN_3	47938	47938 APU Cycle of Emergency Sdn(3)
409 EMERG_EVT_3	003F	003F Event Word for Emergency Sdn(3)
410 EMERG_SDN_4	47908	47908 APU Cycle of Emergency Sdn(4)
411 EMERG_EVT_4	00AF	00AF Event Word for Emergency Sdn(4)
412 EMERG_SDN_5	47598	47598 APU Cycle of Emergency Sdn(5)
413 EMERG_EVT_5	001F	001F Event Word for Emergency Sdn(5)
414 NOSPD_SDN_1	48846	48846 APU Cycle of No Speed Sdn(1)
415 NOSPD_EVT_1	001F	001F Event Word for No Speed Sdn(1)
416 NOSPD_SDN_2	48846	48846 APU Cycle of No Speed Sdn(2)
417 NOSPD_EVT_2	001F	001F Event Word for No Speed Sdn(2)
418 NOSPD_SDN_3	47669	47669 APU Cycle of No Speed Sdn(3)
419 NOSPD_EVT_3	001F	001F Event Word for No Speed Sdn(3)

420	NOSPD_SDN_4	47486	47486	APU Cycle of No Speed Sdn(4)
421	NOSPD_EVT_4	001F	001F	Event Word for No Speed Sdn(4)
422	NOSPD_SDN_5	45333	45333	APU Cycle of No Speed Sdn(5)
423	NOSPD_EVT_5	001F	001F	Event Word for No Speed Sdn(5)
424	SNSRFAIL_SDN_1	0	0	APU Cycle of Sensor Fail Sdn(1)
425	SNSRFAIL_EVT_1	0000	0000	Event Word for Sensor Fail Sdn(1)
426	SNSRFAIL_SDN_2	0	0	APU Cycle of Sensor Fail Sdn(2)
427	SNSRFAIL_EVT_2	0000	0000	Event Word for Sensor Fail Sdn(2)
428	SNSRFAIL_SDN_3	0	0	APU Cycle of Sensor Fail Sdn(3)
429	SNSRFAIL_EVT_3	0000	0000	Event Word for Sensor Fail Sdn(3)
430	SNSRFAIL_SDN_4	0	0	APU Cycle of Sensor Fail Sdn(4)
431	SNSRFAIL_EVT_4	0000	0000	Event Word for Sensor Fail Sdn(4)
432	SNSRFAIL_SDN_5	0	0	APU Cycle of Sensor Fail Sdn(5)
433	SNSRFAIL_EVT_5	0000	0000	Event Word for Sensor Fail Sdn(5)
434	INFLIGHT_SDN_1	49838	49838	APU Cycle of Inflight Sdn(1)
435	INFLIGHT_EVT_1	80EB	80EB	Event Word for Inflight Sdn(1)
436	INFLIGHT_SDN_2	49826	49826	APU Cycle of Inflight Sdn(2)
437	INFLIGHT_EVT_2	84EB	84EB	Event Word for Inflight Sdn(2)
438	INFLIGHT_SDN_3	49825	49825	APU Cycle of Inflight Sdn(3)
439	INFLIGHT_EVT_3	84EB	84EB	Event Word for Inflight Sdn(3)
440	INFLIGHT_SDN_4	49824	49824	APU Cycle of Inflight Sdn(4)
441	INFLIGHT_EVT_4	882B	882B	Event Word for Inflight Sdn(4)
442	INFLIGHT_SDN_5	49824	49824	APU Cycle of Inflight Sdn(5)
443	INFLIGHT_EVT_5	882B	882B	Event Word for Inflight Sdn(5)
444	ABFLTSTRT_L25	2	2	Number of Unsuccessful In-Flight Starts
< 25000 ft				
445	ABFLTSTRT_G25	0	0	Number of Unsuccessful In-Flight Starts
> 25000 ft				
446	CUR_MONTH	0010	0010 0001..0012	corresponding to January ..
December				
447	MINUTES_M0	4580	4580	Number of APU minutes during current
month				
448	CYCLES_M0	187	187	Number of APU cycles during current
month				
449	MINUTES_M1	6546	6546	Number of APU minutes during current
month - 1 month				
450	CYCLES_M1	310	310	Number of APU cycles during current
month - 1 month				
451	MINUTES_M2	6394	6394	Number of APU minutes during current
month - 2 months				
452	CYCLES_M2	362	362	Number of APU cycles during current
month - 2 months				
453	MINUTES_M3	7129	7129	Number of APU minutes during current
month - 3 months				
454	CYCLES_M3	292	292	Number of APU cycles during current
month - 3 months				
455	MINUTES_M4	2504	2504	Number of APU minutes during current
month - 4 months				
456	CYCLES_M4	138	138	Number of APU cycles during current
month - 4 months				

457 MINUTES_M5 month - 5 months	5487	5487 Number of APU minutes during current
458 CYCLES_M5 month - 5 months	275	275 Number of APU cycles during current
459 MINUTES_M6 month - 6 months	6447	6447 Number of APU minutes during current
460 CYCLES_M6 month - 6 months	347	347 Number of APU cycles during current
461 MINUTES_M7 month - 7 months	7487	7487 Number of APU minutes during current
462 CYCLES_M7 month - 7 months	336	336 Number of APU cycles during current
463 MINUTES_M8 month - 8 months	7549	7549 Number of APU minutes during current
464 CYCLES_M8 month - 8 months	339	339 Number of APU cycles during current
465 MINUTES_M9 month - 9 months	5257	5257 Number of APU minutes during current
466 CYCLES_M9 month - 9 months	277	277 Number of APU cycles during current
467 MINUTES_M10 month - 10 months	6056	6056 Number of APU minutes during current
468 CYCLES_M10 month - 10 months	313	313 Number of APU cycles during current
469 MINUTES_M11 month - 11 months	7502	7502 Number of APU minutes during current
470 CYCLES_M11 month - 11 months	335	335 Number of APU cycles during current
471 MINUTES_M12 month - 12 months	6823	6823 Number of APU minutes during current
472 CYCLES_M12 month - 12 months	399	399 Number of APU cycles during current



Shop Visit
Honeywell
11th April 2012

Honeywell Aerospace GmbH
Frankfurter Str. 41 – 65
65479 Raunheim - Germany

APU SERVICE RECORD

DATE 11042012	ACCUMULATIVE TOTALS		P/N : 3800708-1 S/N : P-2888	
	HOURS	CYCLES		
TSN / TSO	CSN / CSO	TSR / CSR		
10193,83 / N/A	26881 / N/A	0 / 0		

DESCRIPTION OF WORK PERFORMED

TYPE MAINTENANCE : Repaired and Modified
EM 49-27-29 REV.6; 131-9(A); SERIES: 8; P/O: R7009912;
MEDIUM REPAIR WORKSCOPE AND AMP TASKS IAW MWC841-1319A, REV.2, DATED 9/8/2010
PERFORMED. SPECIAL INSPECTION REQUIREMENTS PERFORMED, REFER TO THE ATTACHED FORM
QS1339/2006 FOR DETAILS.
THE AIRCRAFT COMPONENT IDENTIFIED ABOVE WAS INSPECTED IN ACCORDANCE WITH CURRENT
CIVIL AVIATION ADMINISTRATION REGULATIONS (SEE ATTACHED CERTIFICATE) AND IS APPROVED
FOR RETURN TO SERVICE. PERTINENT DETAILS OF WORK PERFORMED ARE ON FILE AT THIS
AGENCY UNDER REPAIR ORDER : 311311778

TRACEABLE LIFE LIMITED / LIFE CONTROLLED PARTS

ITEM	ROTOR	ASSY	S/N	HRS	CYC	LEFT	TIMEEX	EXPOSED
LC.ROTOR	3822400-5	N/A	08-03501-19931	3033,83	11523	O/C	N/A	☒
EC.ROTOR	3822391-6	N/A	11-162053-41553	0	0	30000	30000	☒
T.SHAFT	3822504-3	N/A	12P45786	0	0	30000	30000	☒
1T.ROTOR	3840310-3	N/A	11-156101-00543	0	0	30000	30000	☒
2T.WHEEL	3840165-4	N/A	11-156101-01645	0	0	30000	30000	☒

NAMEPLATE DATA CONTROLLED

ITEM	P/N	S/N	ST	ITEM	P/N	S/N	ST
FCU	441921-5	CUC13037	4	FAN ASSY	3616140-7	P-2393	2
STARTER	2704506-	NOT ATTACHED		GEARBOX	3805057-1	NONE	4
LUBE MOD	4131020-4	2947	0	DEOILSOL	4141028-3	10332	0
HARNESS	3888438-1	NONE	2	LCV	3291432-1	1402	2
SCV	3291238-2	3048	1	DMM	3876287-1	GE3105	4
T.P.SENS	3876226-1	041121460511	4	IGN.UNIT	3888058-5	040218052172	2
IGV.ACT	3886188-3	6197	3E	OIL COOL	160494-1	2031	2

===== ST (STATUS) =====
0=TEST ON APU 1=FINAL/BENCHTEST 2=REPAIR 3=OVERHAUL 4=VISUAL INSPECT 5=NEW E=EXCHANGE

EASA APPROVED MAINT. ORG. NO.: DE.145.0022
FAA APPROVED REPAIR STATION NO.: QJ1Y428K
GACA APPROVED REPAIR STATION NO.: AMO-152F
TCCA ACCEPTANCE APPROVAL NO.: 898-02
DGCAM APPROVED MAINT. ORG. NO.: AWR/263/GMBH-071/92
GCAA APPROVED REPAIR STATION NO.: AMO/170/06
CAA APPROVED MAINT. ORG. NO.: ATR/8/5.65
CAMA APPROVED MAINT. ORG. NO.: CAMA/AMO/051
QCAA APPROVED MAINT. ORG. NO.: QCAA/FAMO/126
CAAV APPROVED MAINT. ORG. NO.: VN-331NN/CAAV
KCAASR APPROVED MAINT. ORG. NO.: DGCA/AMO/069


N. Fischer



STAMP

11.04.2012
DATE

APU S/N : 9-2888

TECHNICIAN :

D'Aci Luca

FT
26

DATE :

11.04.2012

ATP REFERENCE		8.D.1	8.D.2	8.D.4	8.D.5
QUANTITY	UNITS	NO LOAD	SHAFT LOAD	38°C COMBINED LOAD	50°C MES
BAROMETRIC PRESSURE (PBAR)	BAR	0.989	0.989	0.989	0.989
AVERAGE INLET TEMPERATURE (T1)	°C	18.18	18.24	19.46	19.66
UNIT INLET TEMPERATURE (TENIVA)	°C	18.69	18.69	19.00	19.00
OIL PRESSURE	BAR	4.597	4.500	4.501	4.530
OIL TEMPERATURE	°C	78.32	89.52	89.82	85.92
OIL TEMPERATURE SUMP ECB (ECB-TOIL)	°C	90.00	105.0	105.0	100.0
FUEL INLET TEMPERATURE	°C	17.30	16.70	16.10	16.20
FUEL INLET PRESSURE	BAR	1.660	1.642	1.559	1.555
GEARBOX PRESSURE	MBAR	-8.853	-14.85	-35.84	-33.59
COMPRESSOR DISCHARGE STATIC PRESSURE	BAR	6.720	6.961	7.229	7.189
COMPRESSOR DISCHARGE TEMPERATURE	°C	299.5	303.1	312.5	311.2
TURBINE DISCHARGE TEMPERATURE (UNIT RAKES)	# 1	°C	367.7	420.4	552.4
	# 2	°C	357.2	421.3	547.2
EXHAUST GAS TOTAL TEMPERATURE (LAB - AVG)	ACTUAL	°C	317.8	358.9	537.2
	CORRECTED*	°C	*****	*****	571.8
BLEED ORIFICE INLET TEMPERATURE	°C	*****	*****	180.0	187.6
BLEED ORIFICE INLET PRESSURE	BAR	*****	*****	3.572	3.819
BLEED ORIFICE DIFFERENTIAL PRESSURE	MBAR	*****	*****	100.9	91.70
EXHAUST STATIC PRESSURE	MBAR	*****	*****	982.8	982.7
IGV POSITION	DEG	*****	*****	87.01	91.89
CORRECTED DISCHARGE AIRFLOW (WBCDNA)	KG/SEC	*****	*****	0.432	0.402
BLEED AIRFLOW (WB)	ACTUAL	KG/SEC	*****	1.277	1.251
	CORRECTED*	KG/SEC	*****	1.179	1.092
BLEED TOTAL PRESSURE (PB)	ACTUAL	BAR	*****	3.829	4.053
	CORRECTED*	BAR	*****	3.602	3.650
BLEED TOTAL TEMPERATURE (TB)	ACTUAL	°C	*****	196.5	203.1
	CORRECTED*	°C	*****	213.4	229.2
FUEL CONSUMPTION	ACTUAL	KG/HR	78.58	96.09	130.9
	CORRECTED*	KG/HR	*****	126.9	116.6
SHAFT OUTPUT (PWGEN)	ACTUAL	KW	0.	81.54	68.57
SHAFT OUTPUT / δ (SHPSL)	CORRECTED	KW	*****	98.71	83.03
UNIT VIBRATION	COOL. FAN	MM/SEC	7.112	7.315	7.442
	GEARBOX	MM/SEC	5.537	8.331	7.925
	TURBINE	MM/SEC	3.835	3.835	4.064
APU SPEED	RPM	48803.	48803.	48743.	48803.
REQUIREMENTS PER ☒ (HEAVY REPAIR) ☐ (CONTINUE TIME)	MIN BLEED FLOW	KG/SEC	*****	1.17	*****
	MIN BLEED PRESS.	BAR	*****	3.59	3.58
	MAX IGV POSITION	DEG	*****	92.50	*****
	MAX FUEL FLOW	KG/HR	*****	*****	121.6
	MAX EGT	°C	*****	607.2	604.4
DIGITAL DATA SCAN	SHAFT LOAD -0 + 2	KW	*****	98.00	83.00
	TIME	12:31:53	12:41:18	12:47:15	12:57:25
DIGITAL DATA POINT NO.	DATE	04/11/12	04/11/12	04/11/12	04/11/12
	XXXX	1001	1002	1003	1004

* DATA CORRECTED TO INDICATED T2 AND INSTALLED, SEA LEVEL CONDITIONS.

Honeywell Aerospace GmbH
Frankfurter Str. 41-65
65479 Raunheim
Germany

DSC-3800708-1
PAGE 1 OF 2
HEAVY REPAIR

ACCEPTANCE TEST DATA SHEET
131-9 [A]
P/N 3800708-1
(METRIC UNITS)

USED WITH
EM 49-27-29
REV. 6

UNIT OUTLINE 3800708-1 MODEL NO. 131-9[A] SERIAL NO. P-2888 DATE 11.04.2012
TEST CELL NO. 04 RUN NO. 1 REPAIR ORDER NO. 510 500 513 7445
OIL USED MIL- 23699 TYPE 3P 2380 FUEL USED LIL-TS624 TYPE Jet A1
APU CONTROL UNIT PN 3888394-221202 S/N* 027 SLAVE* ☒

QUANTITY	UNITS	ACTUAL	
APU DRY WEIGHT (FROM APU TRAVELLER)	KG	☒ FT	<u>26</u>
AUTOMATIC STARTS	SEC # 1	<u>42</u>	
CHECK PARA. <u>8. H. (1)(a)</u>	SEC # 2	<u>40</u>	
	SEC # 3	<u>43</u>	
TOTAL NUMBER OF STARTS (DURING ATP)	NO.	<u>3</u>	
TOTAL OPERATING TIME (DURING ATP)	HRS	<u>1:25</u>	
INITIAL IGV POSITION	DEGREES, INITIAL PBCOR	<u>92.00</u>	<u>3.72</u> BAR
FINAL IGV POSITION	DEGREES, INITIAL PBCOR	<u>87.00</u>	<u>3.60</u> BAR
ECS OFFSET (FINAL IGV-INITIAL IGV) =	DEGREES	<u>-5</u>	
EGT SPREAD ECS/MES	33.0 DEG (C) MAX	<u>5.19</u>	ECS <u>4.39</u> MES
TAILPIPE SPREAD ECS/MES	17.0 DEG (C) MAX	<u>-12.55</u>	ECS <u>-11.58</u> MES
FLOW SENSOR CHECK PARA. 8.E. (9)	WBCDNA	<u>0.368</u>	KG/SEC
FLOW SENSOR CHECK PARA. 8.E. (13)A	WBCDNA	<u>0.378</u>	KG/SEC
FLOW SENSOR CHECK PARA. 8.E. (13)B	DIFF. (5% MAX)	<u>2.68</u>	%
SCV STABILITY 8.F. (2A)	SCV STABLE YES	☒	NO
MINIMUM SURGE MARGIN 8.G (5)	APU SURGE YES	☒	NO ☒
LOAD CONTROL VALVE TEST 8.I.8	IS OK YES	☒	NO
LOAD CONTROL VALVE TEST 8.I.10	IS OK YES	☒	NO
APU FAULT OBSERVED 5.1 B	NONE	☒	OTHER
UNIT STATUS:	ACCEPT ☒	REJECT ☐	
TECHNICIAN <u>D. Aci Buca</u>	DATE <u>11.04.2012</u>		
SUPERVISOR <u>E631720</u>	DATE <u>11.04.2012</u>		
QUALITY ASSURANCE <u>Baur</u>	DATE <u>11.04.2012</u>		

*INDICATE "LAB SLAVE" AND SERIAL NO. WHEN APPLICABLE

FORM: QS 1042/99 (ÄZ:04,05.07.2010)

Honeywell Aerospace GmbH
Frankfurter Str. 41-65
D-65479 Raunheim

Shop Reference : 311311778

APU Serial Number: P-2888

APU Part Number: 3800708-1

131-9A , A320 Series easyJet Inspection Requirements

MPD Task	General Reference	Section / Component	Task Description	Method of Compliance	Inspection Stamp	Date
493000-B1-1	AMM 493241-920-001	Engine Fuel and Control	Discard Fuel Inlet Filter Element	MM 49-30-05		11. APR. 2012
494000-B2-1	AMM 494141-220-001	Ignition and Starting	Detailed inspection of Ignitor Plug	MM 49-40-02		11. APR. 2012
499100-B2-1	AMM 499141-200-002	Oil System	Remove and Discard Oil Filter Elements	MM 49-90-05		11. APR. 2012
499100-B3-1	AMM 499144-100-003	Oil Cooler	Remove Air/Oil Cooler for Cleaning	MM 49-90-02		11. APR. 2012
494000-B3-2	AMM 494251-200-008 SIL 49-043	Starting	Starter Brushes checked for Wear	MM 49-40-04	Not Attached	11. APR. 2012

Signature:  Inspection Stamp:  Date: 11. APR. 2012

Listed ORI'S, ARB / DER performed on Engine:
--

SN: **P-2888**

Date: **11.04.2012**

Partnumber	Partname	ORI Number
3810900-4	Duct Assy Fan	P31619
3810889-5	Duct Assy Inl Upper	P31619
3844864-1	2nd stg Stator Nozzle	P32505 Rev.D
3844738-5	Seal Air Stator	P32515
3830461-6	Combustor	T36430
3822510-2	Sahft Matched Set Compr	P31066, P31543 Rev.B, P31255 Rev.C
3827152-3	case Cprsr Dr	P31241
3827426-3	Hsg Brg Dr Compr	T39558
Partnumber	Partname	ARB / DER Number

[Signature] 

Part Number

3800708-1

Serial Number

P-2888

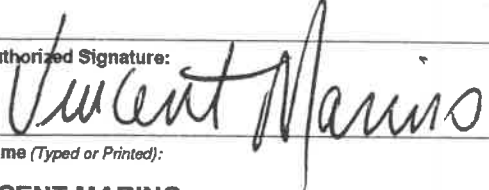
Repair Order

311311778

Date _____

11.4.2012

[illegible]

1. Approving National Aviation Authority/Country: FAA/UNITED STATES		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG				3. Form Tracking Number: T12196759 -001	
4. Organization Name and Address: MOOG INCORPORATED, AIRCRAFT GROUP SENECA & JAMISON ROADS EAST AURORA, NEW YORK 14052 UNITED STATES OF AMERICA (ND1R344K)				5. Work Order/Contract/Invoice Number: 4204272674			
6. Item: 001	7. Description: ACTUATOR	8. Part Number: 3886188-3 (B55968-004)	9. Eligibility: * N/A	10. Quantity: 1	11. Serial/Batch Number: S/N: 6197	12. Status/Work: OVERHAULED	
13. Remarks: IN ACCORDANCE WITH FAA REGULATIONS AND THE MANUFACTURERS WORK INSTRUCTIONS FOR MODEL 17-517C SERVICE BULLETIN # B55968-49-02 REV 0 DATED 1/13/11 OTHER CMM 49-50-07 REV 4 DATED 1/20/11 PERTINENT DETAILS OF THE WORK PERFORMED ARE DESCRIBED ON THE ATTACHED RETURN UNIT REPORT. ADDITIONAL DETAILS ARE ON FILE AT MOOG UNDER THE ABOVE PART NUMBER. CERTIFIES THAT THE WORK SPECIFIED IN BLOCK 12/13 WAS CARRIED OUT IN ACCORDANCE WITH EASA PART-145 AND IN RESPECT TO THAT WORK THE COMPONENT IS CONSIDERED READY FOR RELEASE TO SERVICE UNDER EASA PART-145 APPROVAL NUMBER: EASA 145.4685							
14. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in a condition for safe operation. ☐ Non-approved design data specified in Block 13.				19. ☒ 14 CFR 43.9 Return to Service ☒ Other regulation specified in Block 13 Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 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.			
15. Authorized Signature:		16. Approval/Authorization No:		20. Authorized Signature: 		21. Approval/Certificate No.: ND1R344K	
17. Name (Typed or Printed):		18. Date (m/d/y):		22. Name (Typed or Printed): VINCENT MARINO		23. Date (m/d/y): MAR/16/2012	
User/Installer Responsibilities							
It is important to understand that the existence of this Document alone does not automatically constitute authority to install the part/component/assembly. Where the user/installer performs work in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1 it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1. Statements in blocks 14 and 19 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.							

STORAGE

Honeywell

SHIPPER / COMMERCIAL INVOICE: 8001635480

SHIP DATE: 12. APR. 2012

Honeywell International Sarl
Aerospace R&O
Zone D'Activites La Piece, 16
1180 Rolle
Switzerland

RCB No. DE 907 5560 17

VAT NO. DE272399564

SOLD TO: 304796 VAT REG NO: GB745360825	EASYJET AIRLINES LONDON LUTON AIRPORT LONDON Luton LU2 9PF UNITED KINGDOM	SHIP TO: 4951 VAT REG NO: GB53822614700 0	SR TECHNIKS UK LTD 676 RIVER GARDENS FELTHAM Middlesex TW14 0RB UNITED KINGDOM
BILL TO: 304796	EASYJET AIRLINES LONDON LUTON AIRPORT LONDON Luton LU2 9PF UNITED KINGDOM	SHIPPED FROM:	Honeywell Aerospace Gmbh Frankfurter Strasse 41- 65 65479 RAUNHEIM GERMANY

Freight Forwarder	
--------------------------	--

ORDER INFORMATION		SHIPPING INFORMATION	
Purchase Order No.	R7009912	Bill of Lading:	VIA ONTOUR
Sales Order No.	3876222	Ship Method:	
Contract No.		Ship Condition:	
Vendor Code:		Container Type:	BOX-DE
Currency:	USD	No. of Containers:	1
Incoterms:	DDU LUTON	Dimensions:	168X142X128CM
Payment Terms:	Net 30 Days	Gross / Net Weight:	420.000 / 280.000 KG
Sales Office:	4001 - HIS R&O	Shipped From:	4144 - Honeywell Int. SARL

Item No.	Requested Material No. Honeywell Material No./ Description	Qty	UoM	Serial No./ Lot No.	Unit Price	Extended Price
*000010	T1 12DE323027195576M0 3800708-1 ENGINE OUTLINE, GAS TURBINE Repair value: 89,549.96 USD / 67,712.64 EUR Comm./imp. Code no: 84118100 ECCN/USML: 9A991.D Export Lic NO. NLR ECCN/USML: CIV Export Lic NO. EUDU CIV DE Net Weight Per Item: 280.000 KG Value for Customs: 384,402.76 USD / 290,663.71 EUR Total value for Customs: 384,402.76 USD / 290,663.71 EUR	1	EA	P-2888		
					Total	

*EAR Controlled Goods

*These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

NAME OF AUTHORISED DISPATCH SIGNATORY (Print and Sign)

DATE: / /

Shipping Instructions:

Contract Representative: (If Required) Contact Number:	Date	Government Source Inspection (If Required)	Date

WE EXPLAIN OURSELVES TO THE BAN CUSTOMER, OR RENUNCIATION CUSTOMER. WIR ERKLAEREN UNS ZUM VERBOTSKUNDEN, BZW VERZICHTSKUNDE.
General Manager: Paolo Carmassi.

RUN DATE: 11.04.2012
 RUN BY: N. Fischer

HONEYWELL AEROSPACE GMBH RAUNHEIM
 SERVICE BULLETIN STATUS
 ENGINE MODEL: 131-9(A) ENGINE SN: P-2888

PAGE 1 OF 2
 CUSTOMER: 304796

SERVICE BULLETIN	REV.	DESCRIPTION	WHEN ACCOMP
GTE1172		REPLACE INLET ADAPTER FITTING #3617300-1 WITH #2 ON FCU	PCW
GTE1177		REPLACE FAN #3616140-6 WITH #7	PCW
GTE1192		REPLACE 2nd STAGE STATOR #3844762-2 WITH #3844864-1	PCW
GTE1231		REPLACE COMBUSTION CHAMBER #3830461-5 WITH #6	PCW
GTE1236		REPLACE CLAMP #234-591-9300/-9350 WITH #AS1895/4-300/-350	PCW
GTE1280		REPLACE 2nd STAGE STATIONARY AIR SEAL #3844582-1 WITH #2	PCW
441921-49-0004		REWORK FCU #441921-4 TO #5	PCW
ASH-001		REPLACE ID-STRAPS ON HARNESS #3888438-1	PCW
B55968-49-01		REWORK IGV ACTUATOR #3886188-1/-2	PCW
B55968-49-02		REWORK IGV-ACTUATOR #3886188-2 TO #3	11.04.2012
CH92036-49-001		REWORK IGNITION UNIT #3888058-7	N/A
CUC1-49-0001		ONE TIME INSPECTION FOR MISSING SPRING IN RELIEF VALVE	PCW
CUC1-49-0002		REWORK FCU #441921-4	PCW
49-2378		REWORK OIL COOLER #160494-1 S1 TO S2	PCW
49-7039		REPLACE THE ACTUATOR HOUSING, BUTTERFLY SHAFT AND SETSCREW	PCW
49-7469		REPLACE STUD #682-557-2416 WITH #2418	PCW
49-7562		REPLACE TURBINE SEAL GASKET #3844707-1 WITH #2	PCW
49-7600		REWORK/REPLACE TURBINE STATOR SUPPORT #3844797-15/-16 TO/WITH #19/-20	PCW
49-7606		REWORK/REPLACE POWER SECTION #3801300-1 TO/WITH #2 AND PLUMBING & ELECTRIC #3617170-1 TO/WITH #2	PCW
49-7668		INCORPORATE COMBUSTOR CASE DRAIN PLUG LOCK WIRE FEATURE	PCW
49-7687		REPLACE FCU #441921-4 WITH #5	PCW
49-7712		REPLACE SURGE DUCT #3884974-1 WITH #3885084-1	PCW
49-7716		REPLACE COMPRESSOR DISCHARGE DUCT #3885007-1 (TITANIUM) WITH #2 (IN718)	PCW
49-7718		REPLACE ENGINE COMPRESSOR SHROUD #3827322-3 WITH #3827504-3	PCW
49-7739		REPLACE FLOW DIVIDER #3883830-1 WITH #3879005-1 AND FITTING #MS24392J4 WITH #3879006-1	PCW
49-7741		REPLACE FCU CLAMP #234-591-3030 WITH #234-511-9059	PCW
49-7744		REWORK/REPLACE 1. STAGE TURBINE NOZZLE #3844797-15-19 OR #16/-20 WITH/TO #21 OR #22	PCW
49-7764		REPLACE COOLING FAN INLET DUCT #3810929-2 WITH #3	PCW
49-7765		REPLACE FAN EXIT DUCT #3810900-3 WITH #4	PCW
49-7777		REWORK/REPLACE 1st STAGE TURBINE WHEEL #3840160-5 TO/WITH #3840303-1	PCW
49-7778		REWORK/REPLACE 1ST STAGE STATOR SUPPORT #3844797-15/-16/-19/-20/-21/-22 TO/WITH #17/-18	PCW

PCW = PREVIOUSLY COMPLIED WITH
 AD = AIRWORTHINESS DIRECTIVE
 LTA = LUFFTFAHRT TÜCHTIGKEITSANWEISUNG
 CN = CONSIGNE DE NAVIGABILITE

EASA APPROVED MAINT. ORG. NO.: DE.145.0022
 FAA APPROVED REPAIR STATION NO.: QJ1Y428K
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 CAA APPROVED MAINT. ORG. NO.: ATR/8/5.65
 CAMA APPROVED MAINT. ORG. NO.: CAMA/AMO/051
 QCAA APPROVED MAINT. ORG. NO.: QCAA/FAMO/126
 CAAV APPROVED MAINT. ORG. NO.: VN-331NN/CAAV
 KCASR APPROVED MAINT. ORG. NO.: DGCA/AMO/069

RUN DATE: 11.04.2012
 RUN BY: N. Fischer

HONEYWELL AEROSPACE GMBH RAUNHEIM
 SERVICE BULLETIN STATUS
 ENGINE MODEL: 131-9(A) ENGINE SN: P-2888

PAGE 2 OF 2
 CUSTOMER: 304796

SERVICE BULLETIN	REV.	DESCRIPTION	WHEN ACCOMP
49-7845		REPLACE REAR BEARING SEAL #3844561-1 WITH #3	21.08.2008
49-7846		REWORK 1ST STAGE TURBINE WHEEL #3840303-1 TO #3840160-7	21.08.2008
49-7856		REPLACE 1ST STAGE TURBINE WHEEL #3840303-1 OR REPLACE/REWORK #3840160-5 WITH/TO #3840160-8	N/A
49-7900	1	APU PERFORMANCE ADJUSTMENTS IN DMM #3876287-1	11.04.2012
49-7944		REPLACE SCAVENGE TUBE #3881826-1 WITH #2, AND INCORPORATE GASKET #AS4824N06	11.04.2012
49-7947		REPLACE LOAD COMPRESSOR SEAL #3827350-3 WITH #3827608-3 AND ROTOR #3822418-1 WITH #3822635-2	21.08.2008
49-7989		REPLACE TURBINE SEAL GASKET #3844705-1 WLTH #2	11.04.2012
49-8026		REPLACE THE INLET GUIDE VANE ACTUATOR #3886188-2 WITH #3	11.04.2012
49-8063		REPLACE 1 STG WHEEL #3840160-5, #-7, #-8 OR #3840303-1 WITH #3840310-3 AND STATIONARY SEAL #3844738-5 WITH #3844738-6.	11.04.2012

SIGNATURE / STAMP

PCW = PREVIOUSLY COMPLIED WITH
 AD = AIRWORTHINESS DIRECTIVE
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 CAAV APPROVED MAINT. ORG. NO.: VN-331NN/CAAV
 KCASR APPROVED MAINT. ORG. NO.: DGCA/AMO/069

Honeywell

Engine Disposition Report

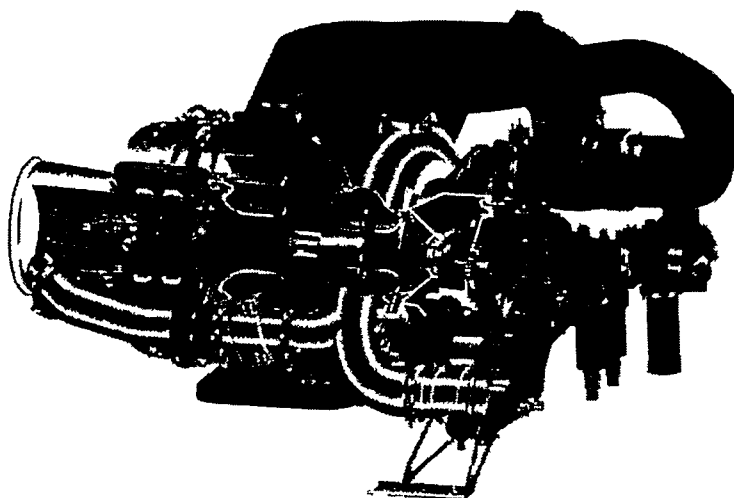
131-9A

P-2888

311318576

Honeywell Aerospace GmbH

DE.145.0022



Prepared By: Harald
Koebel-Hofmann
Printed On : 17.04.2012



Model Number : 131-9A
Serial Number : P-2888
Notification : 311318576
Repair Facility : Honeywell Aerospace GmbH
Maintenance Organization # : DE.145.0022

FINAL - FINDINGS REPORT

Customer :	EASYJET AIRLINES	Customer P/O :	R7009912
Notification :	000311318576	Induction Date :	14.03.2012
Model No :	GTCP131-9A	Installed Date :	00.00.0000
Part Number :	3800708-1		
Series :	8	Removal Date :	14.03.2012
Serial No In :	P-2888		
Mod to Part No:	3800708-1		
Outgoing Series :	Series 8		
Mod to S/N :	P-2888		

<i>TIMES / CYCLES</i>	<i>HH.DD</i>	<i>(HH:MM)</i>		
Time Since New:	10193.83	(10193:50)	Cycles Since New:	26881.00
Time Since Overhaul:		(:00)		
Time Since Repair:		(:00)		
Time Since Last Shop Visit:	3033.83	(3033:50)	Cycles Since Installation:	11523.00

AIRCRAFT INFORMATION

Aircraft Tail Number:	HB-JZI	Aircraft/Application Model:	AIRBUS A319
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CUSTOMER INFORMATION

Sales Order No: 0003876222

REMOVAL INFORMATION

Low Time Removal:	No	Removal Type:	Unscheduled
-------------------	----	---------------	-------------

RETURN REASON

Primary Removal Reason: OIL CONSUMPTION ABOVE AMM LIMITS.

INDUCTION FINDINGS

0010 - Receiving Data

Logbook Received with Engine*

Yes

Shipping box Type

Wood

Honeywell

Model Number : 131-9A
 Serial Number : P-2888
 Notification : 311318576
 Repair Facility : Honeywell Aerospace GmbH
 Maintenance Organization # : DE.145.0022

If Shipping Box is wood, check ISPM 15 [	Pass
Shipping Box	Customer
Shipping frame?	Customer
Shipping box/frame reusable?	Reusable
Shipping/transport damages?	OK
Hourmeter/DMM Condition	Received - Okay
DMM / Hours Readout performed? see LT->	Yes
DMM/Hours: time since new?	10194
DMM/Hours: cycles since new?	26881
Further comments	No

0020 - General Information

Engine nameplates attached	Yes
Engine nameplate data korrekt w. system	Yes
Additional Customer Hardware received	No
Vacuum check acceptable?	No
QEC parts installed	No
Generator assy installed	No
Findings 1st external condition	APU received in assembled condition
Findings 2nd external condition	APU severely dirt contaminated
APU rotation	Free
Missing Hardware (Yes/No)	Yes
Further comments	No

0030 - Oil System Investigation

APU received with oil	Yes
Condition of oil	Carbon Deposits
Engine scav. oilfilter elements attached	Yes
Engine scav. filter metal contaminated	No
Generator scav. oilfilter element attach	Yes
Generator scav. filter metal contaminate	No
Metal chips on magnetic plug [mcd]	No
Metal Chips on speed monopol	No
Bleed ducts oily	No
Surge ducts oily	No
Exhaust duct oily	No
Oil tubes leaking/damaged	No
Further comments	No

0040 - Fuel System Investigation

Honeywell

Model Number : 131-9A
 Serial Number : P-2888
 Notification : 311318576
 Repair Facility : Honeywell Aerospace GmbH
 Maintenance Organization # : DE.145.0022

Fuel filter element attached	Yes
Fuel filter contaminated	Clean, Normal Condition
Fuel tubes/hoses/nozzle leaking	No
Fuel manifold retainers cracked	No
Further comments	No

0050 - Outline Investigation

Findings on inlet plenum	No
Findings on inlet screen	No
Findings on bellmouth	No
Findings on bleed duct	No
Findings on bleed ducts clamps	No
Findings on surge ducts	No
Findings on surge ducts clamps	No
Findings on cooling fan	Cooling fan flow area crusted with sand
Findings on harness assy	Wiring harness cables chafed
Findings on fuel tubes/hoses	No
Findings on fuel tubes retainer	No
Findings on fuel nozzles	No
Findings on air tubes	No
Findings on oil tubes/hoses	No
Findings on oil tubes retainer	No
Findings on ignition system	Ignition box paint damaged / chipping
Findings on thermocouples	No
Findings on other LRUA's in assembled co	No
Findings on grounding strabs	No
Findings on exhaust pipe	No
Findings on Oilcooler	Oil Cooler air side dirty
Further comments	No

0060 - Gearbox Investigation

Orig. Generator gasket attached ?	No
Orig. Generator seal rubber attached ?	Yes
Generator pinhole elongated ?	No
Generator studs damaged ?	No
Findings on engine mount adaption	No
Findings on starter clutch assy	No

Honeywell

Model Number : 131-9A
Serial Number : P-2888
Notification : 311318576
Repair Facility : Honeywell Aerospace GmbH
Maintenance Organization # : DE.145.0022

Further comments	No
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0070 - Load Compressor Investigation

Findings on IGV assy	No
Further comments	No

0080 - Power Section Investigation

Findings on engine mount adaption	No
Findings on blankets	Power section thermal blankets damaged
Further comments	No

0090 - Boroscope Inspection

APU rotation	Free
Further comments	No

FAILURE DATA

Failure Description :

Customers Reason for removal - oil consumption - could not be fully confirmed.

The APU did not show any signs of internal or external oil leaks at time of its reception at Honeywell aunheim.

Disassembly of the power section revealed no indication of an present oil leak from the aft or front seal installation at the both power section bearing and sealing cavity compounds.

However the report of abnormally high oil consumption is seen in conjunction with the condition of the turbine hardware.

The APU showed a considerable amount of hot section hardware distress. Especially the first stage turbine wheel was affected by hot gas erosion/corrosion, resulting in partially significant blade material separation (blade tip / corner area).

The separated blade material did cause impact damages on the downstreaming hot section hardware (e.g. 2nd stage turbine stator; 2nd stage turbine wheel blades).

Furthermore, it can not be excluded that the APU did temporarily operate with an abnormal high vibration level having a negative effect on the

Honeywell

Model Number : 131-9A
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sealing capability of the turbine seal, allowing oil to be bypass the turbine seal as reported by the customer.

DMM readout attached.

Photo Report attached to this report.

Part Number	Part Name	Condition	Findings	Primary Failure
3840160-7	TURB ROTOR ASSY,1STG	Life Limit exceeded		YES
3844775-1	SEAL AIR STA	Worn		NO
3840165-4	2ND STAGE TURBINE ROTOR ASSY	Burned/Oxidized		NO

SUMMARY

DISPOSITION

Work Accomplished:

The following workscope was performed during this shop visit:

- 1) Disassembled power section completely and performed parts inspection per applicable manual cont. time and rotating group hardware per zero time requirements.
- 2) Inspected cooling fan hardware per IRM continue time criteria
- 3) Visually inspected gearbox in assembled condition due to no workscope.
- 4) Performed parts inspection of remaining disassembled hardware per applicable manual continuous time requirements.
- 5) Performed final test per applicable manual requirements.#

Primary Workscope:

REPAIRED

Power Section Workscope Performed:

Medium

Gearbox Workscope Performed:

Not Disassembled

General Workscope Performed:

Medium

DISPOSITION SUMMARY

Customer Confirmed Removal Reason:

Yes

FINDINGS

Honeywell

Model Number : 131-9A
Serial Number : P-2888
Notification : 311318576
Repair Facility : Honeywell Aerospace GmbH
Maintenance Organization # : DE.145.0022

As Received Condition:

APU S/N P-2888 was unscheduled removed due to high oil consumption

The APU received without its starter motor.

DMM shows CT5ATP at 1111F.

Blade damage noted at the second stage turbine wheel blades in the area of the blade trailing edges/ tip.

Space between the cooling fan wheel blade clogged with hard mud/ baked mud.

The APU was received in externally severely dirt contaminated condition.

The inspection of the APU outline revealed normal service wear related discrepancies

The APU rotating group was free spinning.

Ign. plug tip burnt and deformed.

The inspection of the oil system revealed carbon deposits

Load compressor seal witness drain free of oil.
No oil leak from the aft turbine bearing cavity.

Compressor inlet free of oil residues.
Oil Cooling Fan Inlet and exhaust duct clean and free of oil residues.
Oil cooler inlet and exhaust free of oil residues.
Gearbox vent free of oil.

A borescope inspection was not performed

One Line Findings:

Service wear over time

1	Item Count	472	472	NUMBER ENTRIES IN DMM
2	SW Version	009A	009A	ECB SOFTWARE VERSION (SV)
3	APUser.pre	P	P	APU SERIAL NUMBER PREFIX
4	APUser.num1	00	00	APU SERIAL NUMBER (FIRST 2 DIGITS)
5	APUser.num2	00	00	APU SERIAL NUMBER (NEXT 2 DIGITS)
6	APUser.num3	28	28	APU SERIAL NUMBER (NEXT 2 DIGITS)
7	APUser.num4	88	88	APU SERIAL NUMBER (LAST 2 DIGITS)
8	APUser.suf			APU SERIAL NUMBER (SUFFIX 2 DIGITS)
9	APUhours_LO	10193	10193	APU HOURS Low word
10	APUminutes	50	50	APU MINUTES
11	APUcycles_LO	26881	26881	APU CYCLES Low word
12	ECS_OFFSET	-400	-4	ECS OFFSET DEGREES (SV)
13	FUELOFF100	1293	12.930	FUEL FLOW OFFSET AT 100 POUNDS PPH
14	FUELOFF200	156	1.560	FUEL FLOW OFFSET AT 200 PPH
15	ABSTARTS	51	51	NUMBER OF UNSUCCESSFUL STARTS
16	APU_OPTIONS	9	9	APU OPTION FLAGS
	BIT 0: TRUE	A321		ECS Min Derate
	BIT 3: TRUE	A318/319/320		ECS Min Derate
17	FLTSTARTS	10	10	NUMBER OF INFLIGHT STARTS
18	ABFLTSTARTS	0	0	NUMBER OF UNSUCCESSFUL INFLIGHT STARTS
19	TURB_CYCLES	11523	11523	CYCLES SINCE TURBINE REPAIR (TB)
20	LC_CYCLES	11523	11523	CYCLES SINCE LOAD COMP REPAIR (LC)
21	EC_CYCLES	11523	11523	CYCLES SINCE ENGINE COMP REPAIR (EC)
22	CLOG_FILTER	0	0	NUMBER OF CLOGGED OIL FILTER INDICATIONS
23	OVRHAUL_HR	3064	3064	HOURS SINCE SHOP VISIT (SV)
24	OVRHAUL_MIN	368	36.800	MINUTES SINCE SHOP VISIT (SV)
25	INSTALL_HR	3064	3064	HOURS SINCE AIRPLANE INSTALLATION (SV)
26	INSTALL_MIN	368	36.800	MINUTES SINCE AIRPLANE INSTALLATION (SV)
27	ECS_HOURS	4349	4349	OPERATING TIME IN ECS HOURS
28	ECS_MINUTES	434	43.400	OPERATING TIME IN ECS MINUTES
29	FLT_HOURS	3	3	OPERATING TIME IN FLIGHT HOURS
30	FLT_MINUTES	284	28.400	OPERATING TIME IN FLIGHT MINUTES
31	HOT_TIME	408	40.800	OPERATING HOURS T2 GREATER 100 DEGF
32	COLD_TIME	5	0.500	OPERATING HOURS T2 LESS 0 DEGF
33	NMES	21333	21333	NUMBER OF MAIN ENGINE STARTS
34	HIGHSTARTS	3	3	NUMBER OF START ATTEMPTS ABOVE 25000 FT
35	BRRSTARTS	0	0	NUMBER OF STARTS OILTEMP LESS 0 DEGF
36	BRRRRSTARTS	0	0	NUMBER OF STARTS OILTEMP LESS -40 DEGF
37	LOWOILPR	0	0	NUMBER OF LOW OIL PRESSURE SHUTDOWNS
38	NUM3LOP	0	0	NUMBER OF 3 CONSECUTIVE LOP SHUTDOWNS
39	CONSECLOP	0	0	NUMBER OF CONSECUTIVE LOP SHUTDOWNS
40	HOT	2	2	NUMBER OF HIGH OIL TEMPERATURE SHUTDOWNS
41	OVRTMPGOV	1	1	NUMBER OF ONSPEED OVERTEMP SHUTDOWNS
42	OVRTMPSTR	0	0	NUMBER OF STARTING OVERTEMP SHUTDOWNS
43	REVFLOW	0	0	NUMBER OF REVERSE FLOW SHUTDOWNS
44	NO_ACCEL	0	0	NUMBER OF NO ACCELERATION SHUTDOWNS
45	OVERSPEED	0	0	NUMBER OF OVERSPEED SHUTDOWNS
46	UNDERSPEED	1	1	NUMBER OF UNDERSPEED SHUTDOWNS
47	FILTER_SDN	0	0	NUMBER OF CLOGGED OIL FILTER SHUTDOWNS
48	NO_FLAME	4	4	NUMBER OF NO FLAME SHUTDOWNS
49	INLET_HOT	7	7	NUMBER OF INLET HOT SHUTDOWNS
50	INFLIGHT_SD	0	0	NUMBER OF INFLIGHT SHUTDOWNS
51	AT4ECS(1)	79	517.734	AVERAGE T4 ECS DEG F* (PS)
52	AT4ECS(2)	62670	6.267	AVERAGE T4 ECS DEG F (PS)
53	AT4MES(1)	144	943.718	AVERAGE T4 MES DEG F* (PS)
54	AT4MES(2)	65513	6.551	AVERAGE T4 MES DEG F (PS)
55	AT4FLT(1)	6	39.322	AVERAGE T4 INFLIGHT DEG F* (PS)
56	AT4FLT(2)	32064	3.206	AVERAGE T4 INFLIGHT DEG F (PS)
57	T1800	182	18.200	HOURS T4 > 1800 DEG F (PS)
58	T1850	23	2.300	HOURS T4 > 1850 DEG F (PS)
59	T1900	3	0.300	HOURS T4 > 1900 DEG F (PS)
60	T1950	0	0	HOURS T4 > 1950 DEG F (PS)
61	T2000	0	0	HOURS T4 > 2000 DEG F (PS)
62	RECT4R	21983	2198.300	HIGHEST T4 ONSPEED DEGF (PS)
63	RECT5S	16772	1677.200	HIGHEST T5 DURING START DEGF (PS)
64	ABRTCLDN	2	2	NUMBER OF ABORTED COOLDOWNS
65	CT5AVE	21148	1111.480	AVERAGE CORR T5 DURING MES DEGF (SV)
66	MDNCT5AVE	10564	1005.640	MAIDEN CORR T5 DURING MES DEGF
67	CT5AVE500	7652	976.520	CORR T5 MES AT 500 HOURS DEGF
68	CT5AVE1000	9548	995.480	CORR T5 MES AT 1000 HOURS DEGF
69	CT5AVE1500	10400	1004	CORR T5 MES AT 1500 HOURS DEGF
70	CT5AVE2000	11242	1012.420	CORR T5 MES AT 2000 HOURS DEGF
71	CT5AVE2500	10884	1008.840	CORR T5 MES AT 2500 HOURS DEGF

72	CT5AVE3000	0	900	CORR T5 MES AT 3000 HOURS	DEGF
73	CT5AVE3500	0	900	CORR T5 MES AT 3500 HOURS	DEGF
74	CT5AVE4000	0	900	CORR T5 MES AT 4000 HOURS	DEGF
75	CT5AVE4500	0	900	CORR T5 MES AT 4500 HOURS	DEGF
76	CT5AVE5000	0	900	CORR T5 MES AT 5000 HOURS	DEGF
77	CT5AVE6000	0	900	CORR T5 MES AT 6000 HOURS	DEGF
78	CT5AVE7000	12038	1020.380	CORR T5 MES AT 7000 HOURS	DEGF
79	CT5AVE8000	13788	1037.880	CORR T5 MES AT 8000 HOURS	DEGF
80	CT5AVE9000	17962	1079.620	CORR T5 MES AT 9000 HOURS	DEGF
81	CT5AVE10000	21936	1119.360	CORR T5 MES AT 10000 HOURS	DEGF
82	CPTAVE	57378	57.378	AVERAGE CORR PT DURING MES	PSIA (SV)
83	MDNCPTAVE	59458	59.458	MAIDEN CORR PT DURING MES	PSIA
84	CPTAVE500	57626	57.626	CORR PT DURING MES AT 500 HOURS	PSIA
85	CPTAVE1000	57422	57.422	CORR PT DURING MES AT 1000 HOURS	PSIA
86	CPTAVE1500	58404	58.404	CORR PT DURING MES AT 1500 HOURS	PSIA
87	CPTAVE2000	58100	58.100	CORR PT DURING MES AT 2000 HOURS	PSIA
88	CPTAVE2500	58008	58.008	CORR PT DURING MES AT 2500 HOURS	PSIA
89	CPTAVE3000	0	0	CORR PT DURING MES AT 3000 HOURS	PSIA
90	CPTAVE3500	0	0	CORR PT DURING MES AT 3500 HOURS	PSIA
91	CPTAVE4000	0	0	CORR PT DURING MES AT 4000 HOURS	PSIA
92	CPTAVE4500	0	0	CORR PT DURING MES AT 4500 HOURS	PSIA
93	CPTAVE5000	0	0	CORR PT DURING MES AT 5000 HOURS	PSIA
94	CPTAVE6000	0	0	CORR PT DURING MES AT 6000 HOURS	PSIA
95	CPTAVE7000	58970	58.970	CORR PT DURING MES AT 7000 HOURS	PSIA
96	CPTAVE8000	57432	57.432	CORR PT DURING MES AT 8000 HOURS	PSIA
97	CPTAVE9000	55652	55.652	CORR PT DURING MES AT 9000 HOURS	PSIA
98	CPTAVE10000	57084	57.084	CORR PT DURING MES AT 10000 HOURS	PSIA
99	CWFAVE	32172	321.720	AVERAGE CORR FUEL FLOW DURING MES	PPH (SV)
100	MDNCWFAVE	29290	292.900	MAIDEN CORR FUEL FLOW DURING MES	PPH
101	CWFAVE500	27512	275.120	CORR FUEL FLOW MES AT 500 HOURS	PPH
102	CWFAVE1000	27472	274.720	CORR FUEL FLOW MES AT 1000 HOURS	PPH
103	CWFAVE1500	28022	280.220	CORR FUEL FLOW MES AT 1500 HOURS	PPH
104	CWFAVE2000	28166	281.660	CORR FUEL FLOW MES AT 2000 HOURS	PPH
105	CWFAVE2500	27982	279.820	CORR FUEL FLOW MES AT 2500 HOURS	PPH
106	CWFAVE3000	0	0	CORR FUEL FLOW MES AT 3000 HOURS	PPH
107	CWFAVE3500	0	0	CORR FUEL FLOW MES AT 3500 HOURS	PPH
108	CWFAVE4000	0	0	CORR FUEL FLOW MES AT 4000 HOURS	PPH
109	CWFAVE4500	0	0	CORR FUEL FLOW MES AT 4500 HOURS	PPH
110	CWFAVE5000	0	0	CORR FUEL FLOW MES AT 5000 HOURS	PPH
111	CWFAVE6000	0	0	CORR FUEL FLOW MES AT 6000 HOURS	PPH
112	CWFAVE7000	28716	287.160	CORR FUEL FLOW MES AT 7000 HOURS	PPH
113	CWFAVE8000	29248	292.480	CORR FUEL FLOW MES AT 8000 HOURS	PPH
114	CWFAVE9000	29620	296.200	CORR FUEL FLOW MES AT 9000 HOURS	PPH
115	CWFAVE10000	32214	322.140	CORR FUEL FLOW MES AT 10000 HOURS	PPH
116	IGVMES	9328	93.280	IGV POSITION DURING MES	DEGREES
117	SPEEDDROOPS	30	30	NUMBER OF SPEED DROOPS BELOW 85% SPEED	
118	START_TIME	45	45	Start Time for current APU Run	
119	STARTTIME_1	45	45	Start Time for last APU Run	
120	STARTTIME_2	45	45	Start Time for last-1 APU Run	
121	STARTTIME_3	49	49	Start Time for last-2 APU Run	
122	STARTTIME_4	45	45	Start Time for last-3 APU Run	
123	STARTTIME_5	44	44	Start Time for last-4 APU Run	
124	STARTTIME_6	44	44	Start Time for last-5 APU Run	
125	STARTTIME_7	45	45	Start Time for last-6 APU Run	
126	STARTTIME_8	46	46	Start Time for last-7 APU Run	
127	STARTTIME_9	45	45	Start Time for last-8 APU Run	
128	STRTIMEAVE	42	42	Average Start Time for last 10 Starts	
129	ECS_OP_HR	208	208	Operating Time in ECS	Zero Pack (hr)
130	ECS_OP_MIN	14266	23.777	Operating Time in ECS	Zero Pack (min)
131	ECS_1P_HR	1724	1724	Operating Time in ECS	One Pack (hr)
132	ECS_1P_MIN	31168	51.947	Operating Time in ECS	One Pack (min)
133	ECS_2P_HR	2416	2416	Operating Time in ECS	Two Pack (hr)
134	ECS_2P_MIN	18825	31.375	Operating Time in ECS	Two Pack (min)
135	ECS_G75_HR	254	254	Operating Time in ECS	with ARC_DMD > 75%
136	ECS_G75_MIN	10725	17.875	Operating Time in ECS	with ARC_DMD > 75%
137	ECS_L75_HR	3783	3783	Operating Time in ECS	with ARC_DMD < 25%
138	ECS_L25_MIN	34158	56.930	Operating Time in ECS	with ARC_DMD < 25%
139	T1800_HR	18	18	Time T4_ONSPEED_FIL > 1800 DEG F	(HR) (PS)
140	T1800_MIN	10113	16.855	Time T4_ONSPEED_FIL > 1800 DEG F	(MIN) (PS)
141	T1850_HR	2	2	Time T4_ONSPEED_FIL > 1850 DEG F	(HR) (PS)
142	T1850_MIN	13310	22.183	Time T4_ONSPEED_FIL > 1850 DEG F	(MIN) (PS)
143	T1900_HR	0	0	Time T4_ONSPEED_FIL > 1900 DEG F	(HR) (PS)
144	T1900_MIN	11012	18.353	Time T4_ONSPEED_FIL > 1900 DEG F	(MIN) (PS)
145	T1950_HR	0	0	Time T4_ONSPEED_FIL > 1950 DEG F	(HR) (PS)
146	T1950_MIN	1070	1.783	Time T4_ONSPEED_FIL > 1950 DEG F	(MIN) (PS)
147	T2000_HR	0	0	Time T4_ONSPEED_FIL > 2000 DEG F	(HR) (PS)

148	T2000_MIN	163	0.272	Time T4_ONSPEED_FIL > 2000 DEG F (MIN) (PS)
149	T2050_HR	0	0	Time T4_ONSPEED_FIL > 2050 DEG F (HR) (PS)
150	T2050_MIN	112	0.187	Time T4_ONSPEED_FIL > 2050 DEG F (MIN) (PS)
151	T2000_HR	0	0	Time T4_ONSPEED_FIL > 2100 DEG F (HR) (PS)
152	T2100_MIN	45	0.075	Time T4_ONSPEED_FIL > 2100 DEG F (MIN) (PS)
153	T2200_HR	0	0	Time T4_ONSPEED_FIL > 2200 DEG F (HR) (PS)
154	T2200_MIN	0	0	Time T4_ONSPEED_FIL > 2200 DEG F (MIN) (PS)
155	CT5_CYC_NUM	26880	26880	Last cycle where the average corrected EGT
during MES was outside				
156	CT5_CL_OFFSET	0	0	CT5 Control Limit Offset
157	CT5AVE	12140	1111.484	CT5AVE (SV)
158	CT5_MR_BAR	222	20.325	CT5_MR_BAR (SV)
159	M_CT5_UCLT	11690	1070.284	Maiden upper Control Limit for CT5 (SV)
160	C_CT5_UCLT	12024	1100.864	Corrected upper Control Limit for CT5 (SV)
161	M_CT5_XBAR	11100	1016.266	Maiden CT5_XBAR (SV)
162	R_CT5_XBAR	12162	1113.498	Running CT5_XBAR (SV)
163	CT5_A_N1	12138	1111.301	CT5_A_N1 (SV)
164	CT5_A_N2	12315	1127.506	CT5_A_N2 (SV)
165	CT5_A_N3	12009	1099.490	CT5_A_N3 (SV)
166	CT5_A_N4	12143	1111.759	CT5_A_N4 (SV)
167	CT5_A_N5	12088	1106.723	CT5_A_N5 (SV)
168	CT5_A_N6	12241	1120.731	CT5_A_N6 (SV)
169	CT5_A_N7	11963	1095.279	CT5_A_N7 (SV)
170	CT5_A_N8	12278	1124.119	CT5_A_N8 (SV)
171	CT5_A_N9	12224	1119.175	CT5_A_N9 (SV)
172	CT5_A_N10	12092	1107.089	CT5_A_N10 (SV)
173	CT5_A_N11	12105	1108.280	CT5_A_N11 (SV)
174	CT5_A_N12	12061	1104.251	CT5_A_N12 (SV)
175	CT5_A_N13	12182	1115.329	CT5_A_N13 (SV)
176	CT5_A_N14	12319	1127.873	CT5_A_N14 (SV)
177	CT5_A_N15	11979	1096.744	CT5_A_N15 (SV)
178	CT5_A_N16	12159	1113.224	CT5_A_N16 (SV)
179	CT5_A_N17	12151	1112.491	CT5_A_N17 (SV)
180	CT5_A_N18	12204	1117.344	CT5_A_N18 (SV)
181	CT5_A_N19	12222	1118.992	CT5_A_N19 (SV)
182	CT5_A_N20	12382	1133.641	CT5_A_N20 (SV)
183	CT5OLD0	12159	1113.224	CT5AVE 0 Hours ago (SV)
184	CT5OLD50	12083	1106.265	CT5AVE 50 Hours ago (SV)
185	CT5OLD100	11983	1097.110	CT5AVE 100 Hours ago (SV)
186	CT5OLD150	12226	1119.358	CT5AVE 150 Hours ago (SV)
187	CT5OLD200	11903	1089.785	CT5AVE 200 Hours ago (SV)
188	CT5OLD250	11972	1096.103	CT5AVE 250 Hours ago (SV)
189	CT5OLD300	12047	1102.969	CT5AVE 300 Hours ago (SV)
190	CT5OLD350	11911	1090.518	CT5AVE 350 Hours ago (SV)
191	CT5OLD400	12027	1101.138	CT5AVE 400 Hours ago (SV)
192	CT5OLD450	12018	1100.314	CT5AVE 450 Hours ago (SV)
193	CT5OLD500	11956	1094.638	CT5AVE 500 Hours ago (SV)
194	CT5_X1000	10873	995.483	"CT5AVE at x1000 Hours (for x = 0,1, 2, ..., 6)"
195	CT5_X1500	10966	1003.998	"CT5AVE at x1500 Hours (for x = 0,1, 2, ..., 6)"
196	CT5_X2000	11058	1012.421	"CT5AVE at x2000 Hours (for x = 0,1, 2, ..., 6)"
197	CT5_X2500	11019	1008.850	"CT5AVE at x2500 Hours (for x = 0,1, 2, ..., 6)"
198	CT5_X3000	0	0	"CT5AVE at x3000 Hours (for x = 0,1, 2, ..., 6)"
199	CT5_X3500	0	0	"CT5AVE at x3500 Hours (for x = 0,1, 2, ..., 6)"
200	CT5_X4000	0	0	"CT5AVE at x4000 Hours (for x = 0,1, 2, ..., 6)"
201	CT5_X4500	0	0	"CT5AVE at x4500 Hours (for x = 0,1, 2, ..., 6)"
202	CT5_X5000	0	0	"CT5AVE at x5000 Hours (for x = 0,1, 2, ..., 6)"
203	CT5_X6000	0	0	"CT5AVE at x6000 Hours (for x = 0,1, 2, ..., 5)"
204	CT5_X7000	11145	1020.386	"CT5AVE at x7000 Hours (for x = 0,1, 2, ..., 5)"
205	CT5_X8000	11336	1037.873	"CT5AVE at x8000 Hours (for x = 0,1, 2, ..., 5)"
206	CT5_X9000	11792	1079.623	"CT5AVE at x9000 Hours (for x = 0,1, 2, ..., 5)"
207	CT5_X0000	12226	1119.358	"CT5AVE at x0000 Hours (for x = 1, 2, ..., 6)"
208	CPT_CYC_NUM	26837	26837	Last cycle where the average corrected pressure
during MES was ou				
209	CPT_CL_OFFSET	0	0	CPT Control Limit Offset
210	CPTAVE	15668	57.380	CPTAVE (SV)
211	CPT_MR_BAR	146	0.535	CPT_MR_BAR (SV)
212	M_CPT_LCLT	15558	56.977	Maiden lower Control Limit for CPT (SV)
213	M_CPT_XBAR	15946	58.398	Maiden CPT_XBAR (SV)
214	R_CPT_XBAR	15690	57.460	Running CPT_XBAR (SV)
215	CPT_A_N1	15720	57.570	CPT_A_N1 (SV)
216	CPT_A_N2	15830	57.973	CPT_A_N2 (SV)
217	CPT_A_N3	15443	56.556	CPT_A_N3 (SV)
218	CPT_A_N4	15657	57.339	CPT_A_N4 (SV)
219	CPT_A_N5	15592	57.101	CPT_A_N5 (SV)
220	CPT_A_N6	15703	57.508	CPT_A_N6 (SV)
221	CPT_A_N7	15812	57.907	CPT_A_N7 (SV)

222	CPT_A_N8	15630	57.241	CPT_A_N8 (SV)
223	CPT_A_N9	15650	57.314	CPT_A_N9 (SV)
224	CPT_A_N10	15723	57.581	CPT_A_N10 (SV)
225	CPT_A_N11	15876	58.141	CPT_A_N11 (SV)
226	CPT_A_N12	15663	57.361	CPT_A_N12 (SV)
227	CPT_A_N13	15852	58.054	CPT_A_N13 (SV)
228	CPT_A_N14	15576	57.043	CPT_A_N14 (SV)
229	CPT_A_N15	15628	57.233	CPT_A_N15 (SV)
230	CPT_A_N16	15633	57.252	CPT_A_N16 (SV)
231	CPT_A_N17	15829	57.969	CPT_A_N17 (SV)
232	CPT_A_N18	15764	57.731	CPT_A_N18 (SV)
233	CPT_A_N19	15701	57.501	CPT_A_N19 (SV)
234	CPT_A_N20	15531	56.878	CPT_A_N20 (SV)
235	CPTOLD0	15862	58.090	CPTAVE 0 Hours ago (SV)
236	CPTOLD50	15557	56.973	CPTAVE 50 Hours ago (SV)
237	CPTOLD100	15592	57.101	CPTAVE 100 Hours ago (SV)
238	CPTOLD150	15588	57.087	CPTAVE 150 Hours ago (SV)
239	CPTOLD200	15824	57.951	CPTAVE 200 Hours ago (SV)
240	CPTOLD250	15869	58.116	CPTAVE 250 Hours ago (SV)
241	CPTOLD300	15752	57.687	CPTAVE 300 Hours ago (SV)
242	CPTOLD350	15889	58.189	CPTAVE 350 Hours ago (SV)
243	CPTOLD400	15845	58.028	CPTAVE 400 Hours ago (SV)
244	CPTOLD450	15886	58.178	CPTAVE 450 Hours ago (SV)
245	CPTOLD500	15775	57.772	CPTAVE 500 Hours ago (SV)
246	CPT_X1000	15680	57.424	"CPTAVE at X1000 Hours (for x 0 1, 2, ..., 6)"
247	CPT_X1500	15948	58.405	"CPTAVE at X1500 Hours (for x 0 1, 2, ..., 6)"
248	CPT_X2000	15865	58.101	"CPTAVE at X2000 Hours (for x 0 1, 2, ..., 6)"
249	CPT_X2500	15840	58.010	"CPTAVE at X2500 Hours (for x 0 1, 2, ..., 6)"
250	CPT_X3000	0	0	"CPTAVE at X3000 Hours (for x 0 1, 2, ..., 6)"
251	CPT_X3500	0	0	"CPTAVE at X3500 Hours (for x 0 1, 2, ..., 6)"
252	CPT_X4000	0	0	"CPTAVE at X4000 Hours (for x 0 1, 2, ..., 6)"
253	CPT_X4500	0	0	"CPTAVE at X4500 Hours (for x 0 1, 2, ..., 6)"
254	CPT_X5000	0	0	"CPTAVE at X5000 Hours (for x 0 1, 2, ..., 6)"
255	CPT_X6000	0	0	"CPTAVE at X6000 Hours (for x 0 1, 2, ..., 5)"
256	CPT_X7000	16103	58.973	"CPTAVE at X7000 Hours (for x 0 1, 2, ..., 5)"
257	CPT_X8000	15683	57.435	"CPTAVE at X8000 Hours (for x 0 1, 2, ..., 5)"
258	CPT_X9000	15197	55.655	"CPTAVE at X9000 Hours (for x 0 1, 2, ..., 5)"
259	CPT_X0000	15588	57.087	"CPTAVE at X0000 Hours (for x 0 1, 2, ..., 6)"
260	CWFAVE	20590	321.729	CWFAVE (SV)
261	CWFOLD0	20832	325.510	CWFAVE 0 Hours ago (SV)
262	CWFOLD50	20629	322.338	CWFAVE 50 Hours ago (SV)
263	CWFOLD100	20426	319.166	CWFAVE 100 Hours ago (SV)
264	CWFOLD150	20617	322.150	CWFAVE 150 Hours ago (SV)
265	CWFOLD200	20261	316.588	CWFAVE 200 Hours ago (SV)
266	CWFOLD250	20393	318.650	CWFAVE 250 Hours ago (SV)
267	CWFOLD300	20370	318.291	CWFAVE 300 Hours ago (SV)
268	CWFOLD350	20246	316.353	CWFAVE 350 Hours ago (SV)
269	CWFOLD400	20366	318.228	CWFAVE 400 Hours ago (SV)
270	CWFOLD450	20317	317.463	CWFAVE 450 Hours ago (SV)
271	CWFOLD500	20137	314.650	CWFAVE 500 Hours ago (SV)
272	CWF_X1000	17582	274.727	"CWFAVE at X1000 Hours (for x= 0 1, 2, ..., 6)"
273	CWF_X1500	17935	280.243	"CWFAVE at X1500 Hours (for x= 0 1, 2, ..., 6)"
274	CWF_X2000	18027	281.680	"CWFAVE at X2000 Hours (for x= 0 1, 2, ..., 6)"
275	CWF_X2500	17909	279.837	"CWFAVE at X2500 Hours (for x= 0 1, 2, ..., 6)"
276	CWF_X3000	0	0	"CWFAVE at X3000 Hours (for x= 0 1, 2, ..., 6)"
277	CWF_X3500	0	0	"CWFAVE at X3500 Hours (for x= 0 1, 2, ..., 6)"
278	CWF_X4000	0	0	"CWFAVE at X4000 Hours (for x= 0 1, 2, ..., 6)"
279	CWF_X4500	0	0	"CWFAVE at X4500 Hours (for x= 0 1, 2, ..., 6)"
280	CWF_X5000	0	0	"CWFAVE at X5000 Hours (for x= 0 1, 2, ..., 6)"
281	CWF_X6000	0	0	"CWFAVE at X6000 Hours (for x= 0 1, 2, ..., 5)"
282	CWF_X7000	18379	287.181	"CWFAVE at X7000 Hours (for x= 0 1, 2, ..., 5)"
283	CWF_X8000	18719	292.493	"CWFAVE at X8000 Hours (for x= 0 1, 2, ..., 5)"
284	CWF_X9000	18957	296.212	"CWFAVE at X9000 Hours (for x= 0 1, 2, ..., 5)"
285	CWF_X0000	20617	322.150	"CWFAVE at X0000 Hours (for x= 1, 2, ..., 6)"
286	LOWFUELPR	6	6	Number of Low Fuel Pressure Faults (SV)
287	SDN_LFP	1	1	Number of Shutdowns with Low Fuel Pressure Fault (SV)
288	NO_SPEED	30	30	Number of No Speed S/D
289	NOSPDNOBATRY	19	19	Number of No Speed Shutdowns with Main or Backup
Start Contactor (SV)				
290	EMERGENCY	23	23	Number of Emergency S/D (SV)
291	SNSR_FAIL	0	0	Number of Sensor Fail S/D
292	RECT4R_CYC	16906	16906	APU Cycle of RECT4R entry (PS)
293	RECT4R_CYC	23922	23922	APU Cycle of RECT4S entry (PS)
294	LOP_SDN_1	0	0	APU Cycle of Low Oil Pressure Sdn(1)
295	LOP_EVT_1	0000	0000	Event Word for Low Oil Pressure Sdn(1)

296	LOP_SDN_2	0	0	APU Cycle of Low Oil Pressure Sdn(2)
297	LOP_EVT_2	0000	0000	Event Word for Low Oil Pressure Sdn(2)
298	LOP_SDN_3	0	0	APU Cycle of Low Oil Pressure Sdn(3)
299	LOP_EVT_3	0000	0000	Event Word for Low Oil Pressure Sdn(3)
300	LOP_SDN_4	0	0	APU Cycle of Low Oil Pressure Sdn(4)
301	LOP_EVT_4	0000	0000	Event Word for Low Oil Pressure Sdn(4)
302	LOP_SDN_5	0	0	APU Cycle of Low Oil Pressure Sdn(5)
303	LOP_EVT_5	0000	0000	Event Word for Low Oil Pressure Sdn(5)
304	HOT_SDN_1	21114	21114	APU Cycle of High Oil Temp Sdn(1)
305	HOT_EVT_1	31EF	31EF	Event Word for High Oil Temp Sdn(1)
306	HOT_SDN_2	5611	5611	APU Cycle of High Oil Temp Sdn(2)
307	HOT_EVT_2	00EF	00EF	Event Word for High Oil Temp Sdn(2)
308	HOT_SDN_3	0	0	APU Cycle of High Oil Temp Sdn(3)
309	HOT_EVT_3	0000	0000	Event Word for High Oil Temp Sdn(3)
310	HOT_SDN_4	0	0	APU Cycle of High Oil Temp Sdn(4)
311	HOT_EVT_4	0000	0000	Event Word for High Oil Temp Sdn(4)
312	HOT_SDN_5	0	0	APU Cycle of High Oil Temp Sdn(5)
313	HOT_EVT_5	0000	0000	Event Word for High Oil Temp Sdn(5)
314	OVRTMPG_SDN_1	16906	16906	APU Cycle of Overtmp Onspeed Sdn(1)
315	OVRTMPG_EVT_1	41EF	41EF	Event Word for Overtmp Onspeed Sdn(1)
316	OVRTMPG_SDN_2	0	0	APU Cycle of Overtmp Onspeed Sdn(2)
317	OVRTMPG_EVT_2	0000	0000	Event Word for Overtmp Onspeed Sdn(2)
318	OVRTMPG_SDN_3	0	0	APU Cycle of Overtmp Onspeed Sdn(3)
319	OVRTMPG_EVT_3	0000	0000	Event Word for Overtmp Onspeed Sdn(3)
320	OVRTMPG_SDN_4	0	0	APU Cycle of Overtmp Onspeed Sdn(4)
321	OVRTMPG_EVT_4	0000	0000	Event Word for Overtmp Onspeed Sdn(4)
322	OVRTMPG_SDN_5	0	0	APU Cycle of Overtmp Onspeed Sdn(5)
323	OVRTMPG_EVT_5	0000	0000	Event Word for Overtmp Onspeed Sdn(5)
324	OVRTMPS_SDN_1	0	0	APU Cycle of Overtmp Start Sdn(1)
325	OVRTMPS_EVT_1	0000	0000	Event Word for Overtmp Start Sdn(1)
326	OVRTMPS_SDN_2	0	0	APU Cycle of Overtmp Start Sdn(2)
327	OVRTMPS_EVT_2	0000	0000	Event Word for Overtmp Start Sdn(2)
328	OVRTMPS_SDN_3	0	0	APU Cycle of Overtmp Start Sdn(3)
329	OVRTMPS_EVT_3	0000	0000	Event Word for Overtmp Start Sdn(3)
330	OVRTMPS_SDN_4	0	0	APU Cycle of Overtmp Start Sdn(4)
331	OVRTMPS_EVT_4	0000	0000	Event Word for Overtmp Start Sdn(4)
332	OVRTMPS_SDN_5	0	0	APU Cycle of Overtmp Start Sdn(5)
333	OVRTMPS_EVT_5	0000	0000	Event Word for Overtmp Start Sdn(5)
334	REVFLOW_SDN_1	0	0	APU Cycle of Reverse Flow Sdn(1)
335	REVFLOW_EVT_1	0000	0000	Event Word for Reverse Flow Sdn(1)
336	REVFLOW_SDN_2	0	0	APU Cycle of Reverse Flow Sdn(2)
337	REVFLOW_EVT_2	0000	0000	Event Word for Reverse Flow Sdn(2)
338	REVFLOW_SDN_3	0	0	APU Cycle of Reverse Flow Sdn(3)
339	REVFLOW_EVT_3	0000	0000	Event Word for Reverse Flow Sdn(3)
340	REVFLOW_SDN_4	0	0	APU Cycle of Reverse Flow Sdn(4)
341	REVFLOW_EVT_4	0000	0000	Event Word for Reverse Flow Sdn(4)
342	REVFLOW_SDN_5	0	0	APU Cycle of Reverse Flow Sdn(5)
343	REVFLOW_EVT_5	0000	0000	Event Word for Reverse Flow Sdn(5)
344	NOACCEL_SDN_1	0	0	APU Cycle of No Accel Sdn(1)
345	NOACCEL_EVT_1	0000	0000	Event Word for No Accel Sdn(1)
346	NOACCEL_SDN_2	0	0	APU Cycle of No Accel Sdn(2)
347	NOACCEL_EVT_2	0000	0000	Event Word for No Accel Sdn(2)
348	NOACCEL_SDN_3	0	0	APU Cycle of No Accel Sdn(3)
349	NOACCEL_EVT_3	0000	0000	Event Word for No Accel Sdn(3)
350	NOACCEL_SDN_4	0	0	APU Cycle of No Accel Sdn(4)
351	NOACCEL_EVT_4	0000	0000	Event Word for No Accel Sdn(4)
352	NOACCEL_SDN_5	0	0	APU Cycle of No Accel Sdn(5)
353	NOACCEL_EVT_5	0000	0000	Event Word for No Accel Sdn(5)
354	OVRSPD_SDN_1	0	0	APU Cycle of Overspeed Sdn(1)
355	OVRSPD_EVT_1	0000	0000	Event Word for Overspeed Sdn(1)
356	OVRSPD_SDN_2	0	0	APU Cycle of Overspeed Sdn(2)
357	OVRSPD_EVT_2	0000	0000	Event Word for Overspeed Sdn(2)
358	OVRSPD_SDN_3	0	0	APU Cycle of Overspeed Sdn(3)
359	OVRSPD_EVT_3	0000	0000	Event Word for Overspeed Sdn(3)
360	OVRSPD_SDN_4	0	0	APU Cycle of Overspeed Sdn(4)
361	OVRSPD_EVT_4	0000	0000	Event Word for Overspeed Sdn(4)
362	OVRSPD_SDN_5	0	0	APU Cycle of Overspeed Sdn(5)
363	OVRSPD_EVT_5	0000	0000	Event Word for Overspeed Sdn(5)
364	UNDRSPD_SDN_1	17500	17500	APU Cycle of Underspeed Sdn(1)
365	UNDRSPD_EVT_1	0DAF	0DAF	Event Word for Underspeed Sdn(1)
366	UNDRSPD_SDN_2	0	0	APU Cycle of Underspeed Sdn(2)
367	UNDRSPD_EVT_2	0000	0000	Event Word for Underspeed Sdn(2)
368	UNDRSPD_SDN_3	0	0	APU Cycle of Underspeed Sdn(3)
369	UNDRSPD_EVT_3	0000	0000	Event Word for Underspeed Sdn(3)
370	UNDRSPD_SDN_4	0	0	APU Cycle of Underspeed Sdn(4)
371	UNDRSPD_EVT_4	0000	0000	Event Word for Underspeed Sdn(4)

372	UNDRSPD_SDN_5	0	0	APU Cycle of Underspeed Sdn(5)
373	UNDRSPD_EVT_5	0000	0000	Event Word Underspeed Sdn(5)
374	CLFLTR_SDN_1	0	0	APU Cycle of Clogged Oil Filter Sdn(1)
375	CLFLTR_EVT_1	0000	0000	Event Word for Clogged Oil Filter Sdn(1)
376	CLFLTR_SDN_2	0	0	APU Cycle of Clogged Oil Filter Sdn(2)
377	CLFLTR_EVT_2	0000	0000	Event Word for Clogged Oil Filter Sdn(2)
378	CLFLTR_SDN_3	0	0	APU Cycle of Clogged Oil Filter Sdn(3)
379	CLFLTR_EVT_3	0000	0000	Event Word for Clogged Oil Filter Sdn(3)
380	CLFLTR_SDN_4	0	0	APU Cycle of Clogged Oil Filter Sdn(4)
381	CLFLTR_EVT_4	0000	0000	Event Word for Clogged Oil Filter Sdn(4)
382	CLFLTR_SDN_5	0	0	APU Cycle of Clogged Oil Filter Sdn(5)
383	CLFLTR_EVT_5	0000	0000	Event Word for Clogged Oil Filter Sdn(5)
384	NOFLAM_SDN_1	7349	7349	APU Cycle of No Flame Sdn(1)
385	NOFLAM_EVT_1	003F	003F	Event Word for No Flame Sdn(1)
386	NOFLAM_SDN_2	4216	4216	APU Cycle of No Flame Sdn(2)
387	NOFLAM_EVT_2	003F	003F	Event Word for No Flame Sdn(2)
388	NOFLAM_SDN_3	0	0	APU Cycle of No Flame Sdn(3)
389	NOFLAM_EVT_3	003F	003F	Event Word for No Flame Sdn(3)
390	NOFLAM_SDN_4	0	0	APU Cycle of No Flame Sdn(4)
391	NOFLAM_EVT_4	003F	003F	Event Word for No Flame Sdn(4)
392	NOFLAM_SDN_5	0	0	APU Cycle of No Flame Sdn(5)
393	NOFLAM_EVT_5	0000	0000	Event Word for No Flame Sdn(5)
394	INLTHOT_SDN_1	23384	23384	APU Cycle of Inlet HOT Sdn(1)
395	INLTHOT_EVT_1	0003	0003	Event Word for Inlet HOT Sdn(1)
396	INLTHOT_SDN_2	23382	23382	APU Cycle of Inlet HOT Sdn(2)
397	INLTHOT_EVT_2	0007	0007	Event Word for Inlet HOT Sdn(2)
398	INLTHOT_SDN_3	23381	23381	APU Cycle of Inlet HOT Sdn(3)
399	INLTHOT_EVT_3	05EF	05EF	Event Word for Inlet HOT Sdn(3)
400	INLTHOT_SDN_4	23380	23380	APU Cycle of Inlet HOT Sdn(4)
401	INLTHOT_EVT_4	31EF	31EF	Event Word for Inlet HOT Sdn(4)
402	INLTHOT_SDN_5	23379	23379	APU Cycle of Inlet HOT Sdn(5)
403	INLTHOT_EVT_5	0007	0007	Event Word for Inlet HOT Sdn(5)
404	EMERG_SDN_1	26740	26740	APU Cycle of Emergency Sdn(1)
405	EMERG_EVT_1	00AF	00AF	Event Word for Emergency Sdn(1)
406	EMERG_SDN_2	26644	26644	APU Cycle of Emergency Sdn(2)
407	EMERG_EVT_2	001F	001F	Event Word for Emergency Sdn(2)
408	EMERG_SDN_3	26615	26615	APU Cycle of Emergency Sdn(3)
409	EMERG_EVT_3	00BF	00BF	Event Word for Emergency Sdn(3)
410	EMERG_SDN_4	26205	26205	APU Cycle of Emergency Sdn(4)
411	EMERG_EVT_4	00BF	00BF	Event Word for Emergency Sdn(4)
412	EMERG_SDN_5	25741	25741	APU Cycle of Emergency Sdn(5)
413	EMERG_EVT_5	000F	000F	Event Word for Emergency Sdn(5)
414	NOSPD_SDN_1	25441	25441	APU Cycle of No Speed Sdn(1)
415	NOSPD_EVT_1	001F	001F	Event Word for No Speed Sdn(1)
416	NOSPD_SDN_2	25441	25441	APU Cycle of No Speed Sdn(2)
417	NOSPD_EVT_2	001F	001F	Event Word for No Speed Sdn(2)
418	NOSPD_SDN_3	24547	24547	APU Cycle of No Speed Sdn(3)
419	NOSPD_EVT_3	001F	001F	Event Word for No Speed Sdn(3)
420	NOSPD_SDN_4	24153	24153	APU Cycle of No Speed Sdn(4)
421	NOSPD_EVT_4	001F	001F	Event Word for No Speed Sdn(4)
422	NOSPD_SDN_5	22458	22458	APU Cycle of No Speed Sdn(5)
423	NOSPD_EVT_5	001F	001F	Event Word for No Speed Sdn(5)
424	SNSRFAIL_SDN_1	0	0	APU Cycle of Sensor Fail Sdn(1)
425	SNSRFAIL_EVT_1	0000	0000	Event Word for Sensor Fail Sdn(1)
426	SNSRFAIL_SDN_2	0	0	APU Cycle of Sensor Fail Sdn(2)
427	SNSRFAIL_EVT_2	0000	0000	Event Word for Sensor Fail Sdn(2)
428	SNSRFAIL_SDN_3	0	0	APU Cycle of Sensor Fail Sdn(3)
429	SNSRFAIL_EVT_3	0000	0000	Event Word for Sensor Fail Sdn(3)
430	SNSRFAIL_SDN_4	0	0	APU Cycle of Sensor Fail Sdn(4)
431	SNSRFAIL_EVT_4	0000	0000	Event Word for Sensor Fail Sdn(4)
432	SNSRFAIL_SDN_5	0	0	APU Cycle of Sensor Fail Sdn(5)
433	SNSRFAIL_EVT_5	0000	0000	Event Word for Sensor Fail Sdn(5)
434	INFLIGHT_SDN_1	0	0	APU Cycle of Inflight Sdn(1)
435	INFLIGHT_EVT_1	0000	0000	Event Word for Inflight Sdn(1)
436	INFLIGHT_SDN_2	0	0	APU Cycle of Inflight Sdn(2)
437	INFLIGHT_EVT_2	0000	0000	Event Word for Inflight Sdn(2)
438	INFLIGHT_SDN_3	0	0	APU Cycle of Inflight Sdn(3)
439	INFLIGHT_EVT_3	0000	0000	Event Word for Inflight Sdn(3)
440	INFLIGHT_SDN_4	0	0	APU Cycle of Inflight Sdn(4)
441	INFLIGHT_EVT_4	0000	0000	Event Word for Inflight Sdn(4)
442	INFLIGHT_SDN_5	0	0	APU Cycle of Inflight Sdn(5)
443	INFLIGHT_EVT_5	0000	0000	Event Word for Inflight Sdn(5)
444	ABFLTSTRT_L25	0	0	Number of Unsuccessful In-Flight starts < 25000
ft				
445	ABFLTSTRT_G25	0	0	Number of Unsuccessful In-Flight starts > 25000
ft				

446 CUR_MONTH	0002	0002 0001..0012 corresponding to January .. December
447 MINUTES_M0	5182	5182 Number of APU minutes during current month
448 CYCLES_M0	270	270 Number of APU cycles during current month
449 MINUTES_M1	5799	5799 Number of APU minutes during current month - 1
month		
450 CYCLES_M1	361	361 Number of APU cycles during current month - 1
month		
451 MINUTES_M2	5362	5362 Number of APU minutes during current month - 2
months		
452 CYCLES_M2	343	343 Number of APU cycles during current month - 2
months		
453 MINUTES_M3	3980	3980 Number of APU minutes during current month - 3
months		
454 CYCLES_M3	278	278 Number of APU cycles during current month - 3
months		
455 MINUTES_M4	6600	6600 Number of APU minutes during current month - 4
months		
456 CYCLES_M4	433	433 Number of APU cycles during current month - 4
months		
457 MINUTES_M5	7477	7477 Number of APU minutes during current month - 5
months		
458 CYCLES_M5	451	451 Number of APU cycles during current month - 5
months		
459 MINUTES_M6	8434	8434 Number of APU minutes during current month - 6
months		
460 CYCLES_M6	451	451 Number of APU cycles during current month - 6
months		
461 MINUTES_M7	8108	8108 Number of APU minutes during current month - 7
months		
462 CYCLES_M7	460	460 Number of APU cycles during current month - 7
months		
463 MINUTES_M8	6623	6623 Number of APU minutes during current month - 8
months		
464 CYCLES_M8	445	445 Number of APU cycles during current month - 8
months		
465 MINUTES_M9	4978	4978 Number of APU minutes during current month - 9
months		
466 CYCLES_M9	361	361 Number of APU cycles during current month - 9
months		
467 MINUTES_M10	5554	5554 Number of APU minutes during current month - 10
months		
468 CYCLES_M10	429	429 Number of APU cycles during current month - 10
months		
469 MINUTES_M11	6049	6049 Number of APU minutes during current month - 11
months		
470 CYCLES_M11	418	418 Number of APU cycles during current month - 11
months		
471 MINUTES_M12	5674	5674 Number of APU minutes during current month - 12
months		
472 CYCLES_M12	398	398 Number of APU cycles during current month - 12
months		

1. Approving Competent
Authority / Country

LBA / Germany

4. Approved Organisation Name and Address:

Honeywell Aerospace GmbH
Frankfurter Str. 41-65
65479 Raunheim, Germany

AUTHORISED RELEASE CERTIFICATE
EASA FORM 1

Honeywell

3. Form Tracking Number

09K004747

5. Work Order/Contract/Invoice

16Z00060

6. Item	7. Description	8. Part No.	9. Eligibility	10. Qty.	11. Serial/Batch No.	12. Status/Work
0010	131-9(A)	5800708-1	VARIOUS VARIOUS	1	P-2888	REPAIRED MODIFIED

13. Remarks

0010 EM 49-27-29 REV.5
TSN: 7160 CSN: 15358 TSR: 0 CSR: 0 P/O 73252297
SERIES: 8
REPAIR WORKSCOPE AND AMP TASKS IAW MWC841-1319A, REV.1, DATED 02/04/2008 PERFORMED.
SPECIAL INSPECTION REQUIREMENTS PERFORMED. REFER TO THE ATTACHED FORM QS1339/2006 FOR DETAILS.
FOR LIFE TRACKED PARTS AND LRU'S: SEE ATTACHED APU SERVICE RECORD
AD AND SERVICE BULLETIN STATUS: SEE ATTACHED LISTINGS
RETURN TO SERVICE I.A.W. FAR 43.9
THIS CIVIL AERONAUTICAL PRODUCT HAS BEEN REPAIRED AND MODIFIED IN ACCORDANCE WITH
U.S. FEDERAL AVIATION REGULATIONS UNDER FAA CERTIFICATE NO. QJ1Y428K.
TCCA ACCEPTANCE APPROVAL NUMBER: 898-02. GCAA APPROVAL NO. AMO/170/06

14. Certifies that the items identified above were manufactured in conformity to:

- ☐ approved design data and are in condition for safe operation
☐ non-approved design data specified in block 13

19. ☒ PART-145.A.50 Release to Service ☒ Other regulation specified in block 13

Certifies that unless otherwise specified in block 13, the work identified in block 12 and described in block 13, was accomplished in accordance with PART-145 and in respect to that work the items are considered ready for release to service.

15. Authorised Signature

16. Approval/Authorisation Number

20. Authorised Signature

21. Certificate/Approval Ref. No.

17. Name

18. Date (d/m/y)

22. Name

23. Date (d/m/y)

Honeywell Aerospace GmbH
Frankfurter Str. 41 - 65
65479 Raunheim - Germany

APU SERVICE RECORD

DATE	ACCUMULATIVE TOTALS		P/N : 3800708-1 S/N : P-2888	
26082009	HOURS	CYCLES		
	TSN / TSO	CSN / CSO	TSR / CSR	
	7160 / N/A	15358 / N/A	0 / 0	

DESCRIPTION OF WORK PERFORMED

TYPE MAINTENANCE : Repaired

EM 49-27-29 REV.5; 131-9(A); SERIES: 8; P/O: 73252297;

REPAIR WORKSCOPE AND AMP TASKS IAW MWC841-1319A, REV.1, DATED 02/04/2008

PERFORMED. SPECIAL INSPECTION REQUIREMENTS PERFORMED, REFER TO THE ATTACHED FORM QS1339/2006 FOR DETAILS.

THE AIRCRAFT COMPONENT IDENTIFIED ABOVE WAS INSPECTED IN ACCORDANCE WITH CURRENT CIVIL AVIATION ADMINISTRATION REGULATIONS (SEE ATTACHED CERTIFICATE) AND IS APPROVED FOR RETURN TO SERVICE. PERTINENT DETAILS OF WORK PERFORMED ARE ON FILE AT THIS AGENCY UNDER REPAIR ORDER : 16Z00060

TRACEABLE LIFE LIMITED / LIFE CONTROLLED PARTS

EXPOSED	ITEM	ROTOR	ASSY	S/N	HRS/CYCLES	LEFT	TIMEEX
☒	LC.ROTOR	3822400-5	N/A	08-03501-19931	0 0	O/C	N/A
☒	EC.ROTOR	3822391-6	N/A	040350107516	7160 15358	14642	30000
☒	T.SHAFT	3822504-3	N/A	04P25995	7160 15358	14642	30000
☒	1T.ROTOR	3840302-1	3840160-7	040335702643	6428 9203	20997	30000
☒	2T.WHEEL	3840165-4	N/A	08-01345-03124	893 2619	27381	30000

LINE REPLACEABLE UNIT

ITEM	P/N	S/N	ST	ITEM	P/N	S/N	ST
FAN ASSY	3616140-7	P-2393	3	GEARBOX	3805057-1	NONE	2
STARTER	2704506-2	1485	2	FCU	441921-5	CUC13037	0
LUBE MOD	4131020-4	2947	0	DMM	3876287-1	GE3105	4
LCV	3291432-1	1402	4	SCV	3291238-2	3048	0
T.P.SENS	3876226-1	041121460511	0	IGN.UNIT	3888058-5	040218052172	1
IGV. ACT	3886188-2	3429	0	OIL COOL	160494-1	2031	2
OIL HEAT	3876145-1	042345300367	0	HARNESS	3888438-1	NONE	0
DEQILSOL	4141028-3	10332	1E				

=====ST (STATUS)=====

0=TEST ON APU 1=FINAL/BENCHTEST 2=REPAIR 3=OVERHAUL 4=VISUAL INSPECT 5=NEW E=EXCHANGE

EASA APPROVED MAINT. ORG. NO.: DE.145.0022
FAA APPROVED REPAIR STATION NO.: QJ1Y428K
PCA APPROVED REPAIR STATION NO.: AMO-152F
TCCA ACCEPTANCE APPROVAL NO.: 898-02
DGCAM APPROVED MAINT. ORG. NO.: AWR/263/GMBH-071/92
GCAA APPROVED REPAIR STATION NO.: AMO/170/06
CAA APPROVED MAINT. ORG. NO.: ATR/8/5.65
ECAA APPROVED REPAIR STATION NO.: CAI/HONEYWELL/AS/01/96


H. Lehmann



26.08.2009
DATE

Honeywell Aerospace GmbH
Frankfurter Str. 41 - 65
65479 Raunheim
Germany

DSC-3800708-1
PAGE 1 OF 2

ACCEPTANCE TEST DATA SHEET
131-9 [A]
P/N 3800708-1
(METRIC UNITS)

USED WITH
EM 49-27-29
REV. 5

UNIT OUTLINE 3800708-1 MODEL NO. 131-9[A] SERIAL NO. P-2888 DATE 26. Aug. 2009
TEST CELL NO. 3 RUN NO. 1 REPAIR ORDER NO. 16200060
OIL USED MIL-23699 TYPE 8P2380 FUEL USED MILT5624 TYPE Jet A1
APU CONTROL UNIT PN 3888394-221202 S/N* 027 SLAVE* X

QUANTITY	UNITS	ACTUAL
APU DRY WEIGHT (FROM APU TRAVELLER)	KG	NR 1810
AUTOMATIC STARTS	SEC # 1	<u>42</u>
CHECK PARA. <u>8-H</u>	SEC # 2	<u>40</u>
	SEC # 3	<u>39</u>
TOTAL NUMBER OF STARTS (DURING ATP)	NO.	<u>4</u>
TOTAL OPERATING TIME (DURING ATP)	HRS	<u>1:16</u>
INITIAL IGV_POSITION <u>91.6</u>	DEGREES, INITIAL PBCOR <u>3.612</u>	BAR
FINAL IGV_POSITION <u>87.6</u>	DEGREES, INITIAL PBCOR <u>3.551</u>	BAR
ECS_OFFSET (FINAL IGV-INITIAL IGV) = <u>-4.0</u>	DEGREES	
FLOW SENSOR CHECK PARA. 8.E. (9)	WBCDNA KG/SEC	<u>0.373</u>
FLOW SENSOR CHECK PARA. 8.E. (13)A	WBCDNA KG/SEC	<u>0.379</u>
FLOW SENSOR CHECK PARA. 8.E. (13)B	WC %	<u>0.79</u>
SCV STABILITY 8.F. (2A)	SCV IS STABLE	YES ☒ NO ☐
MINIMUM SURGE MARGIN 8.G (5)	UNIT DID /DID NOT	☒ SURGE ☐
APU FAULT OBSERVED 5.1 B	NONE ☒ OTHER ☐	
LOAD CONTROL VALVE TEST 8.I.8 IS OK	YES ☒ NO ☐	
LOAD CONTROL VALVE TEST 8.I.10 IS OK	YES ☒ NO ☐	
UNIT STATUS:	ACCEPT ☒ REJECT ☐	
TECHNICIAN <u>[Signature]</u> FT 18	DATE	<u>26. Aug. 2009</u>
SUPERVISOR <u>[Signature]</u> FT 23	DATE	<u>26. Aug. 2009</u>
QUALITY ASSURANCE <u>[Signature]</u>	DATE	<u>26. 08. 2009</u>

*INDICATE "LAB SLAVE" AND SERIAL NO. WHEN APPLICABLE

APU S/N : P-2888

TECHNICIAN :

FT
18

DATE :

26. Aug. 2009

ATP REFERENCE		8.D.1	8.D.2	8.D.4	8.D.5
QUANTITY	UNITS	NO LOAD	SHAFT LOAD	38°C COMBINED LOAD	50°C MES
BAROMETRIC PRESSURE (PBAR)	BAR	1.005	1.005	1.005	1.005
AVERAGE INLET TEMPERATURE (T1)	°C	24.18	24.32	25.20	25.13
UNIT INLET TEMPERATURE (TENIVA)	°C	24.19	24.19	25.06	25.06
OIL PRESSURE	BAR	4.601	4.524	4.509	4.533
OIL TEMPERATURE	°C	80.60	93.00	92.40	88.00
OIL TEMPERATURE SUMP ECB (ECB-TOIL)	°C	95.00	112.0	111.0	105.0
FUEL INLET TEMPERATURE	°C	26.30	26.10	25.60	26.00
FUEL INLET PRESSURE	BAR	2.258	2.228	2.183	2.183
GEARBOX PRESSURE	MBAR	1.427	-7.060	-25.56	-24.03
COMPRESSOR DISCHARGE STATIC PRESSURE	BAR	6.642	6.892	7.175	7.134
COMPRESSOR DISCHARGE TEMPERATURE	°C	292.8	297.0	304.8	303.1
TURBINE DISCHARGE TEMPERATURE (UNIT RAKES)	# 1	°C	369.7	420.1	518.1
	# 2	°C	371.2	429.9	545.8
EXHAUST GAS TOTAL TEMPERATURE (LAB - AVG)	ACTUAL	°C	324.2	366.3	530.8
	CORRECTED*	°C			550.2
BLEED ORIFICE INLET TEMPERATURE	°C			192.2	197.0
BLEED ORIFICE INLET PRESSURE	BAR			3.628	3.833
BLEED ORIFICE DIFFERENTIAL PRESSURE	MBAR			97.19	87.04
EXHAUST STATIC PRESSURE	MBAR			999.7	999.8
IGV POSITION	DEG			87.58	91.85
CORRECTED DISCHARGE AIRFLOW (WBCDNA)	KG/SEC			0.432	0.401
BLEED AIRFLOW (WB)	ACTUAL	KG/SEC		1.248	1.210
	CORRECTED*	KG/SEC		1.161	1.062
BLEED TOTAL PRESSURE (PB)	ACTUAL	BAR		3.765	3.957
	CORRECTED*	BAR		3.551	3.568
BLEED TOTAL TEMPERATURE (TB)	ACTUAL	°C		203.9	208.8
	CORRECTED*	°C		214.6	230.2
FUEL CONSUMPTION	ACTUAL	KG/HR	80.64	98.61	129.8
	CORRECTED*	KG/HR		124.6	114.5
SHAFT OUTPUT (PWGEN)	ACTUAL	KW	0.	83.01	69.69
SHAFT OUTPUT / δ (SHPSL)	CORRECTED	KW		98.92	83.06
UNIT VIBRATION	COOL. FAN	MM/SEC	12.73	14.48	14.07
	GEARBOX	MM/SEC	12.17	11.15	10.95
	TURBINE	MM/SEC	7.061	6.680	8.458
APU SPEED	RPM	48757.	48747.	48747.	48747.
REQUIREMENTS PER ☐ (HEAVY REPAIR) ☒ (CONTINUE TIME)	MIN BLEED FLOW	KG/SEC		1.14	
	MIN BLEED PRESS.	BAR		3.51	3.50
	MAX IGV POSITION	DEG		92.50	
	MAX FUEL FLOW	KG/HR			121.6
	MAX EGT	°C		621.1	618.3
	SHAFT LOAD -0 + 2	KW		98.00	83.00
DIGITAL DATA SCAN	TIME	08:55:07	09:05:28	09:16:55	09:26:38
	DATE	08/26/09	08/26/09	08/26/09	08/26/09
DIGITAL DATA POINT NO.	XXXX	1001	1002	1003	1004

* DATA CORRECTED TO INDICATED T2 AND INSTALLED, SEA LEVEL CONDITIONS.

RUN DATE: 26.08.2009
 RUN BY: H. Lehmann

HONEYWELL AEROSPACE GMBH RAUNHEIM
 SERVICE BULLETIN STATUS
 ENGINE MODEL: 131-9(A) ENGINE SN: P-2888

PAGE 1 OF 1
 CUSTOMER: 516

SERVICE BULLETIN	REV.	DESCRIPTION	WHEN ACCOMP
GTE1177		REPLACE FAN #3616140-6 WITH #7	PCW
441921-49-0004		REWORK FCU #441921-4 TO #5	PCW
B55968-49-01		REWORK IGV ACTUATOR #3886188-1/-2	PCW
CUC1-49-0001		ONE TIME INSPECTION FOR MISSING SPRING IN RELIEF VALVE	PCW
CUC1-49-0002		REWORK FCU #441921-4	PCW
49-2360		REWORK STARTER #2704506-1 S1 TO #2 S1	PCW
49-2368		REWORK STARTER #2704506-1 S1 TO CHNO1 OR #2704506-2 S1 TO S2	PCW
49-2375		REWORK STARTER #2704506-1 S1 CHNO1 TO CHNO3, #2704506-2 S1/S2 TO CHNO 1, AND #2704506-2 S2 TO S3	PCW
49-2378		REWORK OIL COOLER #160494-1 S1 TO S2	PCW
49-7351		REPLACE STARTER #2704506-1/ #2000866-2 WITH #2704506-2/#2000866-4.	PCW
49-7469		REPLACE STUD #682-557-2416 WITH #2418	PCW
49-7562		REPLACE TURBINE SEAL GASKET #3844707-1 WITH #2	PCW
49-7600		REWORK/REPLACE TURBINE STATOR SUPPORT #3844797-15/-16 TO/WITH #19/-20	PCW
49-7606		REWORK/REPLACE POWER SECTION #3801300-1 TO/WITH #2 AND PLUMBING & ELECTRIC #3617170-1 TO/WITH #2	PCW
49-7668		INCORPORATE COMBUSTOR CASE DRAIN PLUG LOCK WIRE FEATURE	PCW
49-7687		REPLACE FCU #441921-4 WITH #5	PCW
49-7716		REPLACE COMPRESSOR DISCHARGE DUCT #3885007-1 (TITANIUM) WITH #2 (IN718)	PCW
49-7718		REPLACE ENGINE COMPRESSOR SHROUD #3827322-3 WITH #3827504-3	PCW
49-7739		REPLACE FLOW DIVIDER #3883830-1 WITH #3879005-1 AND FITTING #MS24392J4 WITH #3879006-1	PCW
49-7741		REPLACE FCU CLAMP #234-591-3030 WITH #234-511-9059	PCW
49-7744		REWORK/REPLACE 1. STAGE TURBINE NOZZLE #3844797-15-19 OR #16/-20 WITH/TO #21 OR #22	PCW
49-7764		REPLACE COOLING FAN INLET DUCT #3810929-2 WITH #3	PCW
49-7765		REPLACE FAN EXIT DUCT #3810900-3 WITH #4	PCW
49-7777		REWORK/REPLACE 1st STAGE TURBINE WHEEL #3840160-5 TO/WITH #3840303-1	PCW
49-7778		REWORK/REPLACE 1st STAGE STATOR SUPPORT #3844797-15/-16/-19/-20/-21/-22 TO/WITH #17	PCW
49-7845		REPLACE REAR BEARING SEAL #3844561-1 WITH #3	21.08.2008
49-7846		REWORK 1ST STAGE TURBINE WHEEL #3840303-1 TO #3840160-7	21.08.2008
49-7900	1	APU PERFORMANCE ADJUSTMENTS IN DMM #3876287-1	21.08.2008
49-7947		REPLACE LOAD COMPRESSOR SEAL #3827350-3 WITH #3827608-3 AND ROTOR #3822418-1 WITH #3822635-2	21.08.2008

SIGNATURE / STAMP

PCW = PREVIOUSLY COMPLIED WITH
 AD = AIRWORTHINESS DIRECTIVE
 LTA = LUFTFAHRT TÜCHTIGKEITSANWEISUNG
 CN = CONSIGNE DE NAVIGABILITÉ

Form QS 1298/2005 ÄZ; 01; 01.10.2008

EASA APPROVED MAINT. ORG. NO.: DE.145.0022
 FAA APPROVED REPAIR STATION NO.: QJ1Y428K
 PCA APPROVED REPAIR STATION NO.: AMO-152F
 TCCA ACCEPTANCE APPROVAL NO.: 898-02
 DGCAM APPROVED MAINT. ORG. NO.: AWR/263/GMBH-071/92
 GCAA APPROVED REPAIR STATION NO.: AMO/170/06
 CAA APPROVED MAINT. ORG. NO.: ATR/8/5.65
 ECAA APPROVED REPAIR STATION NO.: CAI/HONEYWELL/AS/01/96



LLPs



LLP - Comp. Rotor
3822391-6
S/N 11-162053-41553

1. Approving National Aviation Authority/Country: FAA/United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG			3. Form Tracking Number: 890002558039Y14 902038551-20 890002516031Y14 901998366-10	
4. Organization Name and Address: Honeywell International Inc 111 South 34th Street Phoenix AZ 85072		Production Approval PT1222NM		Honeywell International Inc Units 2-4, Chevron Eaton Road Hemel Hempstead, HP2 7DR United Kingdom		5. Work Order/Contract/Invoice Number: 4701873976-000010 Page 1 of 1
6. Item:	7. Description:	8. Part Number:	9. Eligibility:*	10. Quantity:	11. Serial / Batch Number:	12. Status / Work:
001	COMPRESSOR ROTOR, CENTRIFUGAL E/C	3822391-6	N/A	1	11-162053-41553	NEW
13. Remarks : EXPORT AIRWORTHINESS APPROVAL - THIS ARTICLE MEETS THE SPECIAL REQUIREMENTS OF FEDERAL REPUBLIC OF GERMANY. THIS PART IS A SUBCOMPONENT OF A TSO AUTHORIZATION.						
14. Certifies the items identified above were manufactured in conformity to: ☒ Approved design data and are in a condition for safe operation. ☐ Non-approved design data specified in Block 13.			19. ☐ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 13 Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 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.			
15. Authorized Signature: 		16. Approval/Authorization No.: ODA-602216-NM		20. Authorized Signature:		21. Approval/Certificate No.:
17. Name (Typed or Printed): Stephen Foulger		18. Date (m d y): MAR 26 2012		22. Name (Typed or Printed):		23. Date (m d y):
User / Installer Responsibilities It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly. Where the user/installer performs work in accordance with national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.						

LIFE LIMITED PART CARD

Part Name EC.ROTOR

Part Number 3822391-6

Serial Number 11-162053-41553

Part of Assy Part Number N/A

[illegible]

Form QS 1412/2008 ÄZ: 00; 23.07.2008

ID: 35760



LLP - Turb. Shaft
P/N 3822504-3
S/N 12P45786

1. Approving National Aviation Authority/Country: FAA/United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG				3. Form Tracking Number: 890002558224Y14 902028929-70 890002522585Y14 902008130-80	
4. Organization Name and Address: Honeywell International Inc 111 South 34th Street Phoenix AZ 85072		Production Approval PT1222NM		Honeywell International Inc Units 2-4, Chevron Eaton Road Hemel Hempstead, HP2 7DR United Kingdom		5. Work Order/Contract/Invoice Number: 4701867776-000010 Page 1 of 1	
6. Item:	7. Description:	8. Part Number:		9. Eligibility:*	10. Quantity:	11. Serial / Batch Number:	12. Status / Work:
001	SHAFT, TURB	3822504-3		N/A	1	12P45786	NEW
13. Remarks : EXPORT AIRWORTHINESS APPROVAL - THIS ARTICLE MEETS THE SPECIAL REQUIREMENTS OF FEDERAL REPUBLIC OF GERMANY. THIS PART IS A SUBCOMPONENT OF A TSO AUTHORIZATION.							
14. Certifies the items identified above were manufactured in conformity to: ☒ Approved design data and are in a condition for safe operation. ☐ Non-approved design data specified in Block 13.				19. ☐ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 13 Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 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.			
15. Authorized Signature: <i>R. P. Calder</i>		16. Approval/Authorization No.: ODA-602216-NM		20. Authorized Signature:		21. Approval/Certificate No.:	
17. Name (Typed or Printed): Ray Calder		18. Date (m d y): MAR 26 2012		22. Name (Typed or Printed):		23. Date (m d y):	
User / Installer Responsibilities It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly. Where the user/installer performs work in accordance with national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts parts/components/assemblies from the airworthiness authority of the country specified in Block 1. Statements in Block 14 and 19 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.							



LIFE LIMITED PART CARD

Part Name T.SHAFT

Part Number 3822504-3

Serial Number 12P45786

Part of Assy Part Number N/A

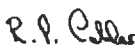
[illegible]

Form QS 1412/2008 ÄZ: 00; 23.07.2008

ID: 35761



LLP - T1 Rotor
P/N 3840310-3
S/N 11-1561010-00543

1. Approving National Aviation Authority/Country: FAA/United States		AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG				3. Form Tracking Number: 890002531716Y14 902006727-10 890002419413Y14 901921924-30	
4. Organization Name and Address: Honeywell International Inc 111 South 34th Street Phoenix AZ 85072		Production Approval PT1222NM		Honeywell International Inc Units 2-4, Chevron Eaton Road Hemel Hempstead, HP2 7DR United Kingdom		5. Work Order/Contract/Invoice Number: 4701857937-000010 Page 1 of 1	
6. Item:	7. Description:	8. Part Number:	9. Eligibility*:	10. Quantity:	11. Serial / Batch Number:	12. Status / Work:	
001	ROTOR ASSY, TURBINE - FIRST STAGE AXIAL	3840310-3	N/A	1	11-156101-00543	NEW	
13. Remarks : EXPORT AIRWORTHINESS APPROVAL - THIS ARTICLE MEETS THE SPECIAL REQUIREMENTS OF FEDERAL REPUBLIC OF GERMANY. THIS PART IS A SUBCOMPONENT OF A TSO AUTHORIZATION.							
14. Certifies the items identified above were manufactured in conformity to: ☒ Approved design data and are in a condition for safe operation. ☐ Non-approved design data specified in Block 13.			19. ☐ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 13 Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 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.				
15. Authorized Signature: 		16. Approval/Authorization No.: ODA-602216-NM		20. Authorized Signature:		21. Approval/Certificate No.:	
17. Name (Typed or Printed): Ray Calder		18. Date (m d y): MAR 14 2012		22. Name (Typed or Printed):		23. Date (m d y):	
User / Installer Responsibilities							
It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly. Where the user/Installer performs work in accordance with national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts parts/components/assemblies from the airworthiness authority of the country specified in Block 1. Statements in Block 14 and 19 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.							



LIFE LIMITED PART CARD

Part Name 1T.ROTOR

Part Number 3840310-3

Serial Number 11-156101-00543

Part of Assy Part Number N/A

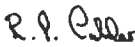
[illegible]

Form QS 1412/2008 ÄZ: 00; 23.07.2008

ID: 35762



LLP - T2 Rotor
P/N 3840165-4
S/N 11-156101-01645

1. Approving National Aviation Authority/Country: FAA/United States		AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG				3. Form Tracking Number: 890002556156Y14 902023734-10 890002509706Y14 901998333-10	
4. Organization Name and Address: Honeywell International Inc 111 South 34th Street Phoenix AZ 85072			Production Approval PT1222NM		Honeywell International Inc Units 2-4, Chevron Eaton Road Hemel Hempstead, HP2 7DR United Kingdom		5. Work Order/Contract/Invoice Number: 4701870449-000010 Page 1 of 1
6. Item:	7. Description:	8. Part Number:	9. Eligibility:*	10. Quantity:	11. Serial / Batch Number:	12. Status / Work:	
001	2ND STAGE TURBINE ROTOR ASSY	3840165-4	N/A	3	11-156101-01645 See Continuation	NEW	
13. Remarks : EXPORT AIRWORTHINESS APPROVAL - THIS ARTICLE MEETS THE SPECIAL REQUIREMENTS OF FEDERAL REPUBLIC OF GERMANY. THIS PART IS A SUBCOMPONENT OF A TSO AUTHORIZATION. 11. Serial/Batch Number(s) (Continued): 11-156101-11486, 11-156101-10899.							
14. Certifies the items identified above were manufactured in conformity to: ☒ Approved design data and are in a condition for safe operation. ☐ Non-approved design data specified in Block 13.			19. ☐ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 13 Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 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.				
15. Authorized Signature: 		16. Approval/Authorization No.: ODA-602216-NM		20. Authorized Signature:		21. Approval/Certificate No.:	
17. Name (Typed or Printed): Ray Calder		18. Date (m d y): MAR 25 2012		22. Name (Typed or Printed):		23. Date (m d y):	
User / Installer Responsibilities							
It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly. Where the user/Installer performs work in accordance with national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts parts/components/assemblies from the airworthiness authority of the country specified in Block 1. Statements in Block 14 and 19 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.							



LIFE LIMITED PART CARD

Part Name 2T.WHEEL

Part Number 3840165-4

Serial Number 11-156101-01645

Part of Assy Part Number N/A

[illegible]

Form QS 1412/2008 ÄZ: 00; 23.07.2008

ID: 35763



Log Book

Honeywell

Honeywell International Inc
Engines Systems and Services
PO Box 52181
Phoenix, Arizona 85072-2181

AUXILIARY POWER UNIT

APU LOG BOOK

AUXILIARY POWER UNIT

APU LOG BOOK

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APU
SERVICE RECORD

AIRWORTHINESS
DIRECTIVES

SERVICE
BULLETINS

ULTIMATE LIFE
PARTS CARDS

Important Instructions

This log book must remain with the APU and accompany the APU to Overhaul or Exchange. A complete record of APU operation must be entered in accordance with the instructions below.

1. Make an entry for each day of regular operation, or each period of intermittent operation.
2. On every entry, show total accumulated hours of operation (hourmeter reading or computation) and total accumulated APU starts (start-counter reading or computation). If estimated add suffix "est".
3. Record any unusual condition noticed during operation (for example: low oil pressure, high EGT, etc.).
4. List any repairs, adjustments, or maintenance performed (including oil added or changed and type of oil).
5. Note all scheduled inspections performed and any abnormalities found.
6. Record part numbers and serial numbers, if any, of major parts replaced.
7. Date and sign each entry.

For assistance with operational or maintenance problems, contact the Honeywell Aerospace Service Representative in your area.

Additional log books can be obtained through Honeywell Aerospace Customer Support Department.

APU DATA

APU
SERVICE RECORD

AIRWORTHINESS
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BULLETINS

ULTIMATE LIFE
PARTS CARDS

APU Data

Delivery Date _____

Model No. 131-9(A) Serial No. P-2888 Total APU Weight 353.1 lbs

See applicable technical manuals for leading particulars.

This se

353.1 lbs

AUXILIARY POWER UNIT APU SERVICE RECORD

This section contains pages for recording APU hours, cycles and maintenance actions.

APU
SERVICE RECORD

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APU SERVICE RECORD

DESCRIPTION OF INSPECTIONS, REPAIRS AND OVERHAULS

Mechanic must endorse all inspections and repairs with name, rating and certificate number.

DATE	ACCUMULATIVE TOTALS				DESCRIPTION OF WORK PERFORMED
	HOURS		CYCLES		
	SINCE NEW	SINCE O/H	SINCE NEW	SINCE O/H	
8 JAN 05	Ø	—	Ø	—	3800708-1 NEW PRODUCTION UNIT P-2888
					SERIES 8 CHANGE NONE
					L. Henrich DA H318 6TH
20.01.05	Ø	Ø	Ø	Ø	INSTALLED IN AC 2402 DA H318 usage
20.01.05	Ø	Ø	Ø	Ø	FILLED WITH AEROSHELL TUR-
					BINE OIL 560 DA H318 usage G-EZNM
					A/C FH: 0 A/C CY: 0
	6267		12739		
06. Jul '08	6462		4719		APU removed from A/C HSN 2402 G-EZNM
					Removal Reason: excessive oil consumption reached
					limit, no external leak
					A/C FH: 11197 A/C CY: 7646
					SR Technics Engineering / TUE B CH-8058 Zürich-Flughafen
					Michael Nyffeler SR Technics 111694-00
					TOTALS TO DATE

AIRWORTHINESS
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APU Service Record

Honeywell Aerospace GmbH Frankfurter Straße 41-65 65479 Raunheim, Germany		Engine Type: 131-9(A)		Honeywell	
R/O:	16Z00024	P/O:	73250883	Date:	21.08.2008
P/N:	3800708-1	S/N:	P-2888	Series:	8
TSN:	6162 6267 (G 66)	TSO:	N/A	TSR:	0
CSN:	4719 12739 (G 66)	CSO:	N/A	CSR:	0
Engine has been:					
☒	Inspected	---	HSI		
☒	Repaired	---	Periodic Checks		
☐	Overhauled	---	Repair As Neccesary		
☒	Modified	---	Workscope		
☒	Full Performance Tested	---	P & M Check		
☐	Functional Tested	---	Hourmeter Reading		
Certificate/Approval Ref. No.:		PCA approval No.: AMO-152F		GCAA approval No.: AMO/170/06	
EASA approval No.: DE.145.0022		TCCA approval No.: 898-02			
FAA approval No.: QJ1Y428K		Oman approval No.: AWR/263/GMBH-071/92			
Notes: NO AD'S APPLICABLE. MEDIUM REPAIR WORKSCOPE AND AMP TASKS IAW MWC841-1319A DATED 05/11/2007 PERFORMED. SPECIAL INSPECTION REQUIREMENTS PERFORMED, REFER TO THE ATTACHED FORM QS1339/2006 FOR DETAILS.					
  					

Form QS 1080/2000 AZ: 04; 07.11.2005

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DATE

DESCRIPTION OF INSPECTIONS, REPAIRS AND OVERHAULS

Mechanic must endorse all inspections and repairs with name, rating and certificate number.

Honeywell Frankfurt 65479 Ra	
R/O:	16Z0
P/N:	3800
TSN:	7160
CSN:	1535
X	Inspe
X	Repa
---	Over
---	Modif
X	Teste
Certificate/Appro	
EASA approval No.	
FAA approval No.:	
Notes	NO AD'S REPAIR WORKSC INSPECTION REQ

Form QS 1080/200C

APU Service Record

Honeywell Aerospace GmbH
Frankfurter Straße 41-65
65479 Raunheim, Germany

Engine Type:

131-9(A)

Honeywell

R/O: 16Z00060

P/O: 73252297

Date: 26.08.2009

P/N: 3800708-1

S/N: P-2888

Series: 8

TSN: 7160

TSO: N/A

TSR: 0

CSN: 15358

CSO: N/A

CSR: 0

Engine has been:

X Inspected

--- HSI

X Repaired

--- Overhauled

--- Modified

X Tested

--- Hourmeter Reading

Certificate/Approval Ref. No.:

EASA approval No.: DE.145.0022

FAA approval No.: QJ1Y428K

PCA approval No.: AMO-152F

TCCA approval No.: 898-02

GCAA approval No.: AMO/170/06

CAA approval No.: ATR/8/5.65

DGCAM approval No.: AWR/263/GMBH-071/92

ECAA approval No.: CAI/HONEYWELL/AS/01/96

Notes NO AD'S APPLICABLE.

REPAIR WORKSCOPE AND AMP TASKS IAW MWC841-1319A, REV.1, DATED 02/04/2008 PERFORMED.
INSPECTION REQUIREMENTS PERFORMED, REFER TO THE ATTACHED FORM QS1339/2006 FOR DETAILS.

SPECIAL

Signature / Stamp

Form QS 1080/2000 ÄZ: 06; 08.10.2008

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ULTIMATE LIFE
PARTS CARDS

61 G-EZBN

452

Nyffeler
Technics
1694-00

3061 G-EZBN

found oil on

: 4912

Nyffeler
Technics
1694-00

TE

APU SERVICE RECORD

DESCRIPTION OF INSPECTIONS, REPAIRS AND OVERHAULS

Mechanic must endorse all inspections and repairs with name, rating and certificate number.

DATE	ACCUMULATIVE TOTALS				DESCRIPTION OF WORK PERFORMED
	HOURS		CYCLES		
	SINCE NEW	SINCE O/H	SINCE NEW	SINCE O/H	
11 Sep '03	7160		15357		APU installed on A/C MSN 2245 HB-JZI A/C FH: 16097 A/C CY: 14231



Michael Nyffeler
 SR Technics
 111694-00

SR Technics contract ended as per 31 January 2010.

Log book closed and returned to Easyjet.

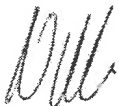
Date	APU			A/C		
	S/N	TSN	CSN	Reg	FH	CY
31 January 2010	P-2888	7630	17201	HB-JZI	17134	15166

Stamp



Engineering / OSSB
CH-8058 Zürich-Flughafen

Signature



TOTALS TO DATE

DATE _____

Check:.....E35

File Reference:.....

Carried out IAW A1

at APU TSN:.....70

at Airframe TAH:...

Technical Records §

Check:.....E36..

File Reference:.....

Carried out IAW AN

at APU TSN: 79

at Airframe 2420....

Technical Records S

PU TSN:.....79
rframe: A.....
nical records S

APU SERVICE RECORD

DESCRIPTION OF INSPECTIONS, REPAIRS AND OVERHAULS

Mechanic must endorse all inspections and repairs with name, rating and certificate number.

DATE	ACCUMULATIVE TOTALS				DESCRIPTION OF WORK PERFORMED
	HOURS		CYCLES		
	SINCE NEW	SINCE O/H	SINCE NEW	SINCE O/H	
Check:.....E37..... on CRS Date: 04-Aug-10.....					
File Reference:.....HBIZI-030810.....					
Carried out IAW AMP Reference:.....EZY/A320F/02 Iss No:.....2..					
at APU TSN:.....8249..... / CSN:.....19578.....					
at Airframe TAH:.....18539 / TAC:.....16368.....					
Technical Records Signature: P-2888 <i>[Signature]</i>					CARTWRIGHT EZY/TR/069
Check:.....E38..... on CRS Date: 28-Sep-10.....					
File Reference:.....HBIZI/L-270910.....					
Carried out IAW AMP Reference:.....EZY/A320F/02 Iss No:.....2..					
at APU TSN:.....8480..... / CSN:.....20330.....					
at Airframe TAH:.....19022 / TAC:.....16778.....					
Technical Records Signature: P-2888 <i>[Signature]</i>					YOUNG EZY/TR/041
Check:.....E39..... on CRS Date: 26-Nov-10.....					
File Reference:.....HBIZI/L-251110.....					
Carried out IAW AMP Reference:.....EZY/A320F/02 Iss No:.....2..					
at APU TSN:.....8653..... / CSN:.....21051.....					
at Airframe TAH:.....19426 / TAC:.....17134.....					
Technical Records Signature: P-2888 <i>[Signature]</i>					PORTMAN EZY/TR/028
					TOTALS TO DATE

DATE
Check:.....
File Referenc
Carried out L
at APU TSN:
at Airframe T
Technical Re
Check:.....
File Referenc
Carried out L
at APU TSN:
at Airframe T
Technical Re
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Carried out l
at APU TSN
at Airframe '
Technical R

APU SERVICE RECORD

DESCRIPTION OF INSPECTIONS, REPAIRS AND OVERHAULS

Mechanic must endorse all inspections and repairs with name, rating and certificate number.

DATE	ACCUMULATIVE TOTALS				DESCRIPTION OF WORK PERFORMED
	HOURS		CYCLES		
	SINCE NEW	SINCE O/H	SINCE NEW	SINCE O/H	
Check:.....E40.....	on CRS Date: 28-Jan-11				CARTWRIGHT EZY/TR/069
File Reference:.....	HBIZIL-270111				
Carried out IAW AMP Reference:.....	EZY/A320F/02. Iss No:.....2.				
at APU TSN:.....8846.....	/ CSN:.....21716				
at Airframe TAH:.....19792	/ TAC:.....17466				
Technical Records Signature:.....	P-2888 				
Check:.....E41.....	on CRS Date: 30-Mar-11				PORTMAN EZY/TR/028
File Reference:.....	HBIZIL-290311				
Carried out IAW AMP Reference:.....	EZY/A320F/02. Iss No:.....2.				
at APU TSN:.....9056.....	/ CSN:.....22588				
at Airframe TAH:.....20288	/ TAC:.....17907				
Technical Records Signature:.....	P-2888 				
Check:.....E42.....	on CRS Date: 31-May-11				PORTMAN EZY/TR/028
File Reference:.....	HBIZIL-300511				
Carried out IAW AMP Reference:.....	EZY/A320F/02. Iss No:.....2.				
at APU TSN:.....9234.....	/ CSN:.....23388				
at Airframe TAH:.....20797	/ TAC:.....18359				
Technical Records Signature:.....	P-2888 				
					TOTALS TO DATE

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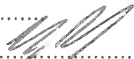
ULTIMATE LIFE
PARTS CARDS

O DATE

APU SERVICE RECORD

DESCRIPTION OF INSPECTIONS, REPAIRS AND OVERHAULS

Mechanic must endorse all inspections and repairs with name, rating and certificate number.

DATE	ACCUMULATIVE TOTALS				DESCRIPTION OF WORK PERFORMED
	HOURS		CYCLES		
	SINCE NEW	SINCE O / H	SINCE NEW	SINCE O / H	
Check:.....E43.....	on CRS Date:.....30-Jul-11.....				
File Reference:.....	HBJZ/L-280711.....				
Carried out IAW AMP Reference:.....	EZY/A320F/02.. Iss No:....2..				
at APU TSN:.....9470.....	/ CSN:.....24263.....				
at Airframe TAH:.....21320.....	/ TAC:.....18821.....				
Technical Records Signature:.....	P-2888 				
Check:.....E44.....	on CRS Date:.....27-Sep-11.....				
File Reference:.....	HBJZ/L-260911.....				
Carried out IAW AMP Reference:.....	EZY/A320F/02.. Iss No:....2..				
at APU TSN:.....9727.....	/ CSN:.....25138.....				
at Airframe TAH:.....21833.....	/ TAC:.....19287.....				
Technical Records Signature:.....	P-2888 				
Check:.....E45.....	on CRS Date:.....30-Nov-11.....				
File Reference:.....	HBJZ/L-291111.....				
Carried out IAW AMP Reference:.....	EZY/A320F/02.. Iss No:....2..				
at APU TSN:.....9920.....	/ CSN:.....25901.....				
at Airframe TAH:.....22247.....	/ TAC:.....19664.....				
Technical Records Signature:.....	P-2888 				
					TOTALS TO DATE

[illegible]

APU SERVICE RECORD

DESCRIPTION OF INSPECTIONS, REPAIRS AND OVERHAULS

Mechanic must endorse all inspections and repairs with name, rating and certificate number.

DATE	ACCUMULATIVE TOTALS				DESCRIPTION OF WORK PERFORMED
	HOURS		CYCLES		
	SINCE NEW	SINCE O / H	SINCE NEW	SINCE O / H	
Check:.....P36.....	on CRS Date: 02-Feb-12.....				
File Reference:.....	HBJZIL-010212.....				
Carried out IAW AMP Reference:..EZY/A320F/02.. Iss No:..2..					
at APU TSN:.....10110.....	/ CSN:.....26620.....				
at Airframe TAH:.....22622..	/ TAC:.....20018.....				
Technical Records Signature:.....P-2888.....					
01-MAR-2012	10193		26881		
APU Removed from A/C MSN:.....2245..... Regn:.....HB-JZI.....					
Reason: Oil consumption above AMM limits.....					
.....					
at APU TSN:.....10193..... / CSN:.....26881.....					
at Airframe TAH:.....22812.. / TAC:.....20194.....					
on Date: 01-Mar-12..... File Reference:HBJZIL-290212.....					
Technical Records Signature:.....P-411.....					
TOTALS TO DATE					

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WILSON
EZY/TP/013

APU Service Record			
Honeywell		Engine Type: 131-9(A)	
R/O: 311311778		P/O: R7009912	
P/N: 3800708-1		S/N: P-2888	
TSN: 10193,83		TSO: N/A	
CSN: 26881		CSO: N/A	
Engine has been:			
Inspected		--- HSI	
Repaired		---	
Overhauled		---	
Modified		---	
Tested		---	
Certificate/Approval Ref. No.:			
EASA approval No.: DE 145.0022 FAA approval No.: Q11V428K GACA approval No.: AMO-152F TCQA approval No.: 898-02			
Notes: NO EASA OR FAA AD'S APPLICABLE MEDIUM REPAIR WORKSCOPE AND AMP TASKS IAW MW/C841-1319A, REV.2, DATED 9/8/2010 PERFORMED. SPECIAL INSPECTION REQUIREMENTS PERFORMED, REFER TO THE ATTACHED FORM Q1339/2006 FOR DETAILS.			
Signature / Stamp			

Signature / Stamp

[illegible]

X	Inspected		---	HSI		Engine has been:
X	Repaired					
---	Overhauled					
X	Modified					
X	Tested		---			
		Hourmeter Reading				

P/O:	311311778	P/O:	R7009912	Date:	11.04.2012
P/N:	3800708-1	S/N:	P-2888	Series:	8
T/SN:	10193,83	T/SO:	N/A	TSR:	0
CSN:	26881	CSO:	N/A	CSR:	0

Honeywell

APU Service Record

	DATE	S/N
Check:.....EOL Pos		
File Reference:....		
Carried out IAW		
at APU TSN:.....		
at Airframe TAH		
Technical Record		
Check:.....EOL Pos		
File Reference:....		
Carried out IAW		
at APU TSN:.....		
at Airframe TAH		
Technical Records		

honeywell

1.04.2012

approval No. ATR/8/5.65
IM approval No. AWR/263/GMBH-071/92
approval No. CAMA/AMO/051

2. SPECIAL INSPECTION

379

Mechanic must endorse all inspections and repairs with name, rating and certificate number.

DATE	ACCUMULATIVE TOTALS				DESCRIPTION OF WORK PERFORMED
	HOURS		CYCLES		
	SINCE NEW	SINCE O/H	SINCE NEW	SINCE O/H	
9 May 2012	10193		26881		APU Installed onto A/C MSN:.....2251 Regn:.....G-EZEP..... at APU TSN:.....10193..... / CSN:.....26881..... at Airframe TAH:.....26690..... / TAC:.....15865..... on Date: 09-May-12..... File Reference:GEZEP/L-080512..... Technical Records Signature:..... <i>Ph. L.</i>

Check:.....EOL (inc. E51)..... on CRS Date:.....02-Jun-12.....

File Reference:.....GEZEP/H-12.....

Carried out IAW AMP Reference:.....EZY/A320F/02 Iss No:.....2..

at APU TSN:.....10240..... / CSN:.....27028.....

at Airframe TAH:.....26807..... / TAC:.....15934.....

Technical Records Signature:.....*[Signature]*.....
P-2888

MARSHALL
EZY/TR/001

Check:.....EOL Post Demo..... on CRS Date:.....29-Jun-12.....

File Reference:.....GEZEP/H-12-3.....

Carried out IAW AMP Reference:.....EZY/A320F/02 Iss No:.....2..

at APU TSN:.....10250..... / CSN:.....27045.....

at Airframe TAH:.....26812..... / TAC:.....15936.....

Technical Records Signature:.....*[Signature]*.....
P-2888

MARSHALL
EZY/TR/001

TOTALS TO DATE

WILSON
EZY/TR/013

WILSON
EZY/TR/013

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DESCRIPTION OF INSPECTIONS, REPAIRS AND OVERHAULS

Mechanic must endorse all inspections and repairs with name, rating and certificate number.

DESCRIPTION OF INSPECTIONS, REPAIRS AND OVERHAULS

Mechanic must endorse all inspections and repairs with name, rating and certificate number.

[illegible]

AIRWORTHINESS DIRECTIVES

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R. Soto