



# MINIPACK

Model No. | GTCP131-9A  
Part No. | 3800708-1  
Serial No. | P-4986

CONDITION	Serviceable	TSN	9,843
TAGGED BY	Piedmont	CSN	21,541
TAG DATE	05/22/2024	TSI/TSR	0
TRACE TO	Maldivian	CSI/CSR	0
LOCATION	FLL		

## LLPs

T1 Disk	27,705	CR
T2 Disk	27,705	CR
Impeller	8,459	CR
Tie Shaft	9,846	CR

## Additional Information:

INCLUDED	GENERATOR
<input checked="" type="checkbox"/> BOX/STAND	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

PRESERVATION  
☐ 6 MO ☐ 12 MO ☒ 24 MO

APPLICATION	AVAILABILITY
A320	Immediate

TRANSACTION TYPE  
☒ LEASE ☒ EXCHANGE  
☒ OUTRIGHT

More about your APU



## Non Incident Statements

# Engine Disk Report

PART NUMBER: 3800708-1

INSTALLED ON A/C: 02347

POS:

DATE REMOVED: 24/03/2024

SERIAL NUMBER: P-4986

DATE INSTALLED: 28/10/2023

HOURS AT INSTALLATION: 8806:46

HOURS ON WING: 0:00

ENGINE TOTAL HOURS: 9843:00

CYCLES AT INSTALLATION: 20692

CYCLES ON WING: 0

ENGINE TOTAL CYCLES: 21541

Position	Pn Description	Part Number	Serial Number	Limit Hours	Limit Cycles	Actual Hours	Actual Cycles	Remain Hours	Remain Cycles
NHA PN: 3800708-1		NHA SN: P-4986							
APU-PS	POWER SECTION	49-21-00	APU-PS-P-4986			9843 : 00	21541		
NHA PN: 49-21-00		NHA SN: APU-PS-P-4986							
	STAGE 1 TURBINE ROTOR	3840310-4	18-156101-08008		30000	1822 : 19	2295		27705
APU-PS01	COMPRESSOR IMPELLER	3822391-6	12-162053-49632		30000	8464 : 07	20154		9846
APU-PS02	TURBINE SHAFT	3822504-3	11P41360		30000	9843 : 46	21541		8459
APU-PS03	2ND STAGE TURBINE ROTOR	3840165-9	19-156101-00133		30000	1822 : 19	2295		27705
APU-PS05	COMPRESSOR DRIVEN	3822400-5	11-162053-40763		30000	9843 : 46	21541		8459

*Signature*





## Non Incident Statements



	<b>NON-INCIDENT STATEMENT</b> ENGINEERING DEPARTMENT	Form No:	Q2/CAMO/033
		Page:	1 of 3
		Rev:	1
		Date:	21 July 2022

Aircraft Type / MSN : A320-214 / 02347      Aircraft Registration Number : 8Q-IAN

Part Number : 3800708-1  
 Serial Number : P-4986  
 Description : AUXILLARY POWER UNIT

INSTALLATION DETAILS	
Time Since New	8806.77
Cycles Since New	20692
Time Since Repair	0
Cycles Since Repair	0
Date Installed	28-Oct-23
Status	REPAIRED





REMOVAL DETAILS	
Time Since New	9843.00
Cycles Since New	21541
Time Since Repair	1036.23
Cycles Since Repair	849
Date Removed	24-Mar-24
Status	SERVICEABLE
Reason for Removal	LEASE RETURN

Note:

- Above unit was installed on engine from date 28-Oct-23 till date 24-Mar-24
- Total Hours utilized during this period 1036.23 Hours
- Total Cycles utilized during this period 849 Cycles

Declaration

This is to confirm, to our best knowledge, that the aforesaid unit had not been involved in any accident or incident during the period of utilization mentioned above.

Internal Endorsement	Approval
Signature:  	Signature:  
Name: Mohamed Hassan	Name: Abdul Hadee Aboobakuru
Title: Director Engineering	Title: General Manager Quality
Date: 11 April 2024	Date: 18 April 2024



## AD/SB STATUS

EXHIBIT C – Non AD / AB Statement

**Non-AD / SB Statement**

Date: 30<sup>th</sup> April 2024

To Whom it May Concern:

Island Aviation Services Limited, hereby confirms that no Service Bulletins or AD-related work implemented or performed on the equipment specified below:

APU Model Number	131-9A
APU Part Number	3800708-1
APU Serial Number	P-4986

	Installation	Removal
Date	28-Oct-23	24-Mar-24
Total Time Since New	8806.77	9843.00
Total Cycles Since New	20692	21541

Signature: 

Name: Ibrahim Shiyaz

Title: Head of CAMO



Current 8130/EASA  
FORM 1

1. Approving Civil Aviation Authority/Country:  <b>FAA/UNITED STATES</b>		2.  <b>AUTHORIZED RELEASE CERTIFICATE</b> <b>FAA FORM 8130-3, AIRWORTHINESS APPROVAL TAG</b>		3. Form Tracking Number: <b>AN31356</b> <b>52224130931</b>	
4. Organization Name and Address: <b>Piedmont Aviation Component Services</b> <b>7102 Cessna Drive</b> <b>Greensboro, NC 27409</b> <b>USA</b> <b>Ph: 336-776-6300, Fax: 336-776-6301</b>		5. Work Order, Contract or Invoice Number:  <b>102057</b>			
<b>Repair Station No: QKPR504X. EASA.145 Certificate No. EASA.145.5257</b>					
6. Item	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status/Work:
1	GTCP131-9A APU	3800708-1	1.00	P-4986	REPAIRED
12. REMARKS Pertinent details of this work are on file at this repair station under work order AN31356  Repaired in accordance with Honeywell Manual 49-27-29 Rev. 23, Dated 23 Nov. 2023. Complied with Service Bulletin 49-8028 for preservation and storage. No Airworthiness Directives apply at this time.          TSN: 9,843:00 TSO: 9,843:00 TSR: 0:00 TSHSI: N/A CSN: 21,541 CSO: 21,541 CSR: 0 All Time/Cycle Information Supplied by Customer Certifies that the work specified in block 11 and 12 was carried out in accordance with EASA Part 145 and in respect to that work the aircraft component is considered ready for release to service under EASA Acceptance Certificate EASA 145.5257.					
13a. Certifies the items identified above were manufactured in conformity to:  <input type="checkbox"/> Approved design data and are in a condition for safe operation.  <input type="checkbox"/> Non-approved design data specified in Block 12			14a <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service <input checked="" type="checkbox"/> 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: 	
13d. Name (Typed or Printed):		13e. Date (dd/mm/yyyy):		14c. Approval/Certificate No:  <b>QKPR504X</b>	
				14d. Name (Typed or Printed):  <b>Brad Hendrix</b>	
				14e. Date (dd/mm/yyyy):  <b>22-May-2024</b>	

**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(s)/propeller(s)/article(s).

Where the user/installer 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.

Statement 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.



Shop Visit



## **Receiving Inspection Findings:**

**Incoming APU Times and Cycles:** Times removed from Engine disk report.

1. Log Book received ☐ No ☒ Yes
2. Time Since New: 9,843 Cycles Since New: 21,541  
Time Since Overhaul: 9,843 Cycles Since Overhaul: 21,541  
Time Since Repair: 1,066 Cycles Since Repair: 887

**Life Limited Parts (Received):** Information removed from Engine disk report.

Description	Part No.	Serial No.	TSN	CSN	TSO	CSO	Cycle Limit	Cycles Remaining
1 <sup>st</sup> Stage Turbine Disk	3840310-4	18-156101-08008	1,822:19	2,295	1,822:19	2,295	30,000	27,705
2 <sup>nd</sup> Stage Turbine Disk	3840165-9	19-156101-00133	1,822:19	2,295	1,822:19	2,295	30,000	27,705
Compressor Rotor	3822391-6	12-162053-49632	8,464:07	20,154	1,822:19	2,295	30,000	9,846
Shaft, Turbine	3822504-3	11P41360	9,843:46	21,541	1,822:19	2,295	30,000	8,459

## **Customer's Reason for Removal:**

1. Reason For Removal: Test and recertification.
2. Warranty Requested: ☐ Yes ☒ No
3. Customer Requested Work scope: Test and recertification.

Comments: \_\_\_\_\_

## **Shipping Container:**

1. Container made of: ☒ Wood ☐ Cardboard ☐ Metal  
☐ Other
2. Condition of container: ☒ No Damage ☐ Damaged
3. Reusable: ☒ Yes ☐ No

Comments: No discrepancies noted.



### QEC / Components when received:

- |                          |  |  |
|--------------------------|--|--|
| 1. Status of Components: | <input type="checkbox"/> Complete            | <input checked="" type="checkbox"/> Missing Components |
| 2. Status of QEC:        | <input checked="" type="checkbox"/> Complete | <input type="checkbox"/> Missing QEC                   |

Comments: Received less AC generator.

(Must list missing items by part number and description if known)

### Pre-Induction Inspection Findings:

#### APU External Condition when received:

- |               |   |                                  |   |
|---------------|---|----------------------------------|---|
| 1. Condition: | <input checked="" type="checkbox"/> No Damage | <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> Clean     |
|               | <input type="checkbox"/> Dirty                | <input type="checkbox"/> Oily    | <input type="checkbox"/> Other (see comments) |

Comments: No discrepancies noted.

#### APU Rotation:

- |   |                                |                                |                                 |
|---|--------------------------------|--------------------------------|---------------------------------|
| 1. <input checked="" type="checkbox"/> Smooth | <input type="checkbox"/> Rough | <input type="checkbox"/> Tight | <input type="checkbox"/> Seized |
|---|--------------------------------|--------------------------------|---------------------------------|

Comments: No discrepancies noted.

#### Fan Gear Inspection:

- |               |  |                                  |
|---------------|--|----------------------------------|
| 1. Gear wear: | <input checked="" type="checkbox"/> Normal | <input type="checkbox"/> Damaged |
|---------------|--|----------------------------------|

Comments: No discrepancies noted.

(If Damaged Describe Damage)





### Starter Brush Inspection:

1. Brush Wear Indicator: ☒ Normal ☐ Excessive Wear

Comments: No discrepancies noted.

### Starter Clutch Inspection:

1. Clutch: ☒ Engages Normal ☐ Does not Engage ☐ Damaged  
2. Bearings: ☒ Normal ☐ Rough ☐ Damaged

Comments: No discrepancies noted.

### Oil System Evaluation:

#### A. Oil Scavenge Pump

1. If unit is received with oil, is it serviced properly? ☐ No Oil ☒ No ☐ Yes  
2. Oil Condition: ☐ No Oil ☒ Normal ☐ Contaminated  
3. Oil Filter Contamination: ☒ N/A ☐ No Filter ☐ Brass ☐ Steel  
☐ Heavy ☐ Moderate ☐ Light

#### B. Generator Scavenge Filter

1. Oil Condition: ☐ No Oil ☒ Normal ☐ Contaminated  
2. Oil Filter Contamination: ☒ N/A ☐ No Filter ☐ Brass ☐ Steel  
☐ Heavy ☐ Moderate ☐ Light

Comments: No discrepancies noted.

**(Note: Do not reinstall Oil Filter, loosely install Oil Filter Cap)**

### Fuel System Evaluation:

1. Fuel Filter Check: ☒ Normal ☐ Contaminated ☐ Not Received

Comments: No discrepancies noted.

**(Note: Fuel filter must be replaced at each shop visit)**



## Magnetic Chip Detectors:

1. Gearbox Chip Detector: ☒ Normal ☐ Contaminated

Comments: No discrepancies noted.

## A.P.U. Borescope:

Component	Acceptable	Damaged	Comments
1. 1 <sup>st</sup> Stg Compressor Impeller:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>No discrepancies noted.</u>
2. Load Compressor Impeller:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>No discrepancies noted.</u>
3. Combustion Chamber:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>No discrepancies noted.</u>
4. Inspect APU Inlet for Foreign Objects:	Pass: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

NOTES: No discrepancies noted.

*(Note: Not required if affected section is in shop for Heavy Maintenance)*

## Pre-Maintenance Test Evaluation:

- ☐ APU was not pre-tested. See notes below.
- ☒ APU was pre-tested. APU passed pre-test and can be returned to service.
- ☐ APU was pre-tested. APU failed pre-test and requires further maintenance.

NOTES: \_\_\_\_\_



## **ANALYTICAL REPORT:**

### **Findings & Evaluation:**

**1. Gearbox Condition:**

- |  |  |   |                                   |
|--|--|---|-----------------------------------|
| <input type="checkbox"/> Metal Contamination | <input type="checkbox"/> Bearing Failure | <input type="checkbox"/> Gear Failure         | <input type="checkbox"/> Oil Leak |
| <input type="checkbox"/> High Hours/Cycles   | <input type="checkbox"/> Requires Mod    | <input checked="" type="checkbox"/> No Damage |                                   |
| <input type="checkbox"/> Other: _____        |  |   |                                   |

**2. Gearbox Recommended Work scope:**

- |  |  |                                   |
|--|--|-----------------------------------|
| <input type="checkbox"/> Light Repair                | <input type="checkbox"/> Medium Repair | <input type="checkbox"/> Overhaul |
| <input checked="" type="checkbox"/> Not Disassembled |  |                                   |

**3. Power Section Condition:**

- |   |  |  |  |
|---|--|--|--|
| <input type="checkbox"/> FOD                  | <input type="checkbox"/> Bearing Failure | <input type="checkbox"/> Blade Shift       | <input type="checkbox"/> Rub Damage                |
| <input type="checkbox"/> Oil Leak             | <input type="checkbox"/> High EGT        | <input type="checkbox"/> High Hours/Cycles | <input type="checkbox"/> Hot Section Deterioration |
| <input checked="" type="checkbox"/> No Damage |  |  |  |
| <input type="checkbox"/> Other: _____         |  |  |  |

**4. Power Section Recommended Work scope:**

- |  |  |                                   |
|--|--|-----------------------------------|
| <input type="checkbox"/> Light Repair                | <input type="checkbox"/> Medium Repair | <input type="checkbox"/> Overhaul |
| <input checked="" type="checkbox"/> Not Disassembled |  |                                   |

**5. Line Replaceable Units:**

- |  |
|--|
| <input type="checkbox"/> Route selected LRU's for test and repair as necessary |
| <input type="checkbox"/> Route all units for test and repair as necessary      |
| <input checked="" type="checkbox"/> No work required                           |



## Conclusion and Analysis:

### 1. Reason for Removal Confirmed:

☐ No ☒ Yes

Comments: \_\_\_\_\_

### 2. Probable Cause:

- ☒ Scheduled Removal ☐ Due HSI ☐ Excessive Heat Damage ☐ FOD  
☐ Bearing Failure ☐ Blade Failure ☐ Improper Maintenance ☐ High Hours/Cycles  
☐ Oil Leak  
☒ Other: APU returning from lease.

### 3. Evidence of Probable Cause:

Comments: Customer RO.

The following items were found damaged during the inspection of the APU.

Description	Part No.	Serial No.	Remarks
Filter	2685336	N/A	100% Replaceable

## APU Recommended Work scope:

### 1. Auxiliary Power Unit Recommended Work scope:

- ☒ Light Repair  
☐ Medium Repair  
☐ Overhaul  
☐ Beyond Economical Repair  
☐ Return As Is  
☒ Functional Inspect and Test  
☐ Other: \_\_\_\_\_



### Service Bulletin Compliance/Status:

S.B. Number	Rev. No.	Date	Description	Change No.	Status
49-8028	3	5 Nov. 2020	Long preservation and storage.	-----	CW

### Airworthiness Directives Status:

A.D.	Amendment	Description	Status
		None apply.	

### Designated Engineering Representative (DER)/ORI Report:

Part Name	Part Number	Revision #	Series	DER/ORI#	Implement Date	Installation Date



# Piedmont

Aviation  
Accessory Report

**CD (Condition) –**    1 = (Overhaul)    2 = (Repair)    3 = (Bench Check)    4 = (Continued Time)    5 = (New)  
                                  FM = (Field Maintenance)    HM = (Heavy Maintenance)

RECEIVED						INSTALLED			
Description	REC	Part Number	Serial Number	RM'D	TECH	Part Number	Serial Number	CD	TECH
Surge Valve	Yes	3291238-2	280	No	JDW			N/A	
Cooling Fan	Yes	3616140-11	P-1196CC	No	JDW			N/A	
Starter	Yes	2704506-4	5967	No	JDW			N/A	
Fuel Control	Yes	441921-5	CUC17622	No	JDW			N/A	
Flow Divider	Yes	692546-4	T#08862	No	JDW			N/A	
Lube Pump	Yes	4131020-4	5127	No	JDW			N/A	
Oil Temp Reg.	Yes	160494-1	LHTKK722	No	JDW			N/A	
Ignition Exciter	Yes	3888058-5	J19370032	No	JDW			N/A	
Oil Level Trans.	Yes	3876330-2	N/A	No	JDW			N/A	
Inlet Guide Vane Actuator	Yes	3886188-3	4298	No	JDW			N/A	
AC Generator	No	NOT	RECEIVED	N/A	JDW			N/A	
Compressor Inlet Sensor	Yes	3876225-2	111121407504	No	JDW			N/A	
Load Compressor Inlet Temp Sensor	Yes	MS28034-1	190146	No	JDW			N/A	
Igniter Plug	Yes	305766-4	17064119	No	JDW			N/A	
DMM	Yes	3876287-1	GE-2052	No	JDW				
Bleed Air Valve	Yes	3291432-2	2323	No	JDW				
Igniter Plug Lead	Yes	3876132-13	N/A	No	JDW			N/A	
Oil Temp Bulb	Yes	MS28034-3	156312	No	JDW			N/A	
LOP Switch	Yes	3876255-2	N/A	No	JDW			N/A	
Thermocouple	Yes	3876271-1	MFR50413-1902508	No	JDW			N/A	
Thermocouple	Yes	3876271-1	MFR50413-1902507	No	JDW			N/A	
Wiring Harness	Yes	3888438-1	N/A	No	JDW			N/A	
Primary Manifold	Yes	3883837-1	N/A	No	JDW			N/A	
Secondary Manifold	Yes	3883836-2	N/A	No	JDW			N/A	

**CD (Condition) –**    1 = (Overhaul)    2 = (Repair)    3 = (Bench Check)    4 = (Continued Time)    5 = (New)



**Life Limited Parts (Installed):** Not accessed this shop visit.

Description	Part No.	Serial No.	TSN	CSN	TSO	CSO	Cycle Limit	Cycles Remaining
1 <sup>st</sup> Stage Turbine Disk								
2 <sup>nd</sup> Stage Turbine Disk								

### APU Corrective Action:

Description	Part No.	Serial No.	Maint. Level Compliance
APU	3800708-1	P-4986	Repair

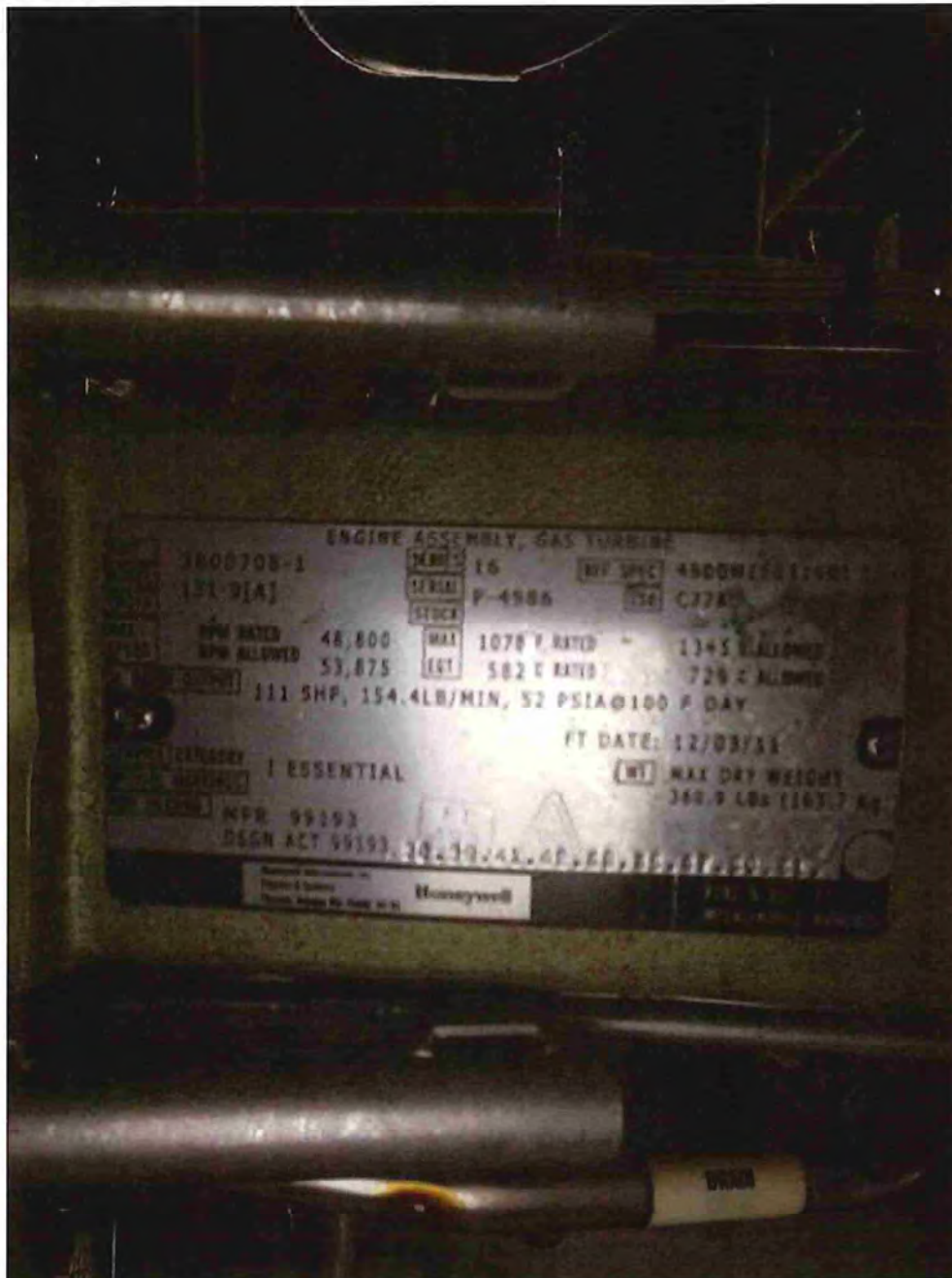
### Preservation Status:

- ☐ Immediate Use (Less than two weeks of storage)
- ☐ Short Term Storage (6 months or less)
- ☐ Long Term Storage (1 year or less)
- ☒ Extended Term Storage (2 years or less)

**NOTE:** Fuel system preserved for long or extended-term storage must be de-preserved in accordance with EM.

Quality Control Approval: Basil Hardy Date: 5/22/2024

## Photo Report:



**Image 1: Data Plate.**





**Image 2:** APU shipping container.



**Image 3:** APU front view.





**Image 4:** APU side view.





**Image 5:** APU aft view.



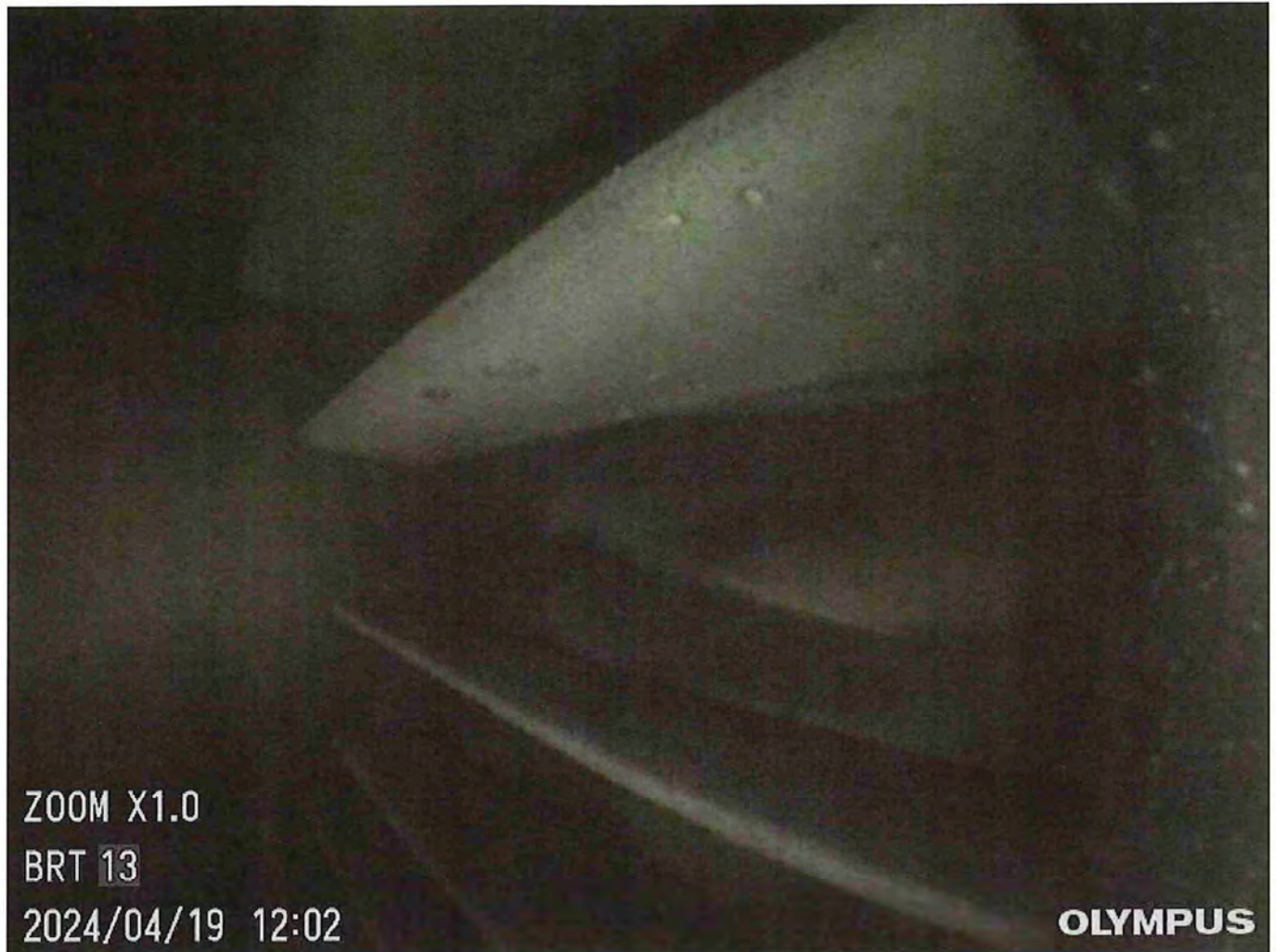


**Image 6:** APU side view.

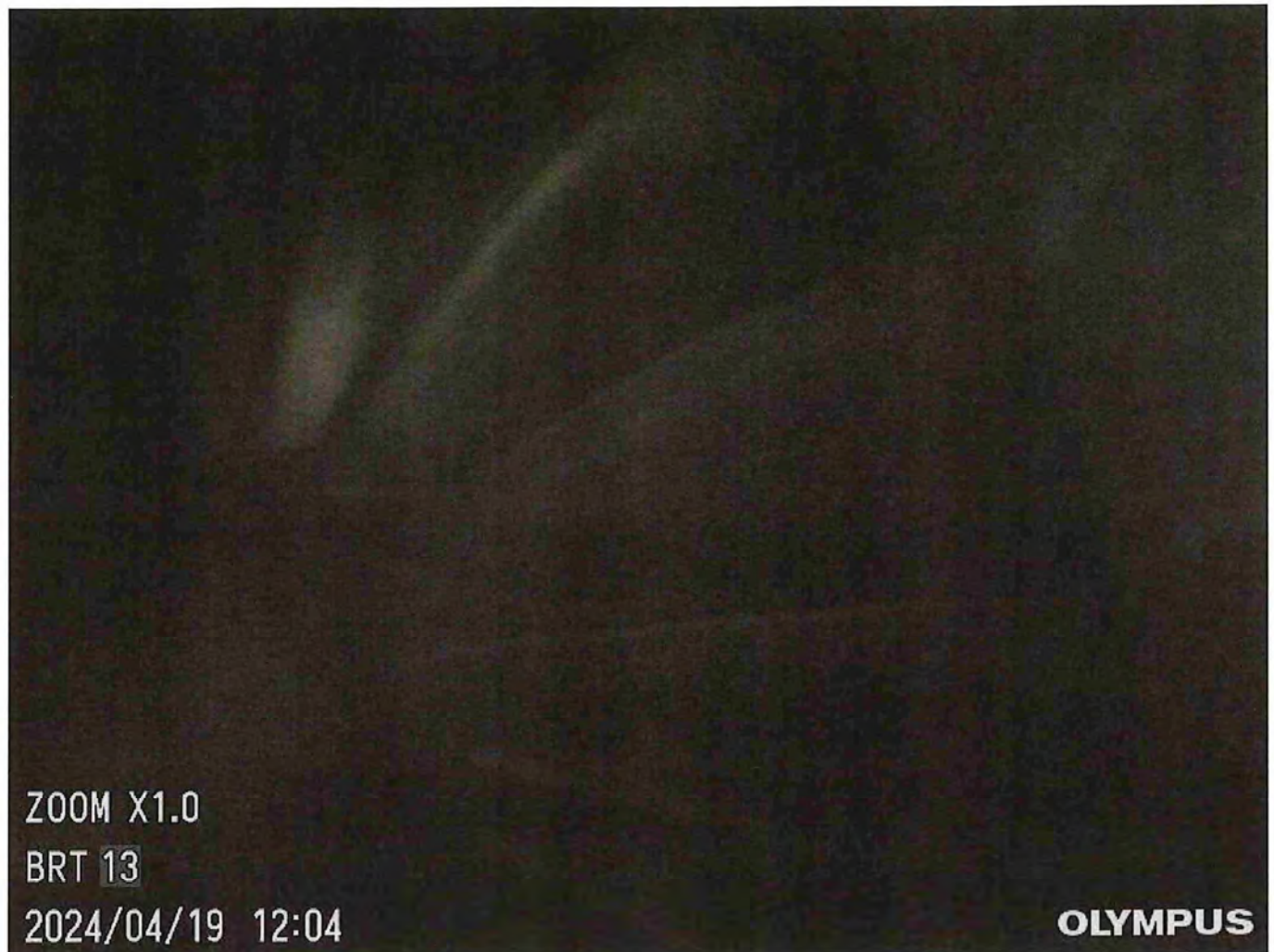


**Image 7: Borescope Pictures: Blade Tips of Load Compressor Impeller.**





**Image 8:** Leading edges of Load Compressor Impeller.



**Image 9:** Leading edges of Engine Compressor Impeller.





**Image 10:** First Stage Stator.



**Image 11:** First Stage Stator.





**Image 12:** First Stage Stator.



## **Appendix A: Test Report**

# Piedmont

Aviation

Piedmont Aviation Component Services

Customer: GATT  
WO # AN31356  
P/N: 3800708-1  
S/N: P-4986  
Model# GTCP131-9A  
Test Cell # 4

## TEST SHEET

### 131 / 331 SERIES

Technician: D. E. James

Date: May 9, 2024

<u>Test/Check</u>	<u>Observation</u>	<u>Requirement</u>	<u>Actual</u>
Functional Test	Turbine Vibration	<u>1.0</u> in./sec.	<u>0.40</u> in./sec.
	Gearcase Vibration	<u>0.65</u> in./sec.	<u>0.38</u> in./sec.
	Cooling Fan Vibration	<u>0.75</u> in./sec.	<u>0.22</u> in./sec.
	Oil Pump Discharge Press.	<u>60-75</u> psig.	<u>66</u> psig.
	Oil Temperature	<u>325</u> °F	<u>213</u> °F
	Full-Load Speed Ck.	<u>48675 - 48925</u> RPM	<u>48790</u> RPM
	Bleed Air Contamination	None Permitted	<u>None</u> Pass
Oil Contamination Check	Check for Contamination	None Permitted	<u>None</u> Pass
Performance Test	Corrected Air Flow		<u>154.4</u> lb./min.
	Corrected Bleed Air Pressure		<u>52.0</u> psia
	Corrected EGT		<u>1096.0</u> °F

Approved by:

*Douglas T. Soloman*

Date:

5/21/2024

## GTCP131-9A APU TEST DATA SHEET

Engine S/N	P-4986	Sample Fuel SG	0.802
Work Order	AN31356	Sample T Fuel (°F)	66
ECB S/N	26-4900-9-0008	LHV (btu/lb)	18500
Oil Type	MIL-PRF-7808	Fuel Type	Jet Fuel
Turbine Vib S/N	33427	Test Type	Repair
Gearbox Vib S/N	33426	Repair Type	Light
Fan Vib S/N	33425	Date	7-May-24

### PERFORMANCE SUMMARY

PARAMETER		UNITS	DATA POINT 0003		DATA POINT 0004	
			2 PACK ECS - 700 HIGH + 83 KW		MES + 54 KW	
			LIMIT	ACTUAL	LIMIT	ACTUAL
PBCOR	BLEED PRESSURE	PSIA	50.2 (3,46) MINIMUM	52	50.1 (3,45) MINIMUM	51.5
WBCOR	BLEED AIRFLOW	LB/MIN	148.9 (67,5) MINIMUM	154.4	N/A	140.6
EGTCOR	EXHAUST GAS TEMPERATURE	°F	1150 (621) MAXIMUM	1096	1145 (618) MAXIMUM	1087
WFCOR	FUEL CONSUMPTION	LB/HR	N/A	278.7	269.0 (122,0) REFERENCE	255.8

NOTE : PERFORMANCE DATA ADJUSTED TO SEA LEVEL, 100F/122F (38C/50C), INSTALLED CONDITIONS. EGTCOR AND WFCOR ARE ALSO CORRECTED TO MINIMUM BLEED PRESSURE. WFCOR IS A REFERENCE-ONLY VALUE

### ECS OFFSET WORKSHEET (Step 8.D.(3))

INITIAL PBCOR	PSIA	51.9
FINAL PBCOR	PSIA	51.9
INITIAL IGV POSITION	°	91.8
FINAL IGV POSITION	°	91.8
ECS_OFFSET ( FINAL IGV DEG - INITIAL IGV DEG )	°	0

### FLOW SENSOR TEST

PARAMETER		STEP	UNITS	LIMITS	VALUE
WBCDNA	FLOW SENSOR TEST	8.E.(8) DATA POINT 0005	LB/MIN	47.6	51.1
				52.3	
WBCDNA	FLOW SENSOR TEST	8.E.(11) DATA POINT 0006	LB/MIN	47.6	51
				52.3	
WC	FLOW SENSOR ACCURACY	8.E.(12)(a)	%	± 5	1.5

### PERFORMED TEST DETAILS

SCV STABILITY TEST	STEP 8.F	STABLE	PASSED
MINIMUM SURGE MARGIN TEST	STEP 8.G	APU SURGE	PASSED
DC POWER START TIME	STEP 8.H.(1)(a)	SECONDS	35
TOTAL NUMBER OF STARTS DURING TEST	---	EA.	7
TOTAL OPERATING TIME DURING TEST	---	HOUR	5.13
APU FAULTS SEEN DURING TEST	---	N/A	0



**GTCP131-9A APU TEST DATA SHEET**

Engine S/N	P-4986	Sample Fuel SG	0.802
Work Order	AN31356	Sample T Fuel (°F)	66
ECB S/N	26-4900-9-0008	LHV (btu/lb)	18500
Oil Type	MIL-PRF-7808	Fuel Type	Jet Fuel
Turbine Vib S/N	33427	Test Type	Repair
Gearbox Vib S/N	33426	Repair Type	Light
Fan Vib S/N	33425	Date	7-May-24

		STEP	8.D.(4)c	8.D.(5)g	8.D.(1)f	8.D.(2)d
		DIGITAL DATA POINT NUMBER	0003	0004	0001	0002
			2 PCKS-700 ECS HIGH	MES	RTL	GEN LOAD
PARAMETERS	UNITS					
PBAR	BAROMETRIC PRESSURE	PSIA	14.25	14.25	14.25	14.25
PINLET	INLET PRESSURE	PSIA	14.25	14.25	14.25	14.25
T1	T1-APU INLET TEMPERATURE (AVG)	°F	84.9	85.7	82	82
TENIVA	UNIT INLET TEMPERATURE (T2)	°F	85.6	85.6	81.1	81.1
POIL	OIL PRESSURE (LUBE PUMP DISCHARGE)	PSIG	65.3	65.6	66.1	65.7
TOIL	OIL TEMP (LUBE PUMP DISCHARGE)	°F	213	206	201	210
PSGBX	GEARBOX PRESSURE-SUMP	inH2O	-3.8	-2.9	5.4	3.2
TOS	GEARBOX TEMPERATURE-SUMP	°F	237	228	221	234
TFUEL	FUEL INLET TEMPERATURE	°F	79.7	81	83.2	82.7
PFUEL	FUEL INLET PRESSURE	PSIG	24.22	24.56	26.04	25.39
VIBGBA	UNIT VIBRATION-GEARBOX	IN/SEC Pk	0.38	0.36	0.32	0.4
VIBTHA	UNIT VIBRATION-TURBINE	IN/SEC Pk	0.15	0.2	0.24	0.21
VIBCFA	UNIT VIBRATION-COOLING FAN	IN/SEC Pk	0.21	0.2	0.2	0.22
XNL	SHAFT SPEED	RPM	48790	48790	48790	48792
PIGV	INLET GUIDE VANE POSITION	°	91.8	91.9	22.1	22.1
PSCV	SURGE CONTROL VANE POSITION	°	90	90	10.2	10.2
PCDFD	COMPRESSOR DISCHARGE STATIC	PSIA	99	98	91.9	95.1
TCDFD	COMPRESSOR DISCHARGE TEMPERATURE	°F	612.7	609.7	587	594
TTDEA	TURBINE DISCHARGE TEMPERATURE #1	°F	1073	1009	730	841
TTDEB	TURBINE DISCHARGE TEMPERATURE #2	°F	1022	976	696	807
EGT	LAB EGT (AVG)	°F	1067	1015	641	719
PS9	EXHAUST STATIC PRESSURE	PSIA	14.17	14.18	14	13.97
PBORFA	BLEED AIR ORIFICE PRESSURE	PSIA	51.5	53.4	N/A	N/A
TBORFA	BLEED AIR ORIFICE TEMPERATURE	°F	382.9	391.4	N/A	N/A
PDBORA	BLEED AIR ORIFICE DELTA PRESSURE	PSID	0.41	0.37	N/A	N/A
WB	BLEED AIRFLOW	LB/MIN	159.1	153	N/A	N/A
WBCDNA	CORRECTED DISCHARGE AIRFLOW	LB/MIN	56.9	53.1	N/A	N/A
PB	BLEED PRESSURE (AVG)	PSIA	53.1	54.9	N/A	N/A
TB	BLEED TEMPERATURE (AVG)	°F	407.5	413.6	N/A	N/A
WF	FUEL FLOW (AVG)	LB/HR	284.8	266.9	168.1	207.1
PWGEN	GENERATOR LOAD - POWER FACTOR = 1.0	KW	68.9	44.9	N/A	80.8
N/A = NOT NEEDED OR APPLICABLE						

**GTCP131-9A APU TEST DATA SHEET**

Engine S/N	P-4986	Sample Fuel SG	0.802
Work Order	AN31356	Sample T Fuel (°F)	66
ECB S/N	26-4900-9-0008	LHV (btu/lb)	18500
Oil Type	MIL-PRF-7808	Fuel Type	Jet Fuel
Turbine Vib S/N	33427	Test Type	Repair
Gearbox Vib S/N	33426	Repair Type	Light
Fan Vib S/N	33425	Date	7-May-24

CALCULATIONS						
		STEP	8.D.(4)c	8.D.(5)g	8.D.(1)f	8.D.(2)d
		DIGITAL DATA POINT NUMBER	0003	0004	0001	0002
PARAMETERS		UNITS	2 PCK-700 ECS HIGH	MES	RTL	GEN LOAD
SHPSL	GENERATOR LOAD AT SEA LEVEL = (PWGEN/0.85) / (PCELL / 14.696)	KW	83.6	54.5	N/A	98
	APU DELTAP/DELTA = (PCELL - PS9) / (PCELL / 14.696)	PSIA	0.08	0.07	N/A	N/A
	BLEED PRESSURE AT SEA LEVEL = PB / (PCELL / 14.696)	PSIA	54.81	56.65	N/A	N/A
DELPB	BLEED PRESSURE LAPSE RATE CORRECTION	PSIA	-1.6	-3.9	N/A	N/A
	INSTALLATION EFFECT ON BLEED PRESSURE	PSIA	-1.2	-1.2	N/A	N/A
PBCOR	BLEED PRESSURE CORRECTED TO SEA LEVEL, 100F (38C), INSTALLED	PSIA	52	51.5	N/A	N/A
	BLEED AIRFLOW AT SEA LEVEL = WB / (PCELL / 14.696)	LB/MIN	164.1	157.9	N/A	N/A
DELWB	BLEED FLOW LAPSE RATE CORRECTION	LB/MIN	-6.2	-14.2	N/A	N/A
	INSTALLATION EFFECT ON WB	LB/MIN	-3.5	-3.1	N/A	N/A
WBCOR	BLEED AIRFLOW CORRECTED TO SEA LEVEL, 100F (38C)	LB/MIN	154.4	140.6	N/A	N/A
DELTB	BLEED TEMPERATURE LAPSE RATE CORRECTION	°F	14.1	34.3	N/A	N/A
	EXCESS PRESSURE CORRECTION ON BLEED TEMPERATURE = (-4.5 * (PBCOR - PBREQ))	°F	-8	-6	N/A	N/A
TBCOR	BLEED TEMPERATURE CORRECTED TO SEA LEVEL, 100F (38C), INSTALLED	°F	413.4	441.4	N/A	N/A
DELEGT	EGT LAPSE RATE CORRECTION	°F	29.1	69.3	N/A	N/A
	APU DELTA P CORRECTION ON EGT = (65 * (PCELL - PS9) / (PCELL / 14.696)	°F	4.91	4.87	N/A	N/A
	INSTALLATION EFFECTS ON EGT	°F	14	14	N/A	N/A
	EXCESS BLEED PRESSURE CORRECTION ON EGT = (-11 * (PBCOR - PBREQ))	°F	-20	-16	N/A	N/A
EGTCOR	EGT CORRECTED TO SEA LEVEL, 100F (38C), INSTALLED, AT PBREQ	°F	1096	1087	N/A	N/A
	SEA LEVEL FUEL FLOW = (WF / PCELL / 14.696) * (FLHV / 18550)	LB/HR	293	274.5	N/A	N/A
DELWF	FUEL FLOW LAPSE RATE CORRECTION	LB/HR	-4.7	-10.9	N/A	N/A
	APU DELTA P CORRECTIONS ON WF = (15 * (PCELL - PS9) / (PCELL / 14.696)	LB/HR	1.13	1.12	N/A	N/A
	INSTALLATION EFFECT ON WF	LB/HR	-2.7	-2.7	N/A	N/A
	EXCESS BLEED PRESSURE CORRECTION ON WF = (-4.4 * (PBCOR - PBREQ))	LB/HR	-7.93	-6.27	N/A	N/A
WFCOR	FUEL FLOW CORRECTED TO SEA LEVEL, 100F (38C), INSTALLED, AT PBREQ	LB/HR	278.7	255.8	N/A	N/A
N/A = NOT NEEDED OR APPLICABLE						



**GTCP131-9A APU TEST DATA SHEET**

Engine S/N	P-4986	Sample Fuel SG	0.802
Work Order	AN31356	Sample T Fuel (°F)	66
ECB S/N	26-4900-9-0008	LHV (btu/lb)	18500
Oil Type	MIL-PRF-7808	Fuel Type	Jet Fuel
Turbine Vib S/N	33427	Test Type	Repair
Gearbox Vib S/N	33426	Repair Type	Light
Fan Vib S/N	33425	Date	7-May-24

**A/C COMPONENTS USED DURING TEST**

COMPONENT	MFR P/N	MFR S/N
ELECTRONIC CONTROL UNIT		
START POWER UNIT		
STARTER CONVERTER UNIT		

**REPLACED LRUs FOR T/S**

COMPONENT	MFR P/N	REMOVED	INSTALLED
		MFR S/N	MFR S/N

**FINDINGS - REMARKS**

**COMPLIANCE**

APU Incoming Date :

Time:

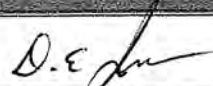

APU Outgoing Date :

Time:

1) We certify that above data are true and correct, and in addition, subject APU has successfully met all test requirements specified in EM 49-20-00 Rev. 19 Dated Aug 25, 2022

2) APU functions and test parameters are ;

**ACCEPTED**

PERFORMED & INSPECTED BY	NAME & SURNAME	SIGNATURE/STAMP	DATE
OPERATOR	Doug James		5-9-24
INSPECTOR	<del>Doug James</del> Bruce Solomon		5/21/2024

CEL Aerospace LTD Canada

(1)-450-442-9994

www.cel-aerospace.ca



## **Appendix B: LRU 8130**



## **Appendix C: APU 8130**

1. Approving Civil Aviation Authority/Country:  <b>FAA/UNITED STATES</b>		2.  <b>AUTHORIZED RELEASE CERTIFICATE</b> <b>FAA FORM 8130-3, AIRWORTHINESS APPROVAL TAG</b>		3. Form Tracking Number: <b>AN31356</b> <b>52224130931</b>	
4. Organization Name and Address: <b>Piedmont Aviation Component Services</b> <b>7102 Cessna Drive</b> <b>Greensboro, NC 27409</b> <b>USA</b> <b>Ph: 336-776-6300, Fax: 336-776-6301</b>  <b>Repair Station No: QKPR504X. EASA.145 Certificate No. EASA.145.5257</b>		5. Work Order, Contract or Invoice Number:  <b>102057</b>			
6. Item	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status/Work:
1	GTCP131-9A APU	3800708-1	1.00	P-4986	REPAIRED
12. REMARKS Pertinent details of this work are on file at this repair station under work order AN31356  Repaired in accordance with Honeywell Manual 49-27-29 Rev. 23, Dated 23 Nov. 2023. Complied with Service Bulletin 49-8028 for preservation and storage. No Airworthiness Directives apply at this time.          TSN: 9,843:00 TSO: 9,843:00 TSR: 0:00 TSHSI: N/A CSN: 21,541 CSO: 21,541 CSR: 0 All Time/Cycle Information Supplied by Customer Certifies that the work specified in block 11 and 12 was carried out in accordance with EASA Part 145 and in respect to that work the aircraft component is considered ready for release to service under EASA Acceptance Certificate EASA 145.5257.					
13a. Certifies the items identified above were manufactured in conformity to:  <input type="checkbox"/> Approved design data and are in a condition for safe operation.  <input type="checkbox"/> Non-approved design data specified in Block 12			14a <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service <input checked="" type="checkbox"/> 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: 	
13d. Name (Typed or Printed):		13e. Date (dd/mm/yyyy):		14c. Approval/Certificate No:  QKPR504X	
				14d. Name (Typed or Printed):  Brad Hendrix	
				14e. Date (dd/mm/yyyy):  22-May-2024	

**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(s)/propeller(s)/article(s).

Where the user/installer 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.

Statement 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.

[illegible]

\*SEE SERVICE LIFE LIMITS OF CRITICAL LIFE LIMITED COMPONENTS, ENTRIES SHALL COMPLY TO FAR 43.

PX-3107-76C





Part Name **E/C IMPELLER**  
Serial Number **12-162053-49632**

Disk Part Number N/A  
Assy Part Number 3822391-6

[illegible]

AX-6167-3

## ULTIMATE LIFE PART REPAIR RECORD

[illegible]

COPY

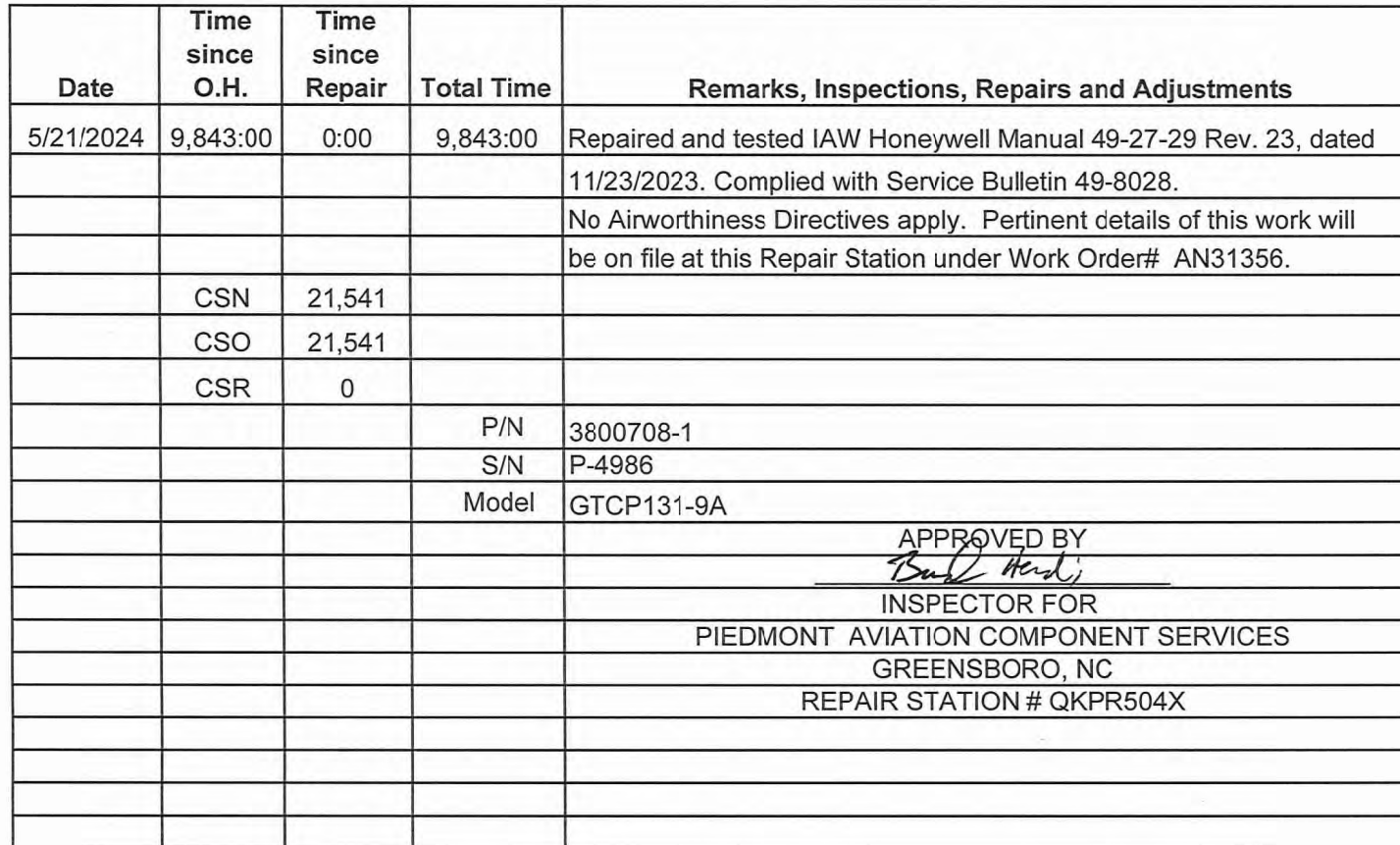
Part Name **TIE SHAFT**  
Serial Number 11P41360

Disk Part Number N/A  
Assy Part Number 3822504-3

[illegible]

## ULTIMATE LIFE PART REPAIR RECORD

[illegible]





**QEC/LRU/Accessories**



# Piedmont

Aviation  
Accessory Report

**CD (Condition) –**    1 = (Overhaul)    2 = (Repair)    3 = (Bench Check)    4 = (Continued Time)    5 = (New)  
                                  FM = (Field Maintenance)    HM = (Heavy Maintenance)

RECEIVED						INSTALLED			
Description	REC	Part Number	Serial Number	RM'D	TECH	Part Number	Serial Number	CD	TECH
Surge Valve	Yes	3291238-2	280	No	JDW			N/A	
Cooling Fan	Yes	3616140-11	P-1196CC	No	JDW			N/A	
Starter	Yes	2704506-4	5967	No	JDW			N/A	
Fuel Control	Yes	441921-5	CUC17622	No	JDW			N/A	
Flow Divider	Yes	692546-4	T#08862	No	JDW			N/A	
Lube Pump	Yes	4131020-4	5127	No	JDW			N/A	
Oil Temp Reg.	Yes	160494-1	LHTKK722	No	JDW			N/A	
Ignition Exciter	Yes	3888058-5	J19370032	No	JDW			N/A	
Oil Level Trans.	Yes	3876330-2	N/A	No	JDW			N/A	
Inlet Guide Vane Actuator	Yes	3886188-3	4298	No	JDW			N/A	
AC Generator	No	NOT	RECEIVED	N/A	JDW			N/A	
Compressor Inlet Sensor	Yes	3876225-2	111121407504	No	JDW			N/A	
Load Compressor Inlet Temp Sensor	Yes	MS28034-1	190146	No	JDW			N/A	
Igniter Plug	Yes	305766-4	17064119	No	JDW			N/A	
DMM	Yes	3876287-1	GE-2052	No	JDW				
Bleed Air Valve	Yes	3291432-2	2323	No	JDW				
Igniter Plug Lead	Yes	3876132-13	N/A	No	JDW			N/A	
Oil Temp Bulb	Yes	MS28034-3	156312	No	JDW			N/A	
LOP Switch	Yes	3876255-2	N/A	No	JDW			N/A	
Thermocouple	Yes	3876271-1	MFR50413-1902508	No	JDW			N/A	
Thermocouple	Yes	3876271-1	MFR50413-1902507	No	JDW			N/A	
Wiring Harness	Yes	3888438-1	N/A	No	JDW			N/A	
Primary Manifold	Yes	3883837-1	N/A	No	JDW			N/A	
Secondary Manifold	Yes	3883836-2	N/A	No	JDW			N/A	

**CD (Condition) –**    1 = (Overhaul)    2 = (Repair)    3 = (Bench Check)    4 = (Continued Time)    5 = (New)



## BSI Report



## Magnetic Chip Detectors:

1. Gearbox Chip Detector: ☒ Normal ☐ Contaminated

Comments: No discrepancies noted.

## A.P.U. Borescope:

Component	Acceptable	Damaged	Comments
1. 1 <sup>st</sup> Stg Compressor Impeller:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>No discrepancies noted.</u>
2. Load Compressor Impeller:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>No discrepancies noted.</u>
3. Combustion Chamber:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>No discrepancies noted.</u>
4. Inspect APU Inlet for Foreign Objects:	Pass: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

NOTES: No discrepancies noted.

*(Note: Not required if affected section is in shop for Heavy Maintenance)*

## Pre-Maintenance Test Evaluation:

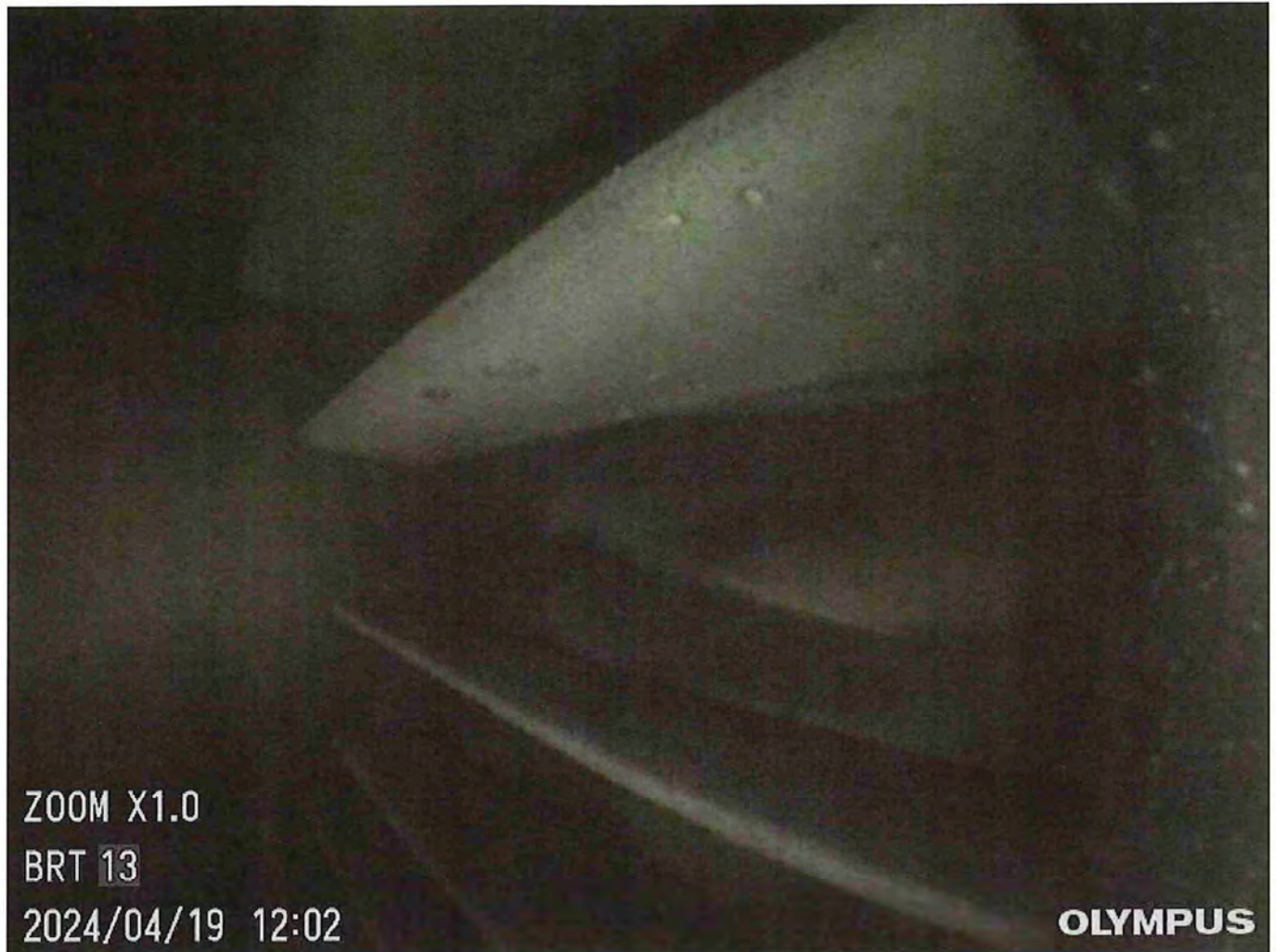
- ☐ APU was not pre-tested. See notes below.
- ☒ APU was pre-tested. APU passed pre-test and can be returned to service.
- ☐ APU was pre-tested. APU failed pre-test and requires further maintenance.

NOTES: \_\_\_\_\_

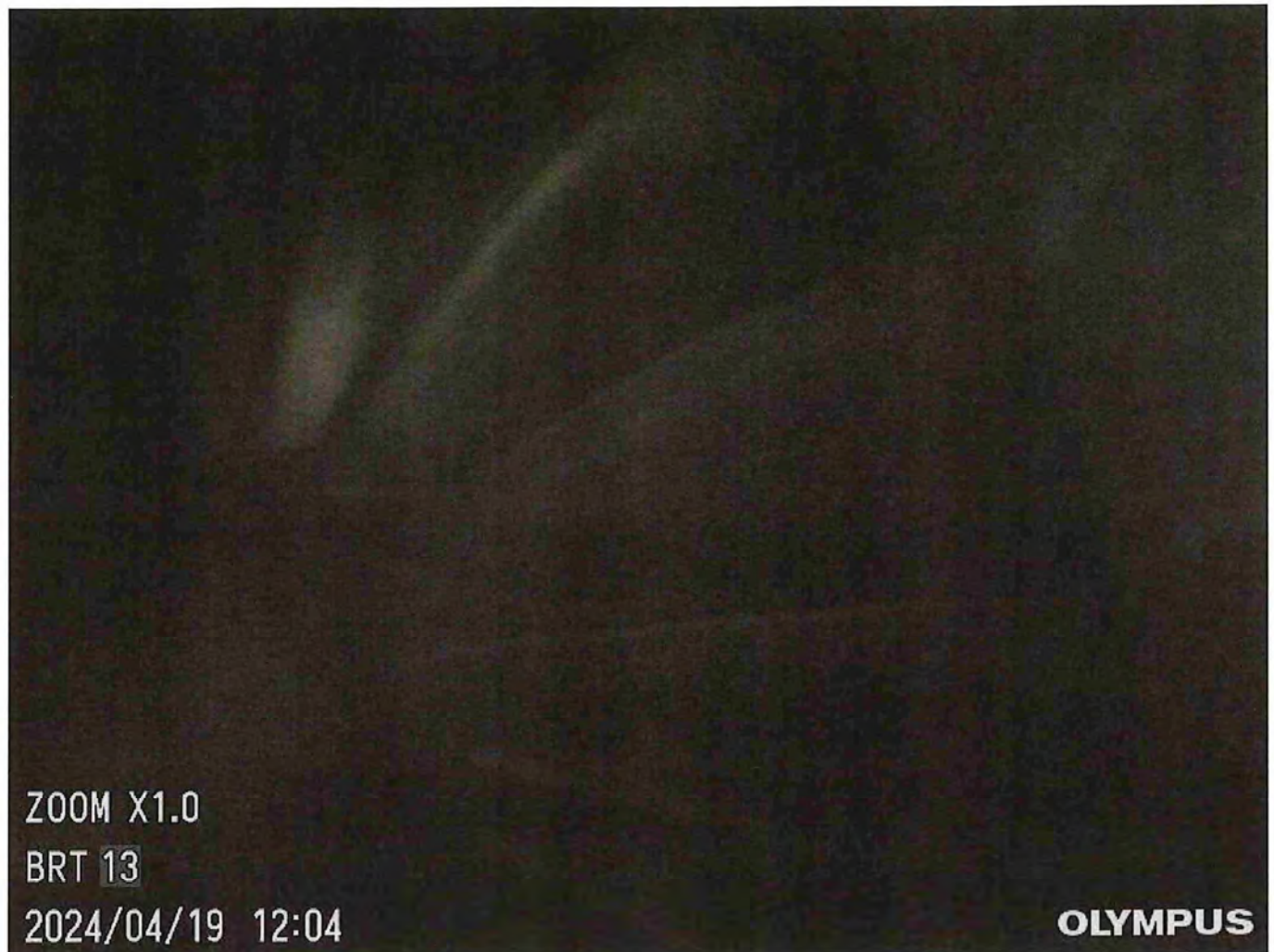


**Image 7: Borescope Pictures: Blade Tips of Load Compressor Impeller.**





**Image 8:** Leading edges of Load Compressor Impeller.



**Image 9:** Leading edges of Engine Compressor Impeller.





**Image 10:** First Stage Stator.



**Image 11:** First Stage Stator.





**Image 12:** First Stage Stator.



## Log Book

# Honeywell

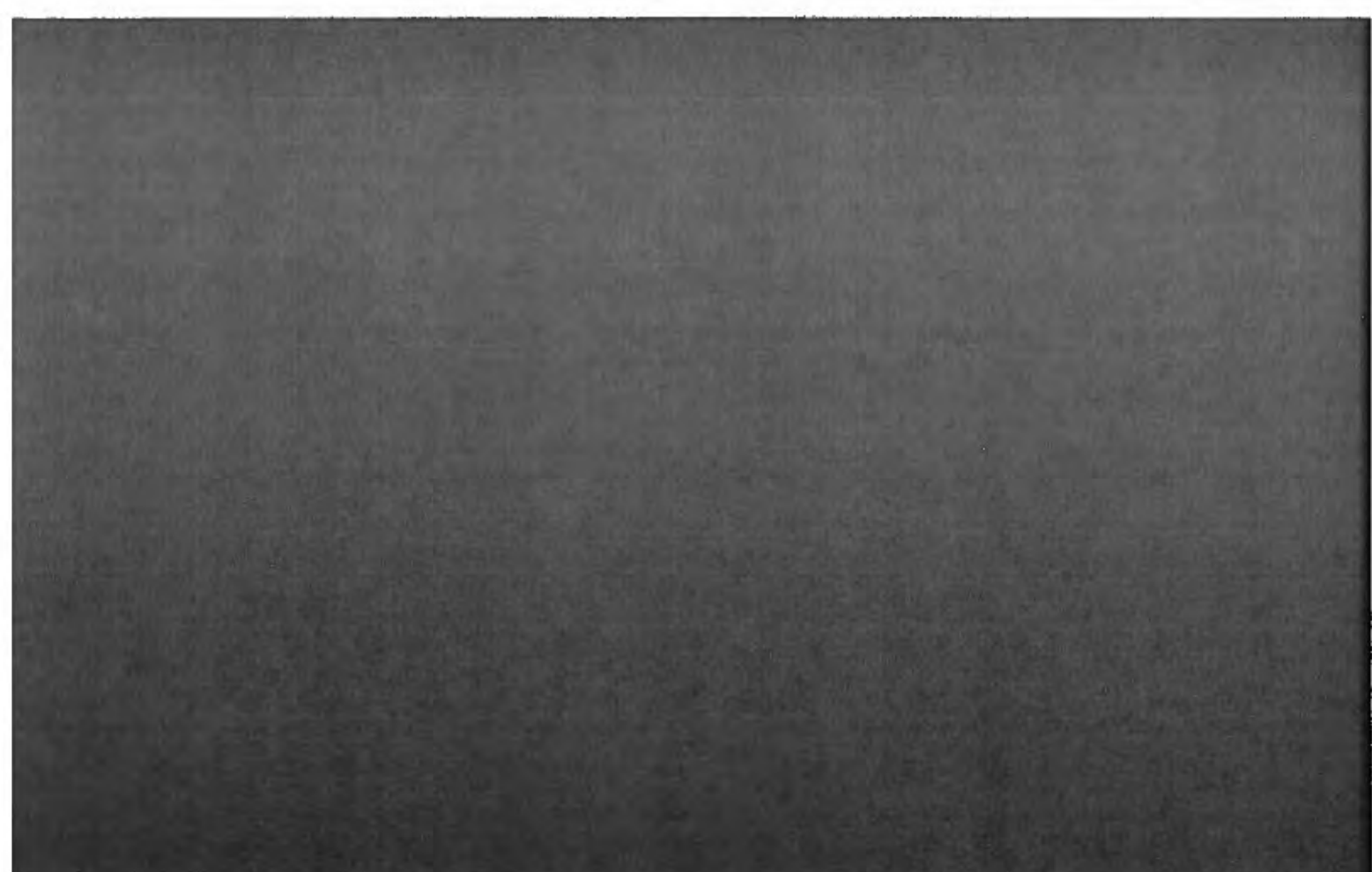
**Honeywell International Inc**  
Engines Systems and Services  
PO Box 52181  
Phoenix, Arizona 85072-2181

AC 5004

S/N: P-4986

## AUXILIARY POWER UNIT

# APU LOG BOOK



## APU Data

Delivery Date \_\_\_\_\_

Model No. 131-9[A] Serial No. P-4986 Total APU Weight 354.1 LBS


See applicable technical manuals for leading particulars.



# 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	
Dec 03, 11	0	0	0	0	3800708-1 NEW PRODUCTION UNIT P-4986
					SERIES 16 CHANGE NONE
					<p>Article Preserved per MIL-E-5607 on this date. This treatment considered adequate for a period of TWO (2) years.</p>
15/12/2011	0	0	0	0	<p>APU-INSTALLED IN AC 5004</p> <p><i>Chris Carey</i></p> <p>              ATIS 6            ASY         </p>
					TOTALS TO DATE

Engines Product Center  
111 S 34th St  
Phoenix, AZ 85034  
USA

July 5, 2007


Gerard Cavanie  
Honeywell Aerospace  
Customer Service Engineer at Airbus  
4 Avenue Saint Granier  
31300 Toulouse  
France

Gerard,

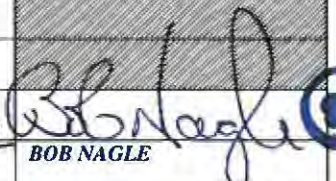
Please be advised that effective with S/N P-3600 for the 131-9A APU we no longer include a LLC for the Load Compressor Rotor P/N 3822400-5. This part is not considered to be life limited. The parts listed in Table One of Engine Manual 49-00-00 dtd 11/17/2006 are the correct Life Limited Components.

Any APU before S/N P-3600 would have a LLC card supplied for P/N 3822400-5 which can be used for life tracking but no longer required.

Sincerely,

 **Honeywell**

for Larry Glindeman  
Customer Quality Program Manager  
Engines Product Center  
Tel.: +1 602 231 2101  
Email: larry.glindeman@honeywell.com

DATE	ENGINE HOURS	ENGINE HOURS	REMARKS, INSPECTIONS, REPAIRS, AND ADJUSTMENTS	SIGNATURE
10/7/19	TSN 8020:27	CSN 19243	APU P/N 3800708-1 S/N P-4986 Model 131-9A	
	TSO N/A	CSO N/A	<b>DESCRIPTION OF WORK PERFORMED:</b> ENGINE DISASSEMBLED TO THE EXTENT NECESSARY TO PERFORM REPAIR, INSPECTED, REPAIRED AND TESTED IAW MANUFACTURER'S MANUAL 49-27-29 AND CUSTOMER INSTRUCTIONS. TSR/CSR:0.	
			***** *****	
			<b>INSPECTIONS COMPLIED WITH:</b> N/A	
			<b>SERVICE BULLETINS COMPLIED WITH:</b> SEE SERVICE BULLETIN SECTION OF LOG BOOK.	
			<b>PARTS REPAIRED OR REPLACED THIS VISIT:</b> SEE TRACE INPUT PAGE	
			<b>NDC / LIFE LIMITED PARTS:</b> SEE NDC / LIFE LIMITED PARTS RECORD	
			THIS APU HAS BEEN REPAIRED/INSPECTED IN ACCORDANCE WITH THE CURRENT REGULATION OF THE FEDERAL AVIATION ADMINISTRATION AND IS APPROVED FOR RETURN TO SERVICE WITH RESPECT TO WORK PERFORMED. PERTINENT DETAILS OF WORK PERFORMED ARE ON FILE AT THIS AGENCY UNDER REPAIR ORDER NUMBER 337207641	
			HONEYWELL AEROSPACE CERTIFIED REPAIR STATION ZN3R030M	
			INSPECTOR: 	
			BOB NAGLE	

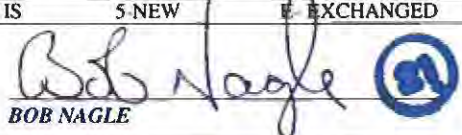
# Honeywell

## NDC / Life Limited Parts


Date	TSN	CSN	APU P/N	S/N	CUSTOMER
10/7/19	8020:27	19243	3800708-1 Model 131-9A	P-4986	ALASKA AIRLINES

Noun	As Received			As Shipped		Status
	P/N	S/N	Disposition	P/N	S/N	
FAN	3616140-10	P-0511	OVERHAUL	3616140-11	P-1196CC	3E
STARTER	2704506-4	5967	BENCH TEST	2704506-4	5967	1
FUEL CONTROL	441921-5	CUC17622	REPAIR	441921-5	CUC17622	2
LUBE MODULE	4131020-4	5127	REPAIR	4131020-4	5127	2
AIR/OIL COOLER	160494-1	LHTKK722	REPAIR	160494-1	LHTKK722	2
IGN UNIT	3888058-5	010218024295	SCRAPED	3888058-5	J19370032	5
SURGE VALVE	3291238-2	2636	OVERHAULED	3291238-2	280	3E
LOAD VALVE	3291432-1	3378	OVERHAULED	3291432-2	2323	3E
DE-OIL VALVE	4141028-3	MFR95273-2181	USED AS IS	4141028-3	MFR95273-2181	4
WIRE HARNESS	3888438-1	NSN	OVERHAULED	3888438-1	NSN	3E
TOTAL P SENSOR	3876226-1	061121461916	USED AS IS	3876226-1	061121461916	1
OIL HEATER		NOT INSTALLED	N/A		NOT INSTALLED	
DMM	3876287-1	GE-2052	BENCH TEST	3876287-1	GE-2052	1
IGV ACTUATOR	3886188-3	8407	OVERHAULED	3886188-3	4298	3E
GENERATOR	DNR				SHIPLESS	

Noun	As Received		Disposition	As Shipped		Hours	Cycles	Remaining	Status
	P/N	S/N		P/N	S/N				
TIE SHAFT	3822504-3	11P41360	OVERHAULED	3822504-3	11P41360	8020:27	19243	10757	3
LOAD COMP	3822400-5	11-162053-40763	INSPECTED	3822400-5	11-162053-40763	N/A	N/A	N/A	4
ENG. COMP	3822391-6	11-162053-40544	OVERHAULED	3822391-6	12-162053-49632	6640:48	17856	12144	3E
1 <sup>ST</sup> T-WHEEL	3840310-3	11-156101-00305	SCRAPED	3840310-4	18-156101-08008	0	0	30000	5
2 <sup>ND</sup> T-WHEEL	3840165-4	11-156101-08513	SCRAP	3840165-4	19-156101-00133	0	0	30000	5

REPAIR CODES	1-BENCH TEST	2-REPAIR	3-OVERHAUL	4- USED AS IS	5-NEW	6- EXCHANGED
REPAIR ORDER: 337207641						
HONEYWELL AEROSPACE CERTIFIED REPAIRED STATION ZN3R030M				INSPECTOR: 		
				BOB NAGLE		



<b>1. Approving Civil Aviation Authority/Country:</b>  FAA/United States		<b>AUTHORIZED RELEASE CERTIFICATE</b> FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG				<b>3. Form Tracking Number:</b>  2024326	
<b>4. Organization Name and Address:</b>  <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">   <small>A UAS HOLDINGS COMPANY</small> </div> <div style="text-align: center;"> <b>TAG Aero, LLC</b>          1247 Apex Drive, Rock Hill, SC 29730          FAA CRS # 3UAR147C       </div> </div>						<b>5. Work Order/Contract/Invoice Number:</b>  33017	
<b>6. Item:</b>	<b>7. Description:</b>	<b>8. Part Number:</b>	<b>9. Quantity:</b>	<b>10. Serial Number:</b>	<b>11. Status/Work:</b>		
1	APU, GTCP131-9A	3800708-1	1	P-4986	INSPECTED		
<b>12. Remarks:</b> <p>This component has been inspected and tested in accordance with current Honeywell publications manual ATA 49-27-29 revision 22, dated April 17, 2023. All flammable liquids have been purged and unit was preserved with MIL-PRF-6081 grade 10/10 lubricant for shipping and preservation purposes. TSN: 8776.0 CSN: 20,651</p> <p>There are no Airworthiness Directive applicable to this component. Complied with 24 month preservation I/A/W SB 49-8028.</p> <p>TAG Aero LLC 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.145.6499</p>							
<b>13a. Certifies the items identified above were manufactured in conformity to:</b>  Approved design data and are in a condition for safe operation. Non-approved design data specified in Block 12.			<b>14a. <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service      <input checked="" type="checkbox"/> Other regulation specified in Block 12</b>  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.				
<b>13b. Authorized Signature:</b>		<b>13c. Approval/Authorization No.:</b>		<b>14b. Authorized Signature:</b> 		<b>14c. Approval/Certificate No.:</b>  3UAR147C	
<b>13d. Name (Typed or Printed):</b>		<b>13e. Date (dd/mm/yyyy):</b>		<b>14d. Name (Typed or Printed):</b>  Jesse K. Russo		<b>14e. Date (dd/mm/yyyy):</b>  07 JUL 2023	
<b>User/Installer Responsibilities</b>							
<p>It is important to understand that the existence of this document alone does not automatically constitute authority to install the aircraft engine/propeller/article.</p> <p>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.</p> <p>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.</p>							





A UAS HOLDINGS COMPANY

1247 Apex Dr., Rock Hill, SC 29730

Ph: (803) 831-9390

FAA 3UAR147C / EASA.145.6499

**P/N 3800708-1S/N P-4986 MODEL GTCP131-9A WO# 33017**

This component has been inspected and tested in accordance with 49-27-29 Revision 22 dated April 17, 2023. Refer to shop report. 33017 for further details of this shop visit.

**TSN: 8,776 / CSN: 20,651**

A handwritten signature in dark ink, appearing to read "Jesse K. Russo".

Jesse K. Russo

July 07, 2023

[illegible]

James Curran



Jesse K. Russo  
October 26, 2023

10/23/2023 Data Conversion For ENGINE S/N P4986  
WINDMM.EXE Version 3.04.03 BuildVersion 180117 131-9A Overhaul Version 04.51

1	Item Count	475	475	NUMBER ENTRIES IN DMM
2	SW Version	0000	0000	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	49	49	APU SERIAL NUMBER (NEXT 2 DIGITS)
7	APUser.num4	86	86	APU SERIAL NUMBER (LAST 2 DIGITS)
8	APUser.suf			APU SERIAL NUMBER (SUFFIX 2 DIGITS)
9	APUhours_LO	8806	8806	APU HOURS Low Word
10	APUminutes	46	46	APU MINUTES
11	APUcycles_LO	20692	20692	APU CYCLES Low Word
12	ECS_OFFSET	-518	-5.180	ECS OFFSET DEGREES (SV)
13	FUELOFF100	83	0.830	FUEL FLOW OFFSET AT 100 POUNDS PPH
14	FUELOFF200	-905	-9.050	FUEL FLOW OFFSET AT 200 PPH
15	ABSTARTS	9	9	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	17	17	NUMBER OF INFLIGHT STARTS
18	ABFLTSTARTS	3	3	NUMBER OF UNSUCCESSFUL INFLIGHT STARTS
19	TURB_CYCLES	0	0	CYCLES SINCE TURBINE REPAIR (TB)
20	LC_CYCLES	0	0	CYCLES SINCE LOAD COMP REPAIR (LC)
21	EC_CYCLES	0	0	CYCLES SINCE ENGINE COMP REPAIR (EC)
22	CLOG_FILTER	0	0	NUMBER OF CLOGGED OIL FILTER INDICATIONS
23	OVRHAUL_HR	0	0	HOURS SINCE SHOP VISIT (SV)
24	OVRHAUL_MIN	0	0	MINUTES SINCE SHOP VISIT (SV)
25	INSTALL_HR	0	0	HOURS SINCE AIRPLANE INSTALLATION (SV)
26	INSTALL_MIN	0	0	MINUTES SINCE AIRPLANE INSTALLATION (SV)
27	ECS_HOURS	405	405	OPERATING TIME IN ECS HOURS
28	ECS_MINUTES	579	57.900	OPERATING TIME IN ECS MINUTES
29	FLT_HOURS	4	4	OPERATING TIME IN FLIGHT HOURS
30	FLT_MINUTES	249	24.900	OPERATING TIME IN FLIGHT MINUTES
31	HOT_TIME	7	0.700	OPERATING HOURS T2 GREATER 100 DEGF
32	COLD_TIME	0	0	OPERATING HOURS T2 LESS 0 DEGF
33	NMES	1302	1302	NUMBER OF MAIN ENGINE STARTS
34	HIGHSTARTS	0	0	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	0	0	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	1	1	NUMBER OF NO ACCELERATION SHUTDOWNS
45	OVERSPEED	0	0	NUMBER OF OVERSPEED SHUTDOWNS

*maldivian*

APU P/N: 3800708-1, S/N: P-4986

DATE	TTSN / TCSN	8806.77	20692	APU INSTALLED ON 8Q-IAN, MSN 22347 REF 638122			
28-Oct-2023	TSO / CSO	N/A	N/A				
	TSR/CSR	0.00	0				
				A/C HOURS:	43084	DATE	SIGN/STAMP
				A/C CYCLES:	23210	28-Oct-23	 

*maldivian*

APU P/N: 3800708-1, S/N: P-4986

DATE	TTSN / TCSN	9843	21541	APU REMOVED FROM 8Q-IAN, MSN 2347 REF 644232		
24-Mar-2024	TSO / CSO	N/A	N/A			
	TSR/CSR	1036.23	849			
				A/C HOURS: 43913	DATE	SIGN/STAMP
				A/C CYCLES: 23754	24-Mar-24	