MINIPACK

Model No.	GTCP131-9A
Part No.	3800708-1
Serial No.	P-4032

CONDITION	Overhauled	TSN	25,832
TAGGED BY	TAG Aero	CSN	26,347
TAG DATE	April 2022	TSO	0
TRACE TO	Interjet	CSO	0
LOCATION	FLL		

LLPs

T1 Disk	25,014	CR
T2 Disk	15,399	CR
Impeller	18,940	CR
Tie Shaft	14,224	CR

Additional Information:

INCLUDED
☑ BOX/STAND

GENERATOR
☐ YES ☑ NO

PRESERVATION
☐ 6 MO ☐ 12 MO ☑ 24 MO

APPLICATION
A320

AVAILABILITY
Immediate

TRANSACTION TYPE
☑ LEASE ☑ EXCHANGE
☑ OUTRIGHT

More about your APU

9100 S. Dadeland Blvd., Suite 1500, Miami, FL 33156 +1-305-271-6650
info@longreach.com www.longreach.com

Non Incident Statement

9100 S. Dadeland Blvd., Suite 1500, Miami, FL 33156 +1-305-271-6650
info@longreach.com www.longreach.com

interjet

Date: 26-Mar-20

TO WHOM IT MAY CONCERN

NO ACCIDENT OR INCIDENT APU STATEMENT

	P-4032				
APU Type	GTCP131-9A				
Serial Number:	P-4032	TSN:	25.832,00	CSN:	26.347
Operated/Possessed:	From December 10th, 2008 to March 26th, 2020				

I hereby certify that; to the best of my knowledge, during the period from December 10th, 2008 to March 26th, 2020:

1. Neither the APU, nor any part installed have been;
a. damaged during, or identified as the root cause of, a reportable incident or accident as defined by Annex 13 to the Chicago Convention, or
b. subjected to severe stress or heat (such as in a major engine failure, accident, or fire) or has been submersed in salt water, unless its airworthiness status was re-established by an approved maintenance organization in accordance with the applicable airworthiness regulations and instructions of the type certificate holder and/or supplemental type certificate holder and/or OEM of the part, and supported by an authorized airworthiness release certificate.

2. No part has been installed on the APU which was obtained from a military source or was previously fitted to a state aircraft as deemed by Article 3 of the Chicago Convention.

Edgardo Ulises Barrientos
Fleet Administration & Powerplant Engineering Manager
Interjet
ABC Aerolíneas, S.A de C.V.

Shop Visits

9100 S. Dadeland Blvd., Suite 1500, Miami, FL 33156 +1-305-271-6650
info@longreach.com www.longreach.com

Shop Visit
Tag Aero
May 2022

9100 S. Dadeland Blvd., Suite 1500, Miami, FL 33156 +1-305-271-6650
info@longreach.com www.longreach.com

GTCP131 Series Receiving Report

PREPARED FOR:

FAA / EASA Approved Repair Station #3UAR147C / EASA.145.6499

Customer Information

Customer:	Received Date:	Customer PO No.:
TAG AERO	March 23 2022	11390
APU Model No.:	APU Serial No.:	APU Part No.:
GTCP131-9A	P-4032	3800708-1
TAG W/O:	Application	Last Operator:
31400	A320	INTERJET
TAG Technician:	GD/LD	

Inbound DMM Readout APU Times and Cycles			
Time Since New:	25832.00	Cycles Since New:	26347

Inbound APU Times and Cycles Reported by Customer			
Time Since New:	25832.00	Cycles Since New:	26347
Time Since Overhaul:	UNK	Cycles Since Overhaul:	UNK
Time Since Repair:	4834	Cycles Since Repair:	UNK

Inbound LLP Times			
1st Stage Turbine Rotor	TSN: 4834.26	CSN: 4986	Cycles Remaining: 25014
2nd Stage Turbine Rotor	TSN: 14932.41	CSN: 13860	Cycles Remaining: 16140
Turbine Shaft	TSN: 25832.00	CSN: 26347	Cycles Remaining: 3653
Engine Compressor Rotor	TSN: 25832.00	CSN: 26347	Cycles Remaining: 3653

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

Customer Reason for Removal:
Unknown

Customer Requested Work Scope:
Evaluate for overhaul

Model: GTCP131-9B
P/N: 3800708-1
S/N: P-4032
WO: 31400

APU Visual Inspection

Logbook

Unit received with logbook ☐ Yes ☒ No

Inbound Shipping Container

Condition of Container: ☐ Damaged ☒ Not Damaged

☐ Wood ☐ Cardboard ☐ Metal ☒ Other (See Comments Below)
☐ OEM Box ☐ OEM Stand

Comments: APU was on a stand and pallet at the time of receiving

Tubing / Hoses Condition

☐ No Damage ☐ Damaged ☒ Dirty ☒ Oily

Comments: None

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: None

Inlet / Exhaust Plenums

☒ No Damage ☐ Bent ☐ Chaffed ☐ Dented ☐ Cracked

Comments: None

Mounts and Brackets

☐ No Damage ☒ Missing ☐ Damaged

Comments: Not received

Model: GTCP131-9B
P/N: 3800708-1
S/N: P-4032
WO: 31400

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:	None				

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:	None					

Rotation			
Rotation	☒ Smooth	☐ Rough	☐ Seized
IGV Assy Pull Test (5 lb. max)	Passed		
Comments:	3 lbs		

Borescope Inspection		
Was APU Borescoped?	☒ Yes	☐ No
Load Compressor Rotor	Satisfactory	
Engine Compressor Rotor	Satisfactory	
1st Stage Turbine Blades	Satisfactory	
2nd Stage Turbine Blades	Satisfactory	
1st Stage Stator	Damage	
Combustion Chamber	Satisfactory	
Comments:	Multiple cracks found on 1st Stage Stator	

Inbound LRUs Fitted

Description	Part Number	Serial Number	Notes
Bleed Air Valve	3291432-2	1646	
Temperature Control Valve	N/A	N/A	
Data Memory Module	3876287-1	GE6916	
Differential Pressure Sensor	3876227-2	081121419513	
E.G.T Thermocouple	3876271	1253	
E.G.T Thermocouple	3876271	0305	
Fuel Control Unit	441921-5	EUC14551	
Gearbox Assy	3805057-1	NSN	
Igniter Plug	305766-1	NSN	
Igniter Plug Lead	3876132-13	NSN	
Ignition Exciter	3888058-5	J14090039	
Inlet Guide Vane Actuator	3886188-3	0713	
Inlet Pressure Sensor	3876225-2	081121404532	
Inlet Temp Bulb	28034-1	159869	
Oil Temp Bulb	MS28034-3	150891	
Low Oil Pressure Switch	3876255-2	NSN	
Lube Module	4131020-4	2713	
Oil Cooler	160494-1	1834	
Oil Level Sensor	3876330-2	NSN	
Transducer Motional Pickup	3876223-1	NSN	
Starter/Generator	N/A	N/A	
Starter/Generator Wiring Harness	N/A	N/A	
Surge Control Valve	3291238-2	5545	
Flow Divider	3879006-1	NSN	
Solenoid Valve	692546-4	NSN	
Total Pressure Probe Assy	3884971-1	NSN	
Total Pressure Sensor	3876226-1	081121463148	
Wiring Harness	3888438-1	NSN	
Cooling Fan	3616140-7	P-2759	
Starter	2704506-4	1741	

Receiving Photos

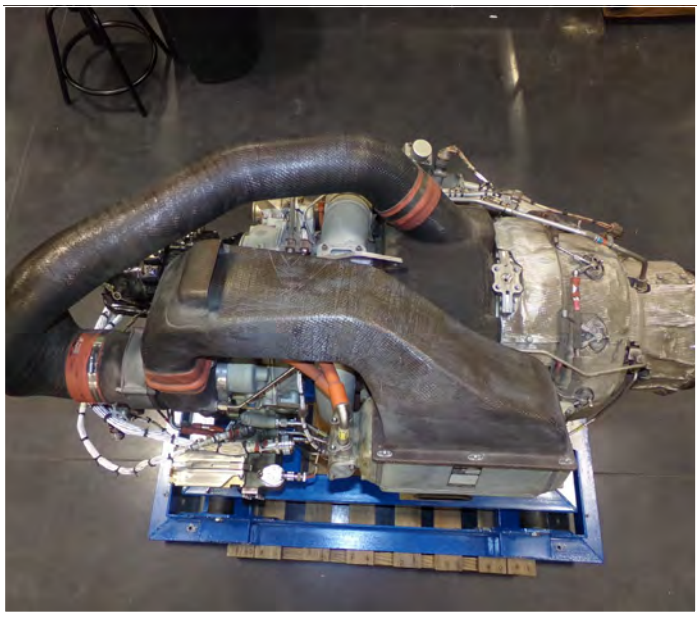
APU: Front

APU: Left

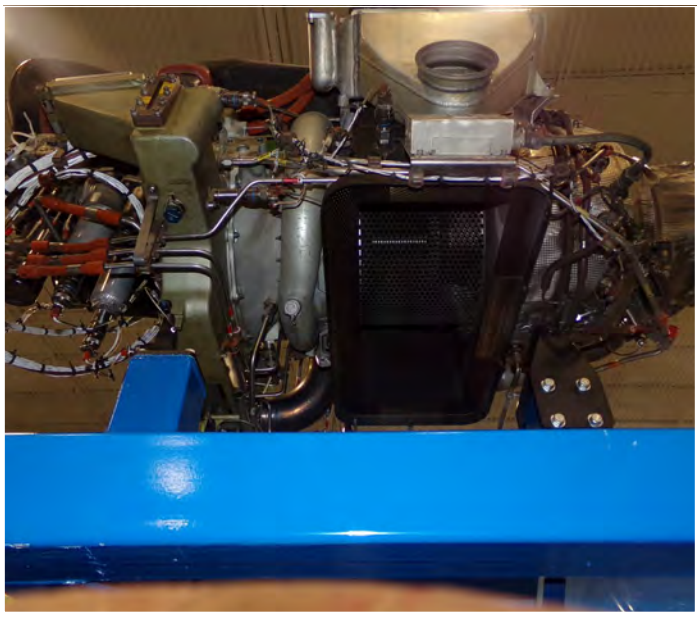
APU: Right

APU: Rear

Receiving Photos



APU: Top



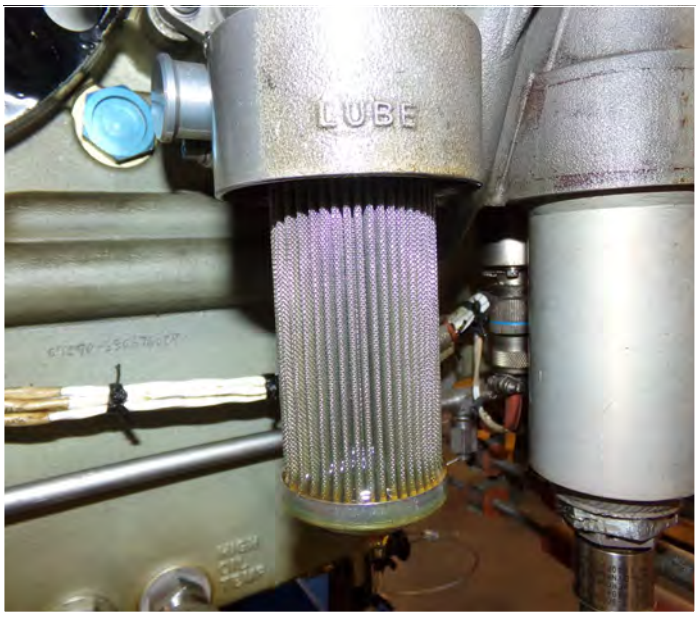
APU: Bottom

APU Data Plate

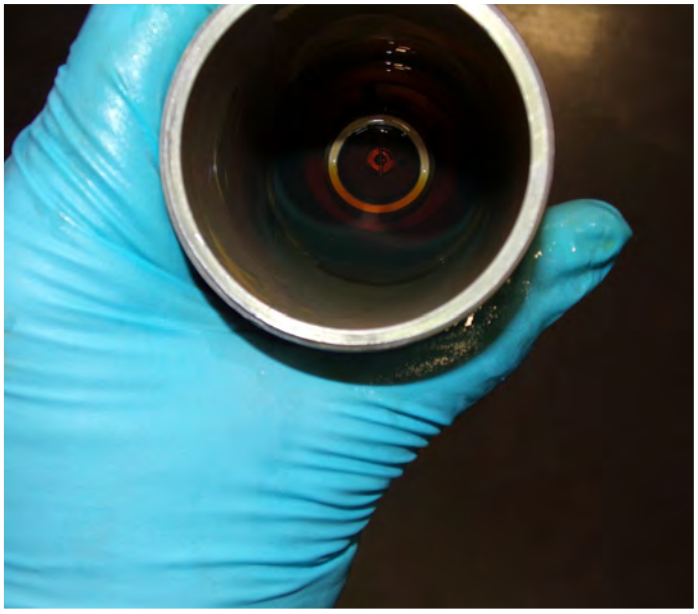
Oil Chip Detector

Receiving Photos

Residual Lube Oil Sample



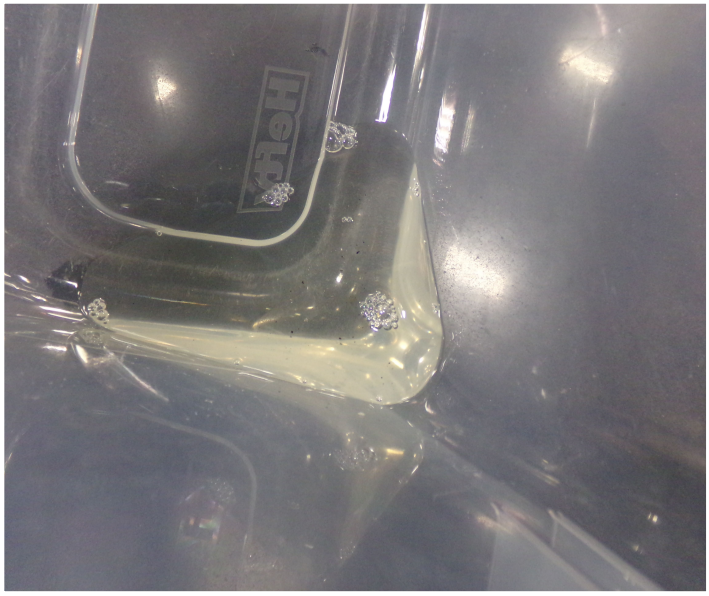
Lube Oil Filter



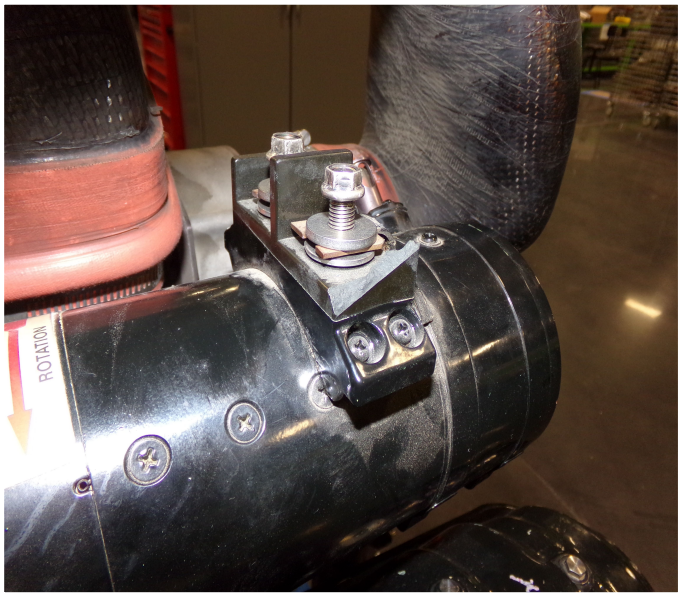
Residual Scavenge Oil Sample

Scavenge Oil Filter

Receiving Photos



Residual Fuel Sample



Starter Terminal Block

Receiving Photos

Load Compressor Rotor

Engine Compressor Rotor

Compressor Section

1st Stage Turbine Blade Tips

Receiving Photos

T1 Stator, LE

T1 Stator, TE

T2 Blade AFT Face

Combustion Chamber

Model: GTCP131-9B
P/N: 3800708-1
S/N: P-4032
WO: 31400

APU Visual Inspection Conclusion

Preliminary Comments:

APU received in fair general condition in a stand on a pallet with no visual transit damage. Starter terminal block broken. Cracks found on compressor section during borescope inspection.

Recommended Workscope:

Engine to be completely disassembled and quote for overhaul due to internal damage.

Customer Approval:

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

Signature: _____

Name: _____

Title: _____

Date: _____

Post Test Findings

Functional Test and Inspection Results: N/A

Recommended Workscope: Overhaul

Findings and Disposition with Recommended Workscope

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 Recommended Workscope	
☒	Route selected LRU's for test and repair as necessary
☐	Route all units for test and repair as necessary
☐	No work required
☐	Other:

Auxiliary Power Unit Recommended Workscope					
☐	Repair	☒	Overhaul	☐	No Fault Found
☐	Return As-Is	☐	Beyond Economical Repair	☐	Functional Inspect and Test
☐	Other:				

Damaged Parts List

Description	Part Number	Serial Number	QTY	Remarks
Driven Compressor Rotor	3822400-5	NSN	1	Nicks and rubs not permitted
2nd Stage Turbine Rotor Assy	3840165-4	13-152101-00379	1	Nicks, bends, and cracks not permitted
Compressor Rotor	3822391-6	08-03501-14281	1	Life cycle low
Turbine Shaft	3822504-3	08P16645	1	Life cycle low
Driven Centrifugal Compressor Case	3827152-3	NSN	1	Excessive wear and damage to contour
2nd Stage Stator	3844864-1	NSN	1	Cracks on vane
Roller Bearing Retainer	3844917-1	NSN	1	DIA 2.0575
Driven Compressor Bearing Housing	3827426-3	2026033	1	Cracks not permitted
Matched Gearbox Housing Assy Set	3863426-3	1115026100846	1	Loose studs are not permitted
Igniter Plug	305766-4	18035770	1	Excessive wear of the spark electrode not permitted
Turbine Bearing Housing Assy	3844863-1	NSN	1	Loose studs from bearing housing not permitted
Annular Combustion Chamber	3830461-6	NSN	1	Cracks not permitted
Combustor Case	3844766-4	NSN	1	Broken studs inside the self-locking nuts and damaged nuts not permitted
Stationary Air Seal	3844738-7	NSN	1	Excessive wear on seal circumference not permitted
Engine Compressor Diffuser	3827325-3	NSN	1	Damage on vanes not permitted
Coupling Shaft	3840171-2	NSN	1	Damage or wear on coupling knife edge not permitted
Driven Compressor IGV	3810684-2	NSN	16	Vane tip damage not permitted
Fuel Nozzle Air Shroud	3830418-1	NSN	1	Erosion or distortion on fuel nozzle shroud not permitted
Segment Gear	3810794-2	NSN	16	Tooth fretting, spalling, or pin bore damage not permitted
Load Compressor Nut	3822423-1	NSN	1	Excessive fretting on conical not permitted
Stationary Air Seal	3844775-1	NSN	1	Stationary air seal distortion, cracks, and other damage not permitted

Model: GTCP131-9B
P/N: 3800708-1
S/N: P-4032
WO: 31400

Damaged Parts List

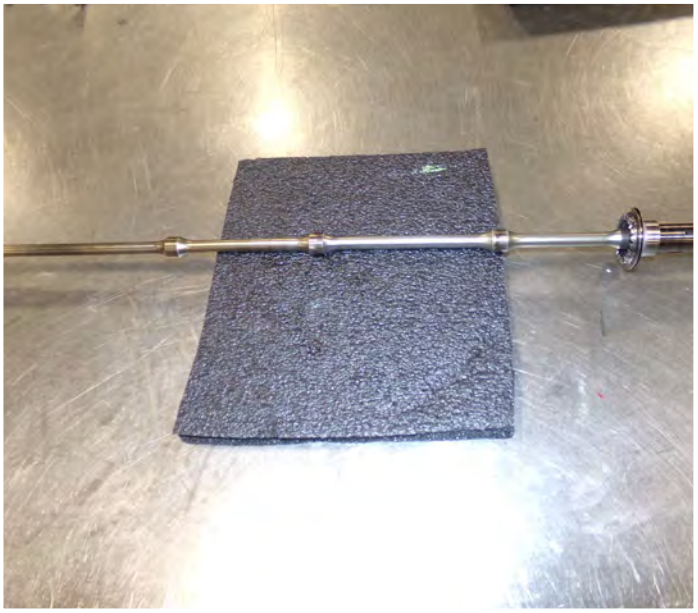
Description	Part Number	Serial Number	QTY	Remarks
1st Stage Turbine Stator Segment	3844760-2	NSN	3	Cracks in vane and missing material not permitted
Gear Shaft Cluster	3870205-1	NSN	1	Cracks not permitted
Terminal Block	2710488-1	NSN	1	Cracked

Findings and Disposition Photos

1) Driven Compressor Rotor

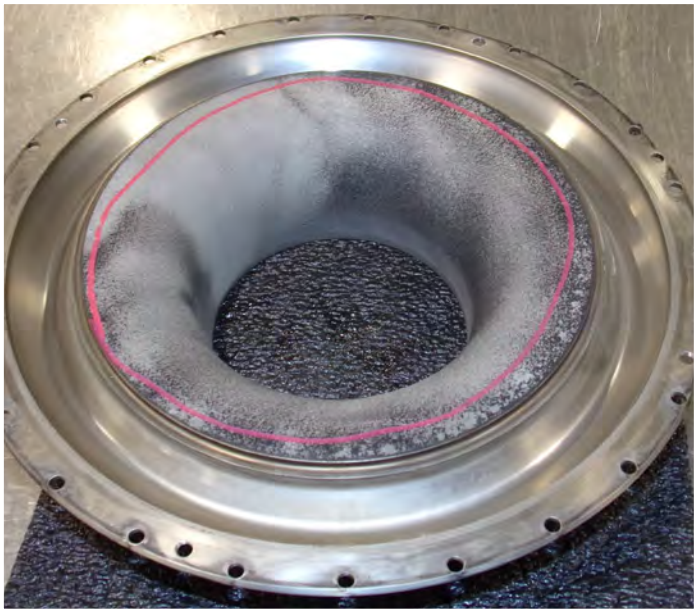
2) 2nd Stage Turbine Rotor Assy

3) Compressor Rotor



4) Turbine Shaft

Findings and Disposition Photos



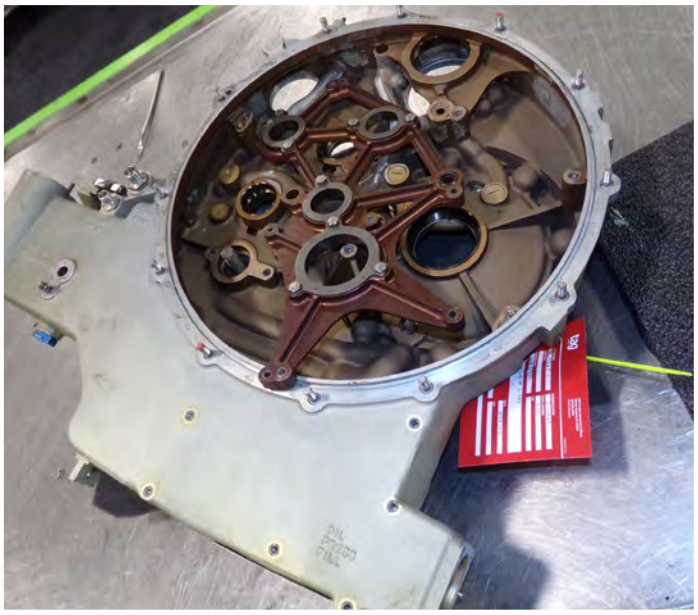
5) Driven Centrifugal Compressor Case

6) 2nd Stage Stator

7) Roller Bearing Retainer

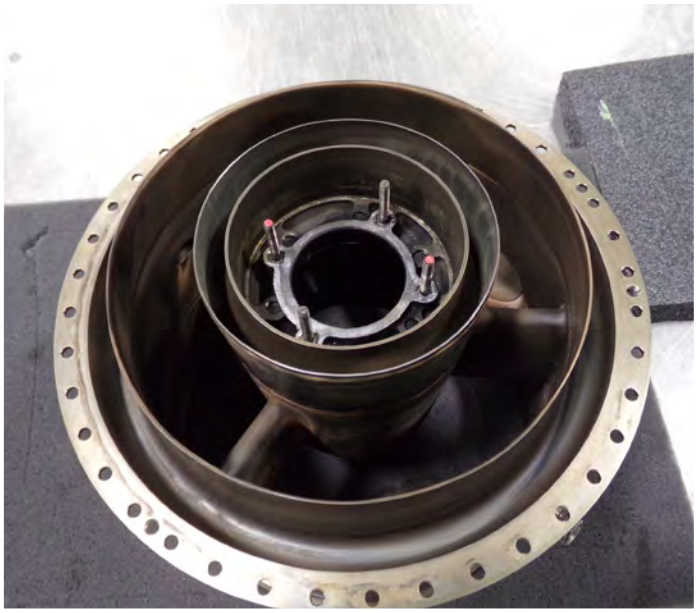
8) Driven Compressor Bearing Housing

Findings and Disposition Photos



9) Matched Gearbox Housing Assy Set

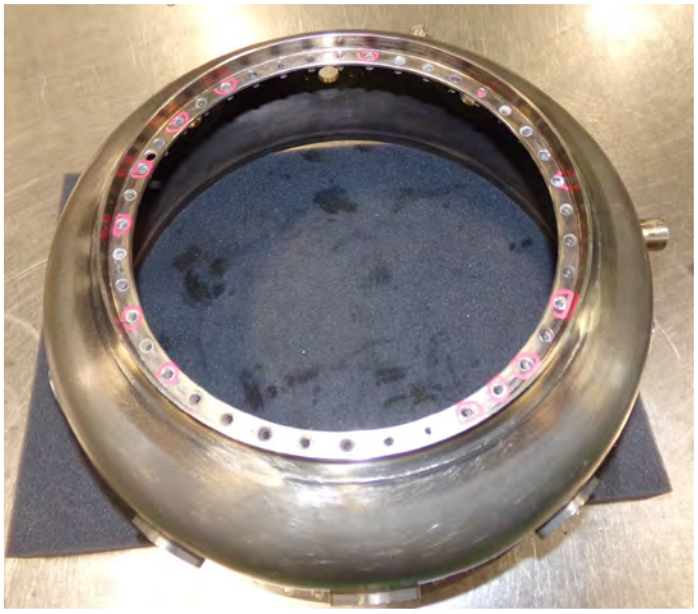
10) Igniter Plug



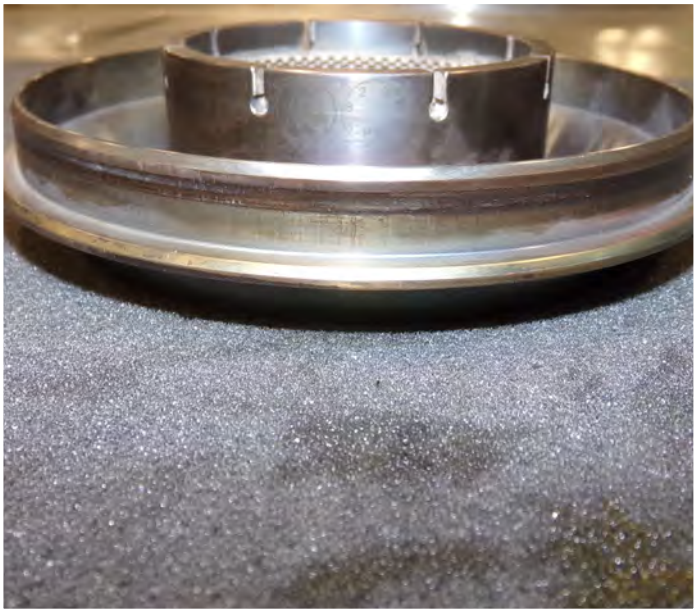
11) Turbine Bearing Housing Assy

12) Annular Combustion Chamber

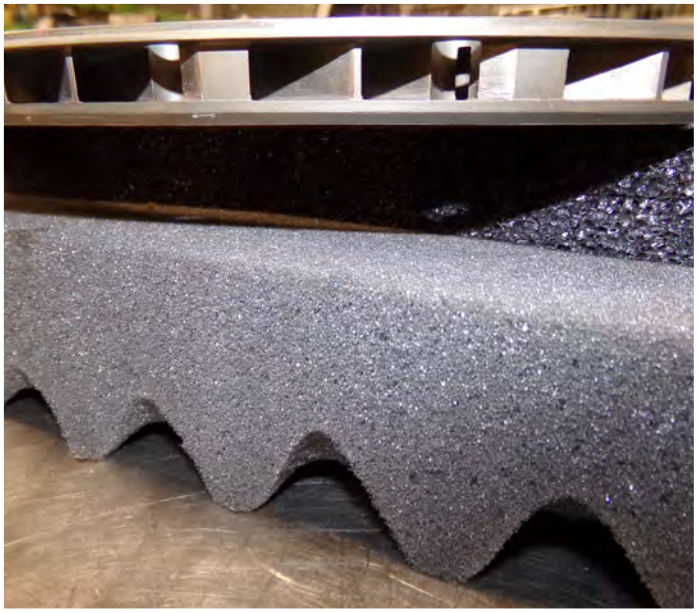
Findings and Disposition Photos



13) Combustion Case



14) Stationary Air Seal



15) Engine Compressor Diffuser

16) Coupling Shaft

Findings and Disposition Photos

17) Driven Compressor IGV

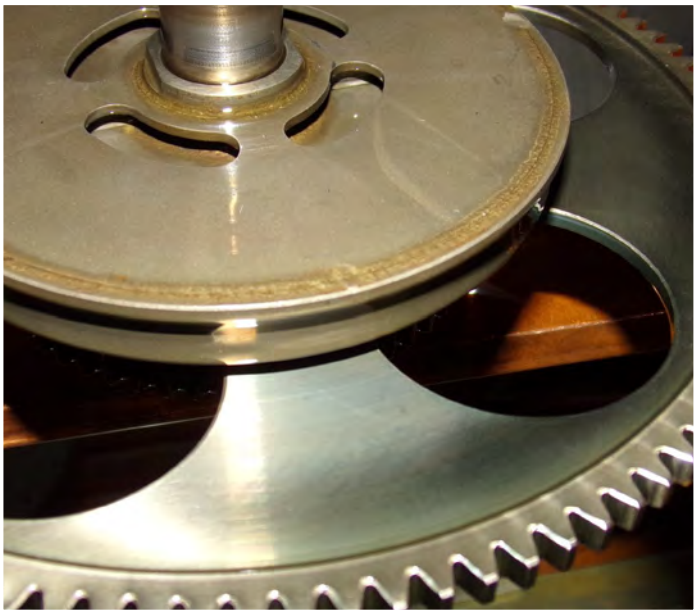
18) Fuel Nozzle Air Shroud

19) Segment Gear

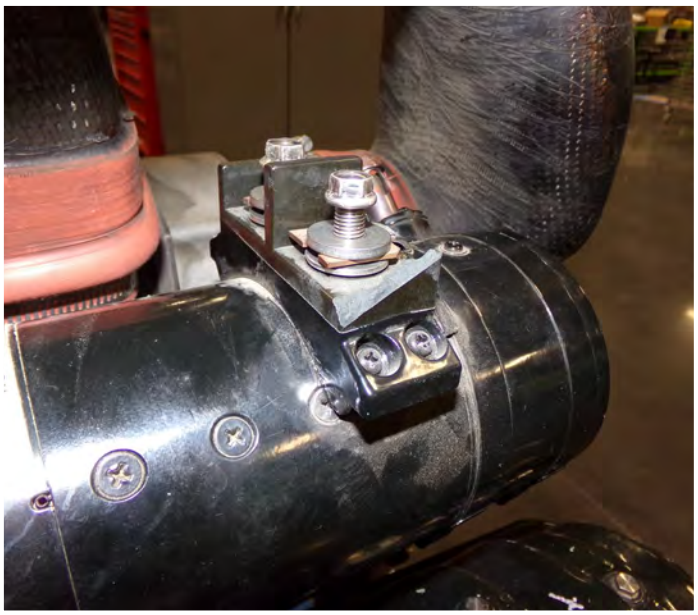
20) Load Compressor Nut

Findings and Disposition Photos

21) 1st Stage Turbine Stator Assy



22) Gearshaft Cluster



23) Terminal Block Damaged

Analysis and Conclusion

Findings and Disposition

GEARBOX: Overhauled

LOAD COMPRESSOR: Overhauled

POWERSECTION: Overhauled

LRU'S: Select LRU's routed for overhaul as necessary

Probable Cause

☒	Scheduled Removal	☐	Due HSI	☐	Excessive Heat Damage	☐	FOD
☐	Bearing Failure	☐	Blade Failure	☐	Improper Maintenance	☒	High Hours/Cycles
☐	Oil Leak						
☐	Other:						

APU Recommended Workscope

☐	Repair	☐	Hot Section Inspection (HSI)	☐	Beyond Economical Repair
☒	Overhaul	☐	Functional Inspect and Test	☐	Return As-Is
☐	No Fault Found				
☐	Other:				

APU Service Record

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: GTCP131-9B
P/N: 3800708-1
S/N: P-4032
WO: 31400

Accessories Parts Status Report

Received			Installed		
Description	Part Number	Serial No.	Part Number	Serial No.	Status
Bleed Air Valve	3291432-2	1646	3291432-2	1646	TESTED
Temperature Control Valve	N/A	N/A	N/A	N/A	N/A
Data Memory Module	3876287-1	GE6916	3876287-1	GE6916	TESTED
Differential Pressure Sensor	3876227-2	081121419513	3876227-2	081121419513	TESTED
E.G.T Thermocouple	3876271	1253	3876271	1253	TESTED
E.G.T Thermocouple	3876271	0305	3876271	0305	TESTED
Fuel Control Unit	441921-5	EUC14551	441921-5	EUC14551	TESTED
Gearbox Assy	3805057-1	NSN	3805057-1	NSN	TESTED
Igniter Plug	305766-1	NSN	305766-4	NSN	RP
Igniter Plug Lead	3876132-13	NSN	3876132-13	NSN	TESTED
Ignition Exciter	3888058-5	J14090039	3888058-5	J14090039	TESTED
Inlet Guide Vane Actuator	3886188-3	0713	3886188-3	0713	TESTED
Inlet Pressure Sensor	3876225-2	081121404532	3876225-2	081121404532	TESTED
Inlet Temp Bulb	28034-1	159869	28034-1	159869	TESTED
Oil Temp Bulb	MS28034-3	150891	MS28034-3	150891	TESTED
Low Oil Pressure Switch	3876255-2	NSN	3876255-2	NSN	TESTED
Lube Module	4131020-4	2713	4131020-4	2713	TESTED
Oil Cooler	160494-1	1834	160494-1	1834	TESTED
Oil Level Sensor	3876330-2	NSN	3876330-2	NSN	TESTED
Transducer Motional Pickup	3876223-1	NSN	3876223-1	NSN	TESTED

SV = Repaired or Visually Inspected OH = Overhauled RP = Replaced N/A = Not applicable

TESTED = Functionally tested on APU BC = Bench Checked CS = Customer Supplied

Model: GTCP131-9B
P/N: 3800708-1
S/N: P-4032
WO: 31400

Accessories Parts Status Report

Received			Installed		
Description	Part Number	Serial No.	Part Number	Serial No.	Status
Starter/Generator	N/A	N/A	N/A	N/A	N/A
Starter/Generator Wiring Harness	N/A	N/A	N/A	N/A	N/A
Surge Control Valve	3291238-2	5545	3291238-2	5545	TESTED
Flow Divider	3879006-1	NSN	3879006-1	NSN	TESTED
Solenoid Valve	692546-4	NSN	692546-4	NSN	TESTED
Total Pressure Probe Assy	3884971-1	NSN	3884971-1	NSN	TESTED
Total Pressure Sensor	3876226-1	081121463148	3876226-1	081121463148	TESTED
Wiring Harness	3888438-1	NSN	3888438-1	NSN	TESTED

SV = Repaired or Visually Inspected
OH = Overhauled
RP = Replaced
N/A = Not applicable

TESTED = Functionally tested on APU
BC = Bench Checked
CS = Customer Supplied

Model: GTCP131-9B
P/N: 3800708-1
S/N: P-4032
WO: 31400

LLP Summary

Description	Part No.	Serial No.	TSN	CSN	Life Limit	Cycles Remaining
1st Stage Turbine Rotor	3840310-4	17-156101-07419	UNK	4,986	30,000	25,014
2nd Stage Turbine Rotor	3840165-4	14-156101-03740	7,358	14,601	30,000	15,399
Turbine Shaft	3822504-3	12P53775	3,516	15,776	30,000	14,224
Engine Compressor Rotor	3822391-6	13-162053-59418	13,045	11,060	30,000	18,940

Information was supplied by customer, trace documents, and/or APU's logbook.
CSN recorded on the LLP summary is logged post final test performed on APU.

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 (6 Months or Less)
☒ Long-Term (2 Years or Less)

APU Corrective Action:

The APU was overhauled and tested in accordance with ATA 49-27-29 Rev. 18 dated April 20, 2022.

TSN: 25,832.00 CSN: 26,347 TSO: 0.0 CSO: 0 TSR: 0.0 CSR: 0

Chief Inspector Approval: Chris Berry Date: 05/24/2022

Purge Certification

24 MAY 2022

Subject: MODEL 3800708-1 P/N: 3800708-1 S/N: P-4032 WO# 31400

To Whom it May Concern,

This letter is to confirm that the above-mentioned APU fuel system was purged on 24/MAY/2022 and contains no hazardous liquids or chemicals.

This unit contains only the following fluids:

Lubricant MIL- PRF-6081C for shipping and preservation purposes.

Please feel free to contact me if you have any questions or concerns.

Thank you,

Chris Berry

Chris Berry

Chief Inspector

Post-Test BSI

24 MAY 2022

Subject: MODEL 3800708-1 P/N: 3800708-1 S/N: P-4032 WO# 31400

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.

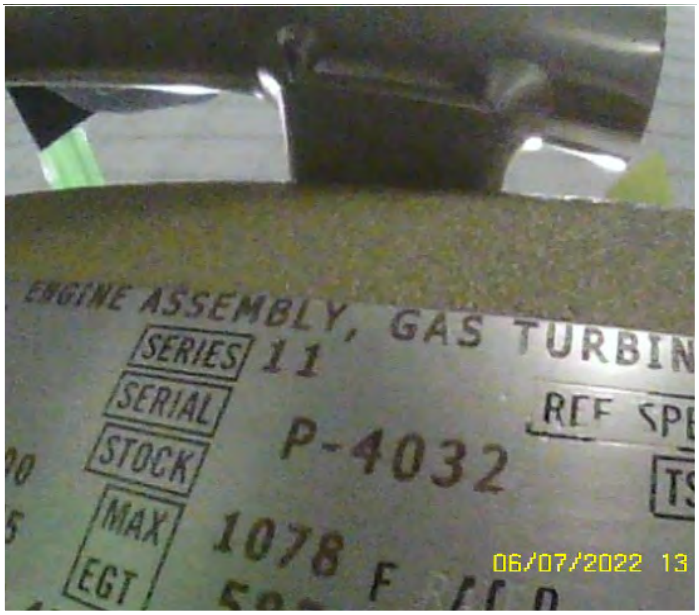
Thank you,

Chris Berry

Chris Berry

Chief Inspector

Outbound BSI Photos



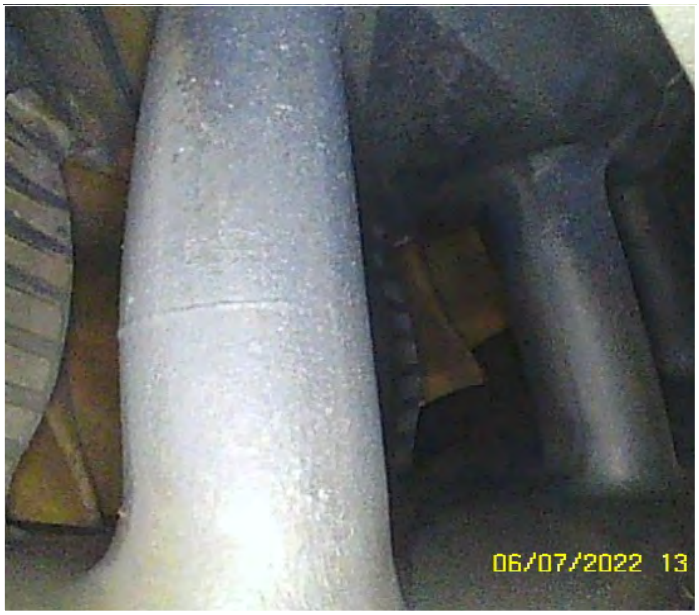
APU Data Plate

Compressor Rotor

Load Compressor Rotor

Load Compressor Blade Tip

Outbound BSI Photos



T1 Stator, LE

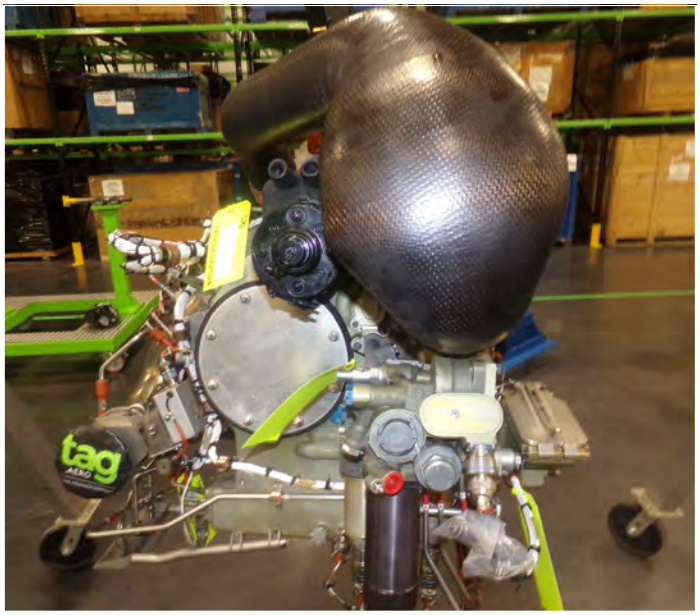
T1 Stator TE/Blades

Combustion Liner

T2 AFT Blades

Model: GTCP131-9B
P/N: 3800708-1
S/N: P-4032
WO: 31400

Outbound Shipping Photos



APU: Front

APU: Rear

APU: Right

APU: Left

Outbound Shipping Photos

APU: Top

APU: Bottom

APU Certification

APU In Box

APU 8130-3

1. Approving Civil Aviation Authority/Country:	2.	3. Form Tracking Number:
FAA/United States	**AUTHORIZED RELEASE CERTIFICATE** **FAA Form 8130–3, AIRWORTHINESS APPROVAL TAG**	2022289

4. Organization Name and Address:	5. Work Order/Contract/Invoice Number:
TAG Aero, LLC 1247 Apex Drive, Rock Hill, SC 29730 FAA CRS # 3UAR147C	31400

6. Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status/Work:
1	APU, GTCP131-9A	3800708-1	1	P-4032	OVERHAULED

12. Remarks:

This component has been overhauled in accordance with current Honeywell publications manual ATA 49-27-29 revision 18, dated April 20, 2022. All flammable liquids have been purged and unit was preserved with MIL-PRF-6081 grade 10/10 lubricant for shipping and preservation purposes.
TSN: 25,832.00 CSN: 26,347 TSO: 0.0 CSO: 0

There are no Airworthiness Directive applicable to this component.
SB 49-8126 was complied with in this shop visit
Complied with 24 month preservation I/A/W SB 49-7997

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

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.: 3UAR147C
13d. Name (Typed or Printed):	13e. Date (dd/mmm/yyyy):	14d. Name (Typed or Printed): Jesse K. Russo	14e. Date (dd/mmm/yyyy): 24 MAY 2022

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.

TAG AERO, LLC
1247 APEX DRIVE
ROCK HILL, SC 29730
TEL.803-831-9390
WWW.TAG.AERO
SC: FAA #3UAR147C | EASA.145.6499
FL: FAA #HI5R376D | EASA.145.5226

BEST APU REPAIR
2021 & 2022

WORK ORDER INSPECTION REPORT

STATUS / WORK	: OVERHAULED
TSN	: 25,832.00 / TSO: 0.0
CSN	: 26,347 / CSO: 0
APU MODEL	: GTCP131-9A
APU PART NUMBER	: 3800708-1
APU S/N	: P-4032
LAST OPERATOR	:
For Customer	: Our Part

W/O No. 31400

P/N 3800708-1

S/N P-4032

Cust P.O.	:	**P/N**	: 3800708-1	**TRACE TO**	: INTERJET
Our Ref	: WO 31400	**Desc**	: GTCP131-9A	**TAG INFO**	: TAG AERO
Your Ref	:	**S/N:**	P-4032	**REMOVED**	:
Project	:	**MFG**	:	**Manual**	:
Contract	:	**Qty**	: 1 **Cond As:** OH	**Revision**	:
Completed P/N	: 3800708-1	**S/N As**	:	**Into Bin Loc**	: [w/h]:
Company	: 1	**Division**	:	**Department**	:
Order Date	: Mar-22-2022	**Received Date**	: Jan-18-2022	**Due Date**	: Mar-22-2022
				Print Date	:

Repair/Service WORK ORDER No. 31400

Reported By Customer
VERIFY P/N AND S/N AS RECEIVED. WORKSCOPE: EVALUATE FOR OVERHAUL.
Preliminary Insp.
VERIFIED P/N 3800708-1 S/N P-4032 MODEL GTCP131-9(A). UNIT RECEIVED IN FAIR GENERAL CONDITION WITH NO VISUAL TRANSIT DAMAGE NOTED. NOTE: STARTER TERMINAL BLOCK IS DAMAGED. PRELIMINARY BORESCOPE AND RECEIPT INSPECTIONS WERE PERFORMED TO THE LOAD COMPRESSOR AND POWER SECTION WITH THE FOLLOWING NOTED: 1) LOAD COMPRESSOR, CRACK ON COMPRESSOR HOUSING VANE, 2) POWER SECTION, FIRST STAGE STATOR CRACKED, 3) IGV PULL TEST (3LBS) MEASURED, A COMPLETE DISASSEMBLY AND DETAILED INSPECTION WAS INITIATED WITH THE FOLLOWING DEFECTS NOTED: 1) DRIVEN COMPRESSOR ROTOR NICKED AT BLADES, 2) SECOND STAGE TURBINE ROTOR NICKED AND CRACKED. 3) COMPRESSOR ROTOR LOW CYCLES, 4) TURBINE SHAFT LOW CYCLES, 5) SECOND STAGE STATOR CRACKED, 6) BEARING RETAINER FAILED DIMENSIONAL CHECK, 6) COMPRESSOR BEARING HOUSING CRACKED. 7) GEARBOX HOUSING STUD LOOSE, 8) IGNITER PLUG EXCESSIVE WEAR, 9) TURBINE BEARING HOUSING LOOSE STUD, 10) ANNULAR COMBUSTION CHAMBER CRACKED, 11) COMBUSTOR CASE BROKEN STUD INSIDE SELF LOCKING NUT, 12) AIR SEAL EXCESSIVE WEAR ON SEAL, 13) ENGINE COMPRESSOR DIFFUSER DAMAGE AT VANES, 14) COUPLING SHAFT KNIFE EDGE DAMAGED, 15) DRIVEN COMPRESSOR IGV (16EA) VANE TIP DAMAGED, 16) FUEL NOZZLE AIR SHROUD ERODED, 17) GEAR SEGMENT (16EA) FRETTING AT TEETH, 18) LOAD COMPRESSOR NUT EXCESSIVE FRETTING, 19) STATIONARY AIR SEAL DISTORTED AND CRACKED, 20) FIRST STAGE STATOR SEGMENT CRACKED AT VANE, 21) GEAR SHAFT CLUSTER CRACKED. UNIT REQUIRES REPLACEMENT PARTS AND 100% PARTS KIT FOR OVERHAUL.
Corrective Action

Continued on next page...

tag .AERO
A UAS HOLDINGS COMPANY

TAG AERO, LLC
1247 APEX DRIVE
ROCK HILL, SC 29730
TEL.803-831-9390
WWW.TAG.AERO
SC: FAA #3UAR147C | EASA.145.6499
FL: FAA #HI5R376D | EASA.145.5226

WORK ORDER INSPECTION REPORT

Repair/Service WORK ORDER No. 31400

THIS COMPONENT HAS BEEN OVERHAULED IN ACCORDANCE WITH HONEYWELL PUBLICATIONS MANUAL ATA 49-27-29 REVISION 18, DATED APRIL 20, 2022. DETAILS OF WORK PERFORMED AT THIS SHOP VISIT ARE AS FOLLOWS

COMPRESSOR AND TURBINE ASSEMBLY HAS BEEN OVERHAULED IN ACCORDANCE WITH HONEYWELL PUBLICATIONS MANUAL ATA 49-27-29 REVISION 18, DATED APRIL 20, 2022. UNIT WAS ASSEMBLED USING REPLACEMENT DRIVEN COMPRESSOR ROTOR P/N 3822400-5, SECOND STAGE TURBINE ROTOR P/N 3840165-4 S/N14-156101-03740, COMPRESSOR ROTOR P/N 3822391-6 S/N 13-162053-59418, TURBINE SHAFT P/N 3822504-3 S/N 12P53775, DRIVEN COMPRESSOR CASE P/N 3827152-3, SECOND STAGE STATOR P/N 3844864-1, BEARING RETAINER P/N 3844917-1, COMPRESSOR BEARING HOUSING P/N 3827426-3, TURBINE BEARING HOUSING P/N 3844863-1, ANNULAR COMBUSTION CHAMBER P/N 3830461-6, COMBUSTOR CASE P/N 3844766-4, AIR SEAL P/N 3844738-7, COMPRESSOR DIFFUSER P/N 3827325-3, COUPLING SHAFT P/N 3840171-2, DRIVEN COMPRESSOR IGV (16EA) P/N 3810684-2, SEGMENT GEAR (16EA) P/N 3810684-2, LOAD COMPRESSOR NUT P/N 3822423-1, AIR SEAL P/N 3844775-1, FIRST STAGE TURBINE STATOR SEGMENT (3EA) P/N 3844760-2,NEW PACKINGS, HARDWARE AND BEARINGS AS REQUIRED.

OVERHAULED FUEL NOZZLE (10EA) P/N 3830416-1 S/N N/A
INSTALLED REPAIRED MATCH SET GEARBOX HOUSING P/N 3863426-3 S/N NSN
INSTALLED REPLACEMENT IGNITER PLUG P/N 305766-4, S/N NSN
INSTALLED REPLACEMENT FUEL NOZZLE SHROUD P/N 3830418-1 S/N NSN
INSTALLED REPLACEMENT GEAR SHAFT CLUSTER P/N 3870205-1 S/N NSN

APU WAS FITTED FOR FULL PERFORMANCE AND OPERATIONAL CHECK WITH ALL PARAMETERS FOR BLEED PRESSURE AND AIR FLOW WITHIN ACCEPTABLE LIMITS. ALL FLAMMABLE LIQUIDS HAVE BEEN PURGED AND UNIT WAS PRESERVED WITH MIL-PRF-6081 GRADE 10/10 LUBRICANT.

1ST STAGE TURBINE ROTOR P/N 3840310-3 S/N 17-156101-07419 CYCLES SINCE NEW: 4,986 / CYCLES REMAINING: 25,014
2ND STAGE TURBINE ROTOR P/N 3840165-4 S/N 14-156101-03740 CYCLES SINCE NEW: 14,601 / CYCLES REMAINING: 15,399
TURBINE SHAFT P/N 3822504-3 S/N 12P53775 CYCLES SINCE NEW: 15,776 / CYCLES REMAINING: 14,224
ENGINE COMPRESSOR ROTOR P/N 3822391-6 S/N 13-162053-59418 CYCLES SINCE NEW: 11,060 / CYCLES REMAINING: 18,940
A/D's and S/B's
THERE ARE NO AIRWORTHINESS DIRECTIVES APPLICABLE TO THIS COMPONENT.
COMPLIED WITH 24-MONTH PRESERVATION I/A/W SB-49-7997.
SB 49-8126 WAS COMPLIED WITH IN THIS SHOP VISIT

Authorized Signature: Jesse K Russo Name : Jesse K Russo Date : 24 MAY 2022

TAG AERO - APU TEST CELL

ACCEPTANCE TEST DATA SHEET

DATE 5/24/2022
TIME 14:33:43

APU MODEL	**131-9A**	PART NO.:	**3800708-1**
CMM	**49-27-29 REV 18**	DATE:	**20-Apr-22**
SOFTWARE REV:	**5.0**	DATE:	**NOV. 2017**
MODEL NO.:	**131-9A**	SERIAL NO.:	**P-4032**
		WORK ORDER:	**31400**
OIL USED:	**MIL-F-23699**	FUEL USED:	**JP1**
ECB UNIT PART NO.:	**3888394-221204**	SERIAL NO.:	**N/A**

AUTOMATIC STARTS	8.H:	START 1	**43**	SEC
		START 2	**42**	SEC
		START 3	**41**	SEC

TOTAL NUMBER OF STARTS (DURING ATP): **7**
TOTAL OPERATING TIME (DURING ATP): **2HR**

OIL SYSTEM PRESERVATION: **NO**
FUEL SYSTEM PRESERVATION: **YES**

NO FUEL / OIL LEAKS: **NO**

REMARKS

INITIAL IGV POSITION	8.D.3:	**92.15**	DEG	INITIAL PBCOR:		**54**	PSIA
FINAL IGV POSITION	8.D.3:	**91.86**	DEG	FINAL PBCOR:		**53.8**	PSIA
ECS OFFSET (FINAL IGV - INITIAL IGV):		**-0.29**	DEG				
FLOW SENSOR CHECK	8.E.8:		WBCDNA:	**48.1**	PPM		
FLOW SENSOR CHECK	8.E.11:		WBCDNA:	**49.4**	PPM		
FLOW SENSOR CHECK	8.E.12:		WC:	**50.6**	PPM	**3.04**	%

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: DATE: **24-May-22**

QUALITY ASSURANCE: DATE: **24-May-22**

TAG AERO - APU TEST CELL

ACCEPTANCE TEST DATA SHEET

DATE 5/24/2022
TIME 14:33:43

MODEL NO.: **131-9A**
SERIAL NO.: **P-4032**
WORK ORDER: **31400**

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 LOAD**	**SHAFT LOAD**	**COMB. LOAD**	**MES MODE**
PBAR	BAROMETRIC PRESSURE		PSIA	14.55	14.55	14.55	14.55
PCELL	CELL PRESSURE		PSIA	14.71	14.71	14.71	14.71
T1	T1 - APU INLET TEMPERATURE (AVG)		DEG F	91.9	89.6	93.6	93.2
TENIVA	UNIT INLET TEMPERATURE (T2)		DEG F	83.9	83.2	90.9	89.8
POIL	OIL PRESS - LUBE PUMP DISCHARGE		PSIG	64	65	64	64
TOIL	OIL TEMP - LUBE PUMP DISCHARGE		DEG F	186	190	191	192
PSGBX	GEARBOX PRESSURE - SUMP		IN H2O	-8	4	-9	-8
TFUEL	FUEL INLET TEMPERATURE		DEG F	74	75	75	75
PFUEL	FUEL INLET PRESSURE		PSIG	19.5	21.6	19.1	19.9
VIBGBA	UNIT VIBRATION - GEARBOX		IN/SEC	0.23	0.23	0.24	0.29
VIBTHA	UNIT VIBRATION - TURBINE		IN/SEC	0.32	0.29	0.29	0.29
VIBCFA	UNIT VIBRATION - COOLING FAN		IN/SEC	0.39	0.4	0.41	0.42
XNL	SHAFT SPEED		RPM	48813	48797	48810	48801
PIGV	INLET GUIDE VAN POSITION		DEG	22.26	22.29	91.84	91.77
PCDFD	COMP. DISCH. STATIC PRESS		PSIA	97.9	96.8	98.5	97.6
TCDFD	COMP. DISCHARGE TEMPERATURE		DEG F	457	571	502	449
TTDEA	TURBINE DISCHARGE TEMPERATURE		DEG F	715	945	1085	1037
TTDEB	(UNIT EGT)		DEG F	720	916	1099	1054
EGT	LAB EGT (AVG)		DEG F	718	739	1108	1044
PS9	EXHAUST STATIC PRESSURE		PSIA	14.55	14.55	14.55	14.55
PBORFA	BLEED AIR ORIFICE PRESSURE		PSIA			34.2	37.5
TBORFA	BLEED ORIFICE TEMPERATURE		DEG F			415	415
PDBORA	BLEED AIR ORIFICE DELTA P		PSID			7.03	5.57
WB	BLEED AIRFLOW		PPM			160.4	153.2
WBCDNA	CORRECTED DISCHARGE AIRFLOW		PPM			56.2	53.6
PG	BLEED PRESSURE (AVG)		PSIA			55.1	55.1
TB	BLEED TEMPERATURE (AVG)		DEG F			436	435
WF	FUEL FLOW		PPH	210	247	299	283
PWGEN	GENERATOR LOAD - PFACTOR = 1		KW		82.3	70.2	46.5
SHPSL	GENERATOR LOAD, SEA LEVEL		KW		98	83	55.3
PBCOR	BLEED PRESSURE, SEA LEVEL		PSIA			53.9	51.4
WBCOR	BLEED ARIFLOW, SEA LEVEL		PPM			156	140.5
TBCOR	BLEED TEMPERATURE, SEA LEVEL		DEG F			433	465
EGTCOR	EGT CORRECTED, SEA LEVEL		DEG F			1098	1071
WFCOR	FUEL FLOW CORRECTED, SEA LEVEL		PPH			289.8	269
REQUIREMENTS		*MIN WBCOR*	PPM			152.2	
		MIN PBCOR	PSIA			51.2	51.1
X	HEAVY REPAIR	*MAX IGV*	DEG			92.5	
		MAX WFCOR	PPH				269
	CONT. TIME	*MAX. EGTCOR*	DEG F			1130	1125
		SHPSL REQUIRED	KW		98	83	54

6/7/2022 Data Conversion For ENGINE S/N P4032
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	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	40	40	APU SERIAL NUMBER (NEXT 2 DIGITS)
7	APUser.num4	32	32	APU SERIAL NUMBER (LAST 2 DIGITS)
8	APUser.suf			APU SERIAL NUMBER (SUFFIX 2 DIGITS)
9	APUhours_LO	25663	25663	APU HOURS Low Word
10	APUminutes	33	33	APU MINUTES
11	APUcycles_LO	26182	26182	APU CYCLES Low Word
12	ECS_OFFSET	-29	-0.290	ECS OFFSET DEGREES (SV)
13	FUELOFF100	417	4.170	FUEL FLOW OFFSET AT 100 POUNDS PPH
14	FUELOFF200	451	4.510	FUEL FLOW OFFSET AT 200 PPH
15	ABSTARTS	38	38	NUMBER OF UNSUCCESSFUL STARTS
16	APU_OPTIONS	0	0	APU OPTION FLAGS
17	FLTSTARTS	7	7	NUMBER OF INFLIGHT STARTS
18	ABFLTSTARTS	0	0	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	23	23	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	5480	5480	OPERATING TIME IN ECS HOURS
28	ECS_MINUTES	112	11.200	OPERATING TIME IN ECS MINUTES
29	FLT_HOURS	138	138	OPERATING TIME IN FLIGHT HOURS
30	FLT_MINUTES	293	29.300	OPERATING TIME IN FLIGHT MINUTES
31	HOT_TIME	1081	108.100	OPERATING HOURS T2 GREATER 100 DEGF
32	COLD_TIME	4	0.400	OPERATING HOURS T2 LESS 0 DEGF
33	NMES	8933	8933	NUMBER OF MAIN ENGINE STARTS
34	HIGHSTARTS	2	2	NUMBER OF START ATTEMPTS ABOVE 25000 FT
35	BRRSTARTS	44	44	NUMBER OF STARTS OILTEMP LESS 0 DEGF
36	BRRRRSTARTS	0	0	NUMBER OF STARTS OILTEMP LESS -40 DEGF
37	LOWOILPR	3	3	NUMBER OF LOW OIL PRESSURE SHUTDOWNS
38	NUM3LOP	1	1	NUMBER OF 3 CONSECUTIVE LOP SHUTDOWNS
39	CONSECLOP	0	0	NUMBER OF CONSECUTIVE LOP SHUTDOWNS
40	HOT	0	0	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
46	UNDERSPEED	0	0	NUMBER OF UNDERSPEED SHUTDOWNS
47	FILTER_SDN	23	23	NUMBER OF CLOGGED OIL FILTER SHUTDOWNS

48	NO_FLAME	27	27	NUMBER OF NO FLAME SHUTDOWNS
49	INLET_HOT	0	0	NUMBER OF INLET HOT SHUTDOWNS
50	INFLIGHT_SD	0	0	NUMBER OF INFLIGHT SHUTDOWNS
51	AT4ECS(1)	0	0	AVERAGE T4 ECS DEG F* (PS)
52	AT4ECS(2)	0	0	AVERAGE T4 ECS DEG F (PS)
53	AT4MES(1)	0	0	AVERAGE T4 MES DEG F* (PS)
54	AT4MES(2)	0	0	AVERAGE T4 MES DEG F (PS)
55	AT4FLT(1)	0	0	AVERAGE T4 INFLIGHT DEG F* (PS)
56	AT4FLT(2)	0	0	AVERAGE T4 INFLIGHT DEG F (PS)
57	T1800	0	0	HOURS T4 > 1800 DEG F (PS)
58	T1850	0	0	HOURS T4 > 1850 DEG F (PS)
59	T1900	0	0	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	0	0	HIGHEST T4 ONSPEED DEGF (PS)
63	RECT5S	0	0	HIGHEST T5 DURING START DEGF (PS)
64	ABRTCLDN	4	4	NUMBER OF ABORTED COOLDOWNS
65	CT5AVE	0	900	AVERAGE CORR T5 DURING MES DEGF (SV)
66	MDNCT5AVE	13420	1034.200	MAIDEN CORR T5 DURING MES DEGF
67	CT5AVE500	0	900	CORR T5 MES AT 500 HOURS DEGF
68	CT5AVE1000	0	900	CORR T5 MES AT 1000 HOURS DEGF
69	CT5AVE1500	0	900	CORR T5 MES AT 1500 HOURS DEGF
70	CT5AVE2000	0	900	CORR T5 MES AT 2000 HOURS DEGF
71	CT5AVE2500	0	900	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	0	900	CORR T5 MES AT 7000 HOURS DEGF
79	CT5AVE8000	0	900	CORR T5 MES AT 8000 HOURS DEGF
80	CT5AVE9000	0	900	CORR T5 MES AT 9000 HOURS DEGF
81	CT5AVE10000	0	900	CORR T5 MES AT 10000 HOURS DEGF
82	CPTAVE	0	0	AVERAGE CORR PT DURING MES PSIA (SV)
83	MDNCPTAVE	57100	57.100	MAIDEN CORR PT DURING MES PSIA
84	CPTAVE500	0	0	CORR PT DURING MES AT 500 HOURS PSIA
85	CPTAVE1000	0	0	CORR PT DURING MES AT 1000 HOURS PSIA
86	CPTAVE1500	0	0	CORR PT DURING MES AT 1500 HOURS PSIA
87	CPTAVE2000	0	0	CORR PT DURING MES AT 2000 HOURS PSIA
88	CPTAVE2500	0	0	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	0	0	CORR PT DURING MES AT 7000 HOURS PSIA
96	CPTAVE8000	0	0	CORR PT DURING MES AT 8000 HOURS PSIA
97	CPTAVE9000	0	0	CORR PT DURING MES AT 9000 HOURS PSIA

```
  98 CPTAVE10000            0             0 CORR PT DURING MES AT 10000 HOURS PSIA
  99 CWFAVE                 0             0 AVERAGE CORR FUEL FLOW DURING MES PPH
(SV)
 100 MDNCWFAVE          28454       284.540 MAIDEN CORR FUEL FLOW DURING MES PPH
 101 CWFAVE500              0             0 CORR FUEL FLOW MES AT 500 HOURS PPH
 102 CWFAVE1000             0             0 CORR FUEL FLOW MES AT 1000 HOURS PPH
 103 CWFAVE1500             0             0 CORR FUEL FLOW MES AT 1500 HOURS PPH
 104 CWFAVE2000             0             0 CORR FUEL FLOW MES AT 2000 HOURS PPH
 105 CWFAVE2500             0             0 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             0             0 CORR FUEL FLOW MES AT 7000 HOURS PPH
 113 CWFAVE8000             0             0 CORR FUEL FLOW MES AT 8000 HOURS PPH
 114 CWFAVE9000             0             0 CORR FUEL FLOW MES AT 9000 HOURS PPH
 115 CWFAVE10000            0             0 CORR FUEL FLOW MES AT 10000 HOURS PPH
 116 IGVMES              9402        94.020 IGV POSITION DURING MES DEGREES
 117 SPEEDDROOPS           25            25 NUMBER OF SPEED DROOPS BELOW 85% SPEED
 118 START_TIME            58            58 Start Time for current APU Run
 119 STARTTIME_1           41            41 Start Time for last APU Run
 120 STARTTIME_2           36            36 Start Time for last-1 APU Run
 121 STARTTIME_3           36            36 Start Time for last-2 APU Run
 122 STARTTIME_4           38            38 Start Time for last-3 APU Run
 123 STARTTIME_5           51            51 Start Time for last-4 APU Run
 124 STARTTIME_6           49            49 Start Time for last-5 APU Run
 125 STARTTIME_7           44            44 Start Time for last-6 APU Run
 126 STARTTIME_8           60            60 Start Time for last-7 APU Run
 127 STARTTIME_9           58            58 Start Time for last-8 APU Run
 128 STRTTIMEAVE           42            42 Average Start Time for last 10 Starts
 129 ECS_0P_HR            276           276 Operating Time in ECS  Zero Pack (hr)
 130 ECS_0P_MIN         23449        39.082 Operating Time in ECS Zero Pack (min)
 131 ECS_1P_HR            125           125 Operating Time in ECS  One Pack (hr)
 132 ECS_1P_MIN         19457        32.428 Operating Time in ECS One Pack (min)
 133 ECS_2P_HR           5072          5072 Operating Time in ECS  Two Pack (hr)
 134 ECS_2P_MIN         22114        36.857 Operating Time in ECS Two Pack (min)
 135 ECS_G75_HR          1564          1564 Operating Time in ECS  with ARC_DMD  >
75%
 136 ECS_G75_MIN        14209        23.682 Operating Time in ECS  with ARC_DMD  >
75%
 137 ECS_L75_HR          1578          1578 Operating Time in ECS  with ARC_DMD  <
25%
 138 ECS_L25_MIN        32491        54.152 Operating Time in ECS  with ARC_DMD  <
25%
 139 T1800_HR              0             0 Time T4_ONSPEED_FIL > 1800 DEG F (HR)
(PS)
 140 T1800_MIN             0             0 Time T4_ONSPEED_FIL > 1800 DEG F (MIN)
(PS)
```

 141 T1850_HR 0 0 Time T4_ONSPEED_FIL > 1850 DEG F (HR)
(PS)
 142 T1850_MIN 0 0 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 0 0 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 0 0 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 0 0 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 0 0 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 0 0 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 CT5AVE 0 0 CT5AVE (SV)
 158 CT5_MR_BAR 0 0 CT5_MR_BAR (SV)
 159 M_CT5_UCLT 0 0 Maiden upper Control Limit for CT5 (SV)
 160 C_CT5_UCLT 0 0 Corrected upper Control Limit for CT5
(SV)
 161 M_CT5_XBAR 0 0 Maiden CT5_XBAR (SV)
 162 R_CT5_XBAR 0 0 Running CT5_XBAR (SV)
 163 CT5_A_N1 0 0 CT5_A_N1 (SV)
 164 CT5_A_N2 0 0 CT5_A_N2 (SV)
 165 CT5_A_N3 0 0 CT5_A_N3 (SV)
 166 CT5_A_N4 0 0 CT5_A_N4 (SV)
 167 CT5_A_N5 0 0 CT5_A_N5 (SV)
 168 CT5_A_N6 0 0 CT5_A_N6 (SV)
 169 CT5_A_N7 0 0 CT5_A_N7 (SV)
 170 CT5_A_N8 0 0 CT5_A_N8 (SV)
 171 CT5_A_N9 0 0 CT5_A_N9 (SV)
 172 CT5_A_N10 0 0 CT5_A_N10 (SV)
 173 CT5_A_N11 0 0 CT5_A_N11 (SV)
 174 CT5_A_N12 0 0 CT5_A_N12 (SV)

```
 175 CT5_A_N13              0            0 CT5_A_N13 (SV)
 176 CT5_A_N14              0            0 CT5_A_N14 (SV)
 177 CT5_A_N15              0            0 CT5_A_N15 (SV)
 178 CT5_A_N16              0            0 CT5_A_N16 (SV)
 179 CT5_A_N17              0            0 CT5_A_N17 (SV)
 180 CT5_A_N18              0            0 CT5_A_N18 (SV)
 181 CT5_A_N19              0            0 CT5_A_N19 (SV)
 182 CT5_A_N20              0            0 CT5_A_N20 (SV)
 183 CT5OLD0                0            0 CT5AVE 0 Hours ago (SV)
 184 CT5OLD50               0            0 CT5AVE 50 Hours ago (SV)
 185 CT5OLD100              0            0 CT5AVE 100 Hours ago (SV)
 186 CT5OLD150              0            0 CT5AVE 150 Hours ago (SV)
 187 CT5OLD200              0            0 CT5AVE 200 Hours ago (SV)
 188 CT5OLD250              0            0 CT5AVE 250 Hours ago (SV)
 189 CT5OLD300              0            0 CT5AVE 300 Hours ago (SV)
 190 CT5OLD350              0            0 CT5AVE 350 Hours ago (SV)
 191 CT5OLD400              0            0 CT5AVE 400 Hours ago (SV)
 192 CT5OLD450              0            0 CT5AVE 450 Hours ago (SV)
 193 CT5OLD500              0            0 CT5AVE 500 Hours ago (SV)
 194 CT5_X1000          11196      1025.056 "CT5AVE at X1000 Hours (for x = 0,1, 2,
..., 6)"
 195 CT5_X1500          10923      1000.061 "CT5AVE at X1500 Hours (for x = 0,1, 2,
..., 6)"
 196 CT5_X2000          10895       997.497 "CT5AVE at X2000 Hours (for x = 0,1, 2,
..., 6)"
 197 CT5_X2500          10940      1001.617 "CT5AVE at X2500 Hours (for x = 0,1, 2,
..., 6)"
 198 CT5_X3000          11015      1008.484 "CT5AVE at X3000 Hours (for x = 0,1, 2,
..., 6)"
 199 CT5_X3500          11254      1030.366 "CT5AVE at X3500 Hours (for x = 0,1, 2,
..., 6)"
 200 CT5_X4000          11231      1028.260 "CT5AVE at X4000 Hours (for x = 0,1, 2,
..., 6)"
 201 CT5_X4500          11316      1036.042 "CT5AVE at X4500 Hours (for x = 0,1, 2,
..., 6)"
 202 CT5_X5000          11214      1026.704 "CT5AVE at X5000 Hours (for x = 0,1, 2,
..., 6)"
 203 CT5_X6000          11604      1062.410 "CT5AVE at X6000 Hours (for x = 0,1, 2,
..., 5)"
 204 CT5_X7000          11723      1073.305 "CT5AVE at X7000 Hours (for x = 0,1, 2,
..., 5)"
 205 CT5_X8000          12021      1100.589 "CT5AVE at X8000 Hours (for x = 0,1, 2,
..., 5)"
 206 CT5_X9000          11747      1075.503 "CT5AVE at X9000 Hours (for x = 0,1, 2,
..., 5)"
 207 CT5_X0000          11780      1078.524 "CT5AVE at X0000 Hours (for x = 1, 2,
..., 6)"
 208 CPT_CYC_NUM        25482         25482 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                0            0 CPTAVE (SV)
 211 CPT_MR_BAR            0            0 CPT_MR_BAR (SV)
 212 M_CPT_LCLT            0            0 Maiden lower Control Limit for CPT (SV)
 213 M_CPT_XBAR            0            0 Maiden CPT_XBAR (SV)
 214 R_CPT_XBAR            0            0 Running CPT_XBAR (SV)
 215 CPT_A_N1              0            0 CPT_A_N1 (SV)
 216 CPT_A_N2              0            0 CPT_A_N2 (SV)
 217 CPT_A_N3              0            0 CPT_A_N3 (SV)
 218 CPT_A_N4              0            0 CPT_A_N4 (SV)
 219 CPT_A_N5              0            0 CPT_A_N5 (SV)
 220 CPT_A_N6              0            0 CPT_A_N6 (SV)
 221 CPT_A_N7              0            0 CPT_A_N7 (SV)
 222 CPT_A_N8              0            0 CPT_A_N8 (SV)
 223 CPT_A_N9              0            0 CPT_A_N9 (SV)
 224 CPT_A_N10             0            0 CPT_A_N10 (SV)
 225 CPT_A_N11             0            0 CPT_A_N11 (SV)
 226 CPT_A_N12             0            0 CPT_A_N12 (SV)
 227 CPT_A_N13             0            0 CPT_A_N13 (SV)
 228 CPT_A_N14             0            0 CPT_A_N14 (SV)
 229 CPT_A_N15             0            0 CPT_A_N15 (SV)
 230 CPT_A_N16             0            0 CPT_A_N16 (SV)
 231 CPT_A_N17             0            0 CPT_A_N17 (SV)
 232 CPT_A_N18             0            0 CPT_A_N18 (SV)
 233 CPT_A_N19             0            0 CPT_A_N19 (SV)
 234 CPT_A_N20             0            0 CPT_A_N20 (SV)
 235 CPTOLD0               0            0 CPTAVE 0 Hours ago (SV)
 236 CPTOLD50              0            0 CPTAVE 50 Hours ago (SV)
 237 CPTOLD100             0            0 CPTAVE 100 Hours ago (SV)
 238 CPTOLD150             0            0 CPTAVE 150 Hours ago (SV)
 239 CPTOLD200             0            0 CPTAVE 200 Hours ago (SV)
 240 CPTOLD250             0            0 CPTAVE 250 Hours ago (SV)
 241 CPTOLD300             0            0 CPTAVE 300 Hours ago (SV)
 242 CPTOLD350             0            0 CPTAVE 350 Hours ago (SV)
 243 CPTOLD400             0            0 CPTAVE 400 Hours ago (SV)
 244 CPTOLD450             0            0 CPTAVE 450 Hours ago (SV)
 245 CPTOLD500             0            0 CPTAVE 500 Hours ago (SV)
 246 CPT_X1000         13809       50.572 "CPTAVE at X1000 Hours (for x 0 1, 2,
...., 6)"
 247 CPT_X1500         15115       55.354 "CPTAVE at X1500 Hours (for x 0 1, 2,
...., 6)"
 248 CPT_X2000         15202       55.673 "CPTAVE at X2000 Hours (for x 0 1, 2,
...., 6)"
 249 CPT_X2500         15250       55.849 "CPTAVE at X2500 Hours (for x 0 1, 2,
...., 6)"
 250 CPT_X3000         15189       55.625 "CPTAVE at X3000 Hours (for x 0 1, 2,
...., 6)"
 251 CPT_X3500         15202       55.673 "CPTAVE at X3500 Hours (for x 0 1, 2,
...., 6)"
 252 CPT_X4000         15030       55.043 "CPTAVE at X4000 Hours (for x 0 1, 2,
...., 6)"
```

```
 253 CPT_X4500         15093       55.274 "CPTAVE at X4500 Hours (for x 0 1, 2,
..., 6)"
 254 CPT_X5000         15058       55.146 "CPTAVE at X5000 Hours (for x 0 1, 2,
..., 6)"
 255 CPT_X6000         15403       56.409 "CPTAVE at X6000 Hours (for x 0 1, 2,
..., 5)"
 256 CPT_X7000         15492       56.735 "CPTAVE at X7000 Hours (for x 0 1, 2,
..., 5)"
 257 CPT_X8000         15468       56.647 "CPTAVE at X8000 Hours (for x 0 1, 2,
..., 5)"
 258 CPT_X9000         15479       56.688 "CPTAVE at X9000 Hours (for x 0 1, 2,
..., 5)"
 259 CPT_X0000         15414       56.449 "CPTAVE at X0000 Hours (for x 0 1, 2,
..., 6)"
 260 CWFAVE                0           0 CWFAVE (SV)
 261 CWFOLD0               0           0 CWFAVE 0 Hours ago (SV)
 262 CWFOLD50              0           0 CWFAVE 50 Hours ago (SV)
 263 CWFOLD100             0           0 CWFAVE 100 Hours ago (SV)
 264 CWFOLD150             0           0 CWFAVE 150 Hours ago (SV)
 265 CWFOLD200             0           0 CWFAVE 200 Hours ago (SV)
 266 CWFOLD250             0           0 CWFAVE 250 Hours ago (SV)
 267 CWFOLD300             0           0 CWFAVE 300 Hours ago (SV)
 268 CWFOLD350             0           0 CWFAVE 350 Hours ago (SV)
 269 CWFOLD400             0           0 CWFAVE 400 Hours ago (SV)
 270 CWFOLD450             0           0 CWFAVE 450 Hours ago (SV)
 271 CWFOLD500             0           0 CWFAVE 100 Hours ago (SV)
 272 CWF_X1000         17142       267.852 "CWFAVE at X1000 Hours (for x= 0 1, 2,
..., 6)"
 273 CWF_X1500         16995       265.555 "CWFAVE at X1500 Hours (for x= 0 1, 2,
..., 6)"
 274 CWF_X2000         17102       267.227 "CWFAVE at X2000 Hours (for x= 0 1, 2,
..., 6)"
 275 CWF_X2500         17018       265.914 "CWFAVE at X2500 Hours (for x= 0 1, 2,
..., 6)"
 276 CWF_X3000         17011       265.805 "CWFAVE at X3000 Hours (for x= 0 1, 2,
..., 6)"
 277 CWF_X3500         17063       266.618 "CWFAVE at X3500 Hours (for x= 0 1, 2,
..., 6)"
 278 CWF_X4000         16918       264.352 "CWFAVE at X4000 Hours (for x= 0 1, 2,
..., 6)"
 279 CWF_X4500         16998       265.602 "CWFAVE at X4500 Hours (for x= 0 1, 2,
..., 6)"
 280 CWF_X5000         17023       265.992 "CWFAVE at X5000 Hours (for x= 0 1, 2,
..., 6)"
 281 CWF_X6000         18063       282.243 "CWFAVE at X6000 Hours (for x= 0 1, 2,
..., 5)"
 282 CWF_X7000         18101       282.837 "CWFAVE at X7000 Hours (for x= 0 1, 2,
..., 5)"
 283 CWF_X8000         18557       289.962 "CWFAVE at X8000 Hours (for x= 0 1, 2,
..., 5)"
```

```
 284 CWF_X9000          18564       290.071 "CWFAVE at X9000 Hours (for x= 0 1, 2,
..., 5)"
 285 CWF_X0000          18761       293.150 "CWFAVE at X0000 Hours (for x= 1, 2,
..., 6)"
 286 LOWFUELPR              0             0 Number of Low Fuel Pressure Faults (SV)
 287 SDN_LFP                0             0 Number of Shutdowns with Low Fuel
Pressure Fault (SV)
 288 NO_SPEED              29            29 Number of No Speed S/D
 289 NOSPDNOBATRY           0             0 Number of No Speed Shutdowns with Main
or Backup Start Contactor open faults (SV)
 290 EMERGENCY              0             0 Number of Emergency S/D (SV)
 291 SNSR_FAIL              0             0 Number of Sensor Fail S/D
 292 RECT4R_CYC             0             0 APU Cycle of RECT4R entry (PS)
 293 RECT5S_CYC             0             0 APU Cycle of RECT5S entry (PS)
 294 LOP_SDN_1          25794         25794 APU Cycle of Low Oil Pressure Sdn(1)
 295 LOP_EVT_1           04EF          04EF Event Word for Low Oil Pressure Sdn(1)
 296 LOP_SDN_2          25793         25793 APU Cycle of Low Oil Pressure Sdn(2)
 297 LOP_EVT_2           04EF          04EF Event Word for Low Oil Pressure Sdn(2)
 298 LOP_SDN_3          25792         25792 APU Cycle of Low Oil Pressure Sdn(3)
 299 LOP_EVT_3           31EF          31EF 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              0             0 APU Cycle of High Oil Temp Sdn(1)
 305 HOT_EVT_1           0000          0000 Event Word for High Oil Temp Sdn(1)
 306 HOT_SDN_2              0             0 APU Cycle of High Oil Temp Sdn(2)
 307 HOT_EVT_2           0000          0000 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          0             0 APU Cycle of Overtmp Onspeed Sdn(1)
 315 OVRTMPG_EVT_1       0000          0000 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	22156	22156	APU Cycle of No Accel Sdn(1)
345	NOACCEL_EVT_1	00BF	00BF	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	0	0	APU Cycle of Underspeed Sdn(1)
365	UNDRSPD_EVT_1	0000	0000	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	25805	25805	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	25804	25804	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	20296	20296	APU Cycle of Clogged Oil Filter Sdn(3)
379	CLFLTR_EVT_3	00EF	00EF	Event Word for Clogged Oil Filter Sdn(3)

380	CLFLTR_SDN_4	20295	20295	APU Cycle of Clogged Oil Filter Sdn(4)
381	CLFLTR_EVT_4	00EF	00EF	Event Word for Clogged Oil Filter Sdn(4)
382	CLFLTR_SDN_5	18882	18882	APU Cycle of Clogged Oil Filter Sdn(5)
383	CLFLTR_EVT_5	14EF	14EF	Event Word for Clogged Oil Filter Sdn(5)
384	NOFLAM_SDN_1	26176	26176	APU Cycle of No Flame Sdn(1)
385	NOFLAM_EVT_1	003F	003F	Event Word for No Flame Sdn(1)
386	NOFLAM_SDN_2	26176	26176	APU Cycle of No Flame Sdn(2)
387	NOFLAM_EVT_2	003F	003F	Event Word for No Flame Sdn(2)
388	NOFLAM_SDN_3	23058	23058	APU Cycle of No Flame Sdn(3)
389	NOFLAM_EVT_3	003F	003F	Event Word for No Flame Sdn(3)
390	NOFLAM_SDN_4	19959	19959	APU Cycle of No Flame Sdn(4)
391	NOFLAM_EVT_4	003F	003F	Event Word for No Flame Sdn(4)
392	NOFLAM_SDN_5	19959	19959	APU Cycle of No Flame Sdn(5)
393	NOFLAM_EVT_5	003F	003F	Event Word for No Flame Sdn(5)
394	INLTHOT_SDN_1	0	0	APU Cycle of Inlet HOT Sdn(1)
395	INLTHOT_EVT_1	0000	0000	Event Word for Inlet HOT Sdn(1)
396	INLTHOT_SDN_2	0	0	APU Cycle of Inlet HOT Sdn(2)
397	INLTHOT_EVT_2	0000	0000	Event Word for Inlet HOT Sdn(2)
398	INLTHOT_SDN_3	0	0	APU Cycle of Inlet HOT Sdn(3)
399	INLTHOT_EVT_3	0000	0000	Event Word for Inlet HOT Sdn(3)
400	INLTHOT_SDN_4	0	0	APU Cycle of Inlet HOT Sdn(4)
401	INLTHOT_EVT_4	0000	0000	Event Word for Inlet HOT Sdn(4)
402	INLTHOT_SDN_5	0	0	APU Cycle of Inlet HOT Sdn(5)
403	INLTHOT_EVT_5	0000	0000	Event Word for Inlet HOT Sdn(5)
404	EMERG_SDN_1	25582	25582	APU Cycle of Emergency Sdn(1)
405	EMERG_EVT_1	00BF	00BF	Event Word for Emergency Sdn(1)
406	EMERG_SDN_2	22779	22779	APU Cycle of Emergency Sdn(2)
407	EMERG_EVT_2	00EF	00EF	Event Word for Emergency Sdn(2)
408	EMERG_SDN_3	22340	22340	APU Cycle of Emergency Sdn(3)
409	EMERG_EVT_3	00BF	00BF	Event Word for Emergency Sdn(3)
410	EMERG_SDN_4	22205	22205	APU Cycle of Emergency Sdn(4)
411	EMERG_EVT_4	08BF	08BF	Event Word for Emergency Sdn(4)
412	EMERG_SDN_5	21591	21591	APU Cycle of Emergency Sdn(5)
413	EMERG_EVT_5	00EF	00EF	Event Word for Emergency Sdn(5)
414	NOSPD_SDN_1	24830	24830	APU Cycle of No Speed Sdn(1)
415	NOSPD_EVT_1	001F	001F	Event Word for No Speed Sdn(1)
416	NOSPD_SDN_2	24830	24830	APU Cycle of No Speed Sdn(2)
417	NOSPD_EVT_2	001F	001F	Event Word for No Speed Sdn(2)
418	NOSPD_SDN_3	24764	24764	APU Cycle of No Speed Sdn(3)
419	NOSPD_EVT_3	001F	001F	Event Word for No Speed Sdn(3)
420	NOSPD_SDN_4	24764	24764	APU Cycle of No Speed Sdn(4)
421	NOSPD_EVT_4	001F	001F	Event Word for No Speed Sdn(4)
422	NOSPD_SDN_5	23490	23490	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	9407	9407	Number of APU minutes during current month
448	CYCLES_M0	149	149	Number of APU cycles during current month
449	MINUTES_M1	12393	12393	Number of APU minutes during current month - 1 month
450	CYCLES_M1	201	201	Number of APU cycles during current month – 1 month
451	MINUTES_M2	14873	14873	Number of APU minutes during current month – 2 months
452	CYCLES_M2	227	227	Number of APU cycles during current month – 2 months
453	MINUTES_M3	14429	14429	Number of APU minutes during current month – 3 months
454	CYCLES_M3	234	234	Number of APU cycles during current month – 3 months
455	MINUTES_M4	14040	14040	Number of APU minutes during current month – 4 months
456	CYCLES_M4	228	228	Number of APU cycles during current month – 4 months
457	MINUTES_M5	13577	13577	Number of APU minutes during current month – 5 months
458	CYCLES_M5	213	213	Number of APU cycles during current month – 5 months
459	MINUTES_M6	16725	16725	Number of APU minutes during current month – 6 months
460	CYCLES_M6	239	239	Number of APU cycles during current month – 6 months
461	MINUTES_M7	14685	14685	Number of APU minutes during current month – 7 months

462	CYCLES_M7	222	222	Number of APU cycles during current month – 7 months
463	MINUTES_M8	13705	13705	Number of APU minutes during current month – 8 months
464	CYCLES_M8	227	227	Number of APU cycles during current month – 8 months
465	MINUTES_M9	12966	12966	Number of APU minutes during current month – 9 months
466	CYCLES_M9	239	239	Number of APU cycles during current month – 9 months
467	MINUTES_M10	12889	12889	Number of APU minutes during current month – 10 months
468	CYCLES_M10	244	244	Number of APU cycles during current month – 10 months
469	MINUTES_M11	9836	9836	Number of APU minutes during current month – 11 months
470	CYCLES_M11	247	247	Number of APU cycles during current month – 11 months
471	MINUTES_M12	10176	10176	Number of APU minutes during current month – 12 months
472	CYCLES_M12	199	199	Number of APU cycles during current month – 12 months

Shop Visit
Honeywell
March 2018

9100 S. Dadeland Blvd., Suite 1500, Miami, FL 33156 +1-305-271-6650
info@longreach.com www.longreach.com

1. Approving Civil Aviation Authority/Country:	2.	3. Form Tracking Number:
FAA/United States	**AUTHORIZED RELEASE CERTIFICATE** **FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG**	20180004534787Y15 331110227

4. Organization Name and Address:	Repair Station	5. Work Order/Contract/Invoice Number:
Honeywell International Inc 1944 E Sky Harbor Circle PHOENIX AZ 85034	ZN3R030M	MX70040112 331110226 Page 1 of 1

6.Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status / Work:
001	ENGINE OUTLINE, GAS TURBINE	3800708-1	1	P-4032	REPAIRED

12. Remarks:

THE SERVICE SPECIFIED HAS BEEN ACCOMPLISHED IN ACCORDANCE WITH:
EM 49-27-29 Rev 11, OCT/25/2017

LONG TERM PRESERVATION ACCOMPLISHED
TSN: 20997:44 CSN: 21361 TSR/CSR: 0

SEE ATTACHED DOCUMENTS AS APPLICABLE FOR WORK PERFORMED
CERTIFIES THAT THE WORK SPECIFIED IN BLOCK 11/12 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 NO. EASA 145.4136

13a. Certifies the items identified above were manufactured in conformity to:		14a. ☒ 14 CFR 43.9 Return to Service ☒ Other regulation specified in Block 12	
☐ Approved design data and are in a condition for safe operation. ☐ Non-approved design data specified in Block 12.		Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.	
13b. Authorized Signature:	13c. Approval/Authorization No.:	14b. Authorized Signature: Gabriel Martinez III (143)	14c. Approval/Certificate No.: **ZN3R030M**
13d. Name (Typed or Printed):	13e. Date(dd/mmm/yyyy):	14d. Name (Typed or Printed): **Gabriel Martinez III**	14e. Date(dd/mmm/yyyy): **30/MAR/2018**

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 Block1, 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 Block1. Statements in Blocks 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

1

55809

Honeywell

NDC / Life Limited Parts

Date	TSN	CSN	APU P/N	S/N	CUSTOMER
3/29/18	20997:44	21361	3800708-1 Model 131-9A	P-4032	ABC AEROLINEAS SA DE CV

Noun	P/N	S/N	Status	Noun	P/N	S/N	Status
FAN	3616140-7	P-2759	2	STARTER	2704506-4	6473	1
FUEL CONTROL	441921-5	CUC14551	2	LUBE MODULE	4131020-4	4164	2
AIR OIL COOLER	160494-1	303	2	IGN EXCITER	DNR	--	--
SURGE VALVE	3291238-2	5545	3	LOAD VALVE	3291432-2	1646	3E
DMM	3876287-1	GE6916	4	IGV ACTUATOR	3886188-3	0713	3E
GENERATOR	DNR	SHIPLESS	--				

REPAIR CODES 1-BENCH TEST 2-REPAIR 3-OVERHAUL 4- USED AS IS 5-NEW E- EXCHANGED

Noun	P/N	S/N	Time	Cycles
TIE SHAFT	3822504-3	08P16645	20997:44	21361
L/C IMPELLER	3822400-5	07-03501-12207	N/A	N/A
E/C IMPELLER	3822391-6	08-03501-14281	20997:44	21361
1ST T-WHEEL	3840310-4	17-156101-07419	0	0
2ND T-WHEEL	3840165-4	13-156101-00379	10098:09	8874

REPAIR ORDER: **331110226**

HONEYWELL AEROSPACE CERTIFIED REPAIRED STATION ZN3R030M

INSPECTOR: *ALFONSO VELDERRAIN*

ACCEPTANCE TEST DATA SHEET

131-9[A]

PART NO. 3800708-1 MODEL NO. 131-9[A] UNIT S/N 4032 DATE 03/28/18

ECB P/N 3888579-1G S/N 3888579-1G

OIL TYPE BP2380 FUEL TYPE ASTM-D-1655 JET A

AIRFLOW MEASURING SECTION NO. 6X4

		HEAVY REPAIR LIMITS			
		2-PACK ECS-700 HIGH + 83 KW DATA POINT 0003		MES + 54 KW DATA POINT 0004	
	DESCRIPTION	REQUIRED	ACTUAL	REQUIRED	ACTUAL
PBCOR	BLEED PRESSURE, PSIA	51.2 (MIN)	N/A	51.1 (MIN)	N/A
WBCOR	BLEED AIRFLOW, LB/MIN	152.2 (MIN)	N/A	N/A	N/A
EGTCOR	EXHAUST GAS TEMPERATURE, F	1125.0(MAX)	N/A	1120.0(MAX)	N/A
WFCOR	FUEL CONSUMPTION, LB/HR	N/A	N/A	269.0 (MAX)	N/A

		LIGHT/MEDIUM REPAIR (CONTINUE-TIME) LIMITS			
		2-PACK ECS-700 HIGH + 83 KW DATA POINT 0003		MES + 54 KW DATA POINT 0004	
	DESCRIPTION	REQUIRED	ACTUAL	REQUIRED	ACTUAL
PBCOR	BLEED PRESSURE, PSIA	50.2 (MIN)	50.21	50.1 (MIN)	50.48
WBCOR	BLEED AIRFLOW, LB/MIN	148.9 (MIN)	149.5	N/A	136.4
EGTCOR	EXHAUST GAS TEMPERATURE, F	1150.0(MAX)	1060.	1145.0(MAX)	1052.
WFCOR	FUEL CONSUMPTION, LB/HR	N/A	282.0	269.0 (MAX)	259.6

PERFORMANCE DATA ADJUSTED TO S.L., 100F/122F, INSTALLED CONDITIONS. EGTCOR AND WFCOR ARE ALSO CORRECTED TO MINIMUM BLEED PRESSURE.

INITIAL IGV POSITION 8.D.(2) 92 DEGREES, INITIAL PBCOR 51.4 PSIA
FINAL IGV POSITION 8.D.(2) 87 DEGREES, FINAL PBCOR 50.3 PSIA
ECS OFFSET=(FINAL IGV-INITIAL IGV)= -5 DEGREES

OTHER ACCEPTANCE DATA						
ITEM	PARAGRAPH	PARAMETER	UNITS	DATA POINT	VALUE	REQUIRED
FLOW SENSOR CHECK	8.E.(8)	WBCDNA	LB/MIN	0005	49.0	FIGURE 1303
FLOW SENSOR CHECK	8.E.(11)	WBCDNA	LB/MIN	0006	50.8	FIGURE 1303
FLOW SENSOR ACCURACY	8.E.(12)(A)	WC	- -	- -	-0.91	+/-5

SCV STABILITY TEST - SCV IS STABLE YES (PARAGRAPH 8.F.)
MINIMUM SURGE MARGIN TEST - APU DID NOT SURGE (PARAGRAPH 8.G.)
DC POWER START TIME 35 SECONDS (STEP 8.H.(1)(A))
APU FAULTS SEEN: NONE
TOTAL NUMBER OF STARTS DURING TEST 9
TOTAL OPERATING TIME DURING TEST 3:40 HR/MIN

UNIT STATUS: ACCEPTED

WE CERTIFY THE ABOVE DATA ARE TRUE AND CORRECT, AND IN ADDITION, THE UNIT HAS SUCCESSFULLY MET ALL OTHER TEST REQUIREMENTS SPECIFIED IN THE LATEST REVISION OF THE APPLICABLE TEST SPECIFICATION INDICATED ABOVE

	SIGNATURE	DATE
TECHNICIAN		3-29-18
SUPERVISOR		3/29/18
QUALITY ASSURANCE		3/29/18

DATE 03/28/18

131-9[A] ACCEPTANCE TEST DATA SHEET
TEST CELL 21062

APU S/N 4032

PARAMETER DESCRIPTION		ATP PARAGRAPH-->		S.D. (4) (C)	S.D. (5) (G)	S.D. (1) (F)	S.D. (2) (D)
				ECS	MES	RTL	SHAFT
DIGITAL DATA SCAN		HR:MIN	12:23	12:33	20:31	20:47
DIGITAL DATA POINT NUMBER			3.	4.	1.	2.
PBAR	BAROMETRIC PRESSURE	PSIA	14.16	14.15	14.12	14.12
PCELL	CELL PRESSURE	PSIA	14.10	14.09	14.06	14.06
T1	T1-APU INLET TEMPERATURE (AVG)	DEG F	86.3	87.2	77.3	78.7
TENIVA	UNIT INLET TEMPERATURE (T2)	DEG F	85.8	86.9	76.8	78.9
POIL	OIL PRESSURE -- LUBE PUMP DISCHARGE	PSIG	61.5	61.8	63.8	62.5
TOIL	OIL TEMPERATURE -- LUBE PUMP DISCHARGE	DEG F	221.	216.	195.	220.
TOS	OIL SUMP TEMPERATURE -- ECB	DEG F	239.	234.	208.	241.
PSGBX	GEARBOX PRESSURE -- SUMP	IN H2O	-9.7	-8.7	16.3	14.1
TFUEL	FUEL INLET TEMPERATURE	DEG F	74.	74.	70.	70.
PFUEL	FUEL INLET PRESSURE	PSIG	30.4	30.5	30.7	30.5
VIBGBA	UNIT VIBRATION -- GEARBOX	IN/SEC	0.26	0.25	0.22	0.25
VIBTHA	UNIT VIBRATION -- TURBINE	IN/SEC	0.23	0.23	0.28	0.33
VIBCFA	UNIT VIBRATION -- COOLING FAN	IN/SEC	0.43	0.43	0.39	0.36
XNL	SHAFT SPEED	RPM	48767.	48810.	48806.	48810.
PIGV	INLET GUIDE VANE POSITION	DEGREE	87.0	92.0	22.0	22.0
PCDFD	COMPRESSOR DISCHARGE STATIC PRESSURE	PSIA	79.0	78.4	72.6	75.1
TCDFD	COMPRESSOR DISCHARGE TEMPERATURE	DEG F	625.	624.	595.	605.
TTDEA	TURBINE DISCHARGE TEMPERATURE #1	DEG F	1040.	999.	721.	841.
TTDEB	(UNIT EGT) #2	DEG F	1022.	968.	692.	807.
EGT	LAB EGT (AVG)	DEG F	1020.	977.	670.	760.
PS9	EXHAUST STATIC PRESSURE	PSIA	14.12	14.11	13.99	13.98
PBORFA	BLEED AIR ORIFICE PRESSURE	PSIA	46.4	49.5		
TBORFA	BLEED AIR ORIFICE TEMPERATURE (AVG)	DEG F	391.	407.		
PDBORA	BLEED AIR ORIFICE DELTA P	PSID	1.38	1.22		
WB	BLEED AIRFLOW	LB/MIN	152.2	146.8		
WBCDNA	CORRECTED DISCHARGE AIRFLOW	LB/MIN	57.2	52.9		
PB	BLEED PRESSURE (AVG)	PSIA	50.69	53.18		
TB	BLEED TEMPERATURE (AVG)	DEG F	412.	423.		
WF	FUEL FLOW (AVG)	LB/HR	276.6	262.6	174.1	212.8
PWGEN	GENERATOR LOAD - POWER FACTOR = 1.0	KW	68.2	45.2	0.1	81.2

CALCULATIONS:

SHPSL	SHAFT LOAD AT PAD, SEA LEVEL--(PWGEN/0.85)/(PCELL/14.696)	KW	83.6	55.5		99.8
	APU DELTAP/DELTA -- (PCELL-PS9)/(PCELL/14.696)	PSID	-0.02	-0.02		
	BLEED PRESSURE AT SEA LEVEL -- PB/(PCELL/14.696)	PSIA	52.84	55.46		
DELPB	BLEED PRESSURE LAPSE RATE CORRECTION	PSIA	-1.43	-3.78		
	INSTALLATION EFFECT ON BLEED PRESSURE	PSIA	-1.20	-1.20		
PBCOR	BLEED PRESSURE CORRECTED TO SL, 100F/122F, INSTALLED	PSIA	50.21	50.48		
	BLEED AIRFLOW AT SEA LEVEL -- WB/(PCELL/14.696)	LB/MIN	158.7	153.1		
DELWB	BLEED FLOW LAPSE RATE CORRECTION	LB/MIN	-5.7	-13.6		
	INSTALLATION EFFECT ON WB	LB/MIN	-3.5	-3.1		
WBCOR	BLEED AIRFLOW CORRECTED TO SL, 100F/122F, INSTALLED	LB/MIN	149.5	136.4		
DELTB	BLEED TEMPERATURE LAPSE RATE CORRECTION	DEG F	13.	33.		
	EXCESS PBCOR CORRECTION ON TB -- (-4.5*(PBCOR-PBREQ)	DEG F	0.	2.		
TBCOR	BLEED TEMPERATURE CORRECTED TO SL, 100F/122F, INSTALLED	DEG F	426.	455.		
DELEGT	EGT LAPSE RATE CORRECTION	DEG F	27.	67.		
	APU DELTA P CORR. ON EGT--(65*(PCELL-PS9)/(PCELL/14.696))	DEG F	-1.	-1.		
	INSTALLATION EFFECT ON EGT	DEG F	14.	14.		
	EXCESS PBCOR CORRECTION ON EGT -- (-11*(PBCOR-PBREQ))	DEG F	0.	4.		
EGTCOR	EGT CORRECTED TO SEA LEVEL, 100F/122F, INST. AT PBREQ	DEG F	1060.	1052.		
	SEA LEVEL FUEL FLOW -- WF/(PCELL/14.696)*(FLHV/18550)	LB/HR	289.3	274.7		
DELWF	FUEL FLOW LAPSE RATE CORRECTION	LB/HR	-4.3	-10.4		
	APU DELTA P CORR. ON WF--(15*(PCELL-PS9)/(PCELL/14.696))	LB/HR	-0.3	-0.3		
	INSTALLATION EFFECT ON WF	LB/HR	-2.7	-2.7		
	EXCESS PBCOR CORRECTION ON WF -- (-4.4*(PBCOR-PBREQ))	LB/HR	0.0	1.7		
WFCOR	FUEL FLOW CORRECTED TO SL, 100F/122F, INSTALLED AT PBREQ	LB/HR	282.0	259.6		

FLHV 18609. BTU/LBM ▓▓▓ - DATA NOT NEEDED OR APPLOCABLE

1. Approving Civil Aviation Authority/Country: **FAA/United States**	2. **AUTHORIZED RELEASE CERTIFICATE** **FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG**	3. Form Tracking Number: 20180004510690Y15 331194182
4. Organization Name and Address: Honeywell International Inc 1944 E Sky Harbor Circle PHOENIX AZ 85034	Repair Station ZN3R030M	5. Work Order/Contract/Invoice Number: MX70040112 331110226 Page 1 of 1

6.Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status / Work:
001	SHAFT, TURBINE	3822504-3	1	08P16645	INSPECTED

12. Remarks:

THE SERVICE SPECIFIED HAS BEEN ACCOMPLISHED IN ACCORDANCE WITH:
IRM 49-26-85 Rev 31, AUG/02/2017

INSPECTED TO CONTINUE TIME CRITERIA

TSN: 20997:44 CSN: 21361

SEE ATTACHED DOCUMENTS AS APPLICABLE FOR WORK PERFORMED

CERTIFIES THAT THE WORK SPECIFIED IN BLOCK 11/12 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 NO. EASA 145.4136

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.: **ZN3R030M**
13d. Name (Typed or Printed):	13e. Date(dd/mmm/yyyy):	14d. Name (Typed or Printed): **Jesus A. Velderrain**	14e. Date(dd/mmm/yyyy): **26/MAR/2018**

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 Block1, 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 Block1. Statements in Blocks 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

1. Approving Civil Aviation Authority/Country:	2.	3. Form Tracking Number:
FAA/United States	**AUTHORIZED RELEASE CERTIFICATE** **FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG**	20180004529428Y15 331194181

4. Organization Name and Address:		5. Work Order/Contract/Invoice Number:
Honeywell International Inc 1944 E Sky Harbor Circle PHOENIX AZ 85034	Repair Station ZN3R030M	MX70040112 331110226 Page 1 of 1

6.Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status / Work:
001	COMPRESSOR ROTOR, CENTRIFUGAL E/C	3822391-6	1	08-03501-14281	INSPECTED

12. Remarks:

THE SERVICE SPECIFIED HAS BEEN ACCOMPLISHED IN ACCORDANCE WITH:
IRM 49-26-85 Rev 31, AUG/02/2017

INSPECTED TO CONTINUE TIME CRITERIA

TSN: 20997:44 CSN: 21361

SEE ATTACHED DOCUMENTS AS APPLICABLE FOR WORK PERFORMED
CERTIFIES THAT THE WORK SPECIFIED IN BLOCK 11/12 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 NO. EASA 145.4136

13a. Certifies the items identified above were manufactured in conformity to:		14a. ☒ 14 CFR 43.9 Return to Service ☒ Other regulation specified in Block 12	
☐ Approved design data and are in a condition for safe operation. ☐ Non-approved design data specified in Block 12.		Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.	
13b. Authorized Signature:	13c. Approval/Authorization No.:	14b. Authorized Signature:	14c. Approval/Certificate No.: **ZN3R030M**
13d. Name (Typed or Printed):	13e. Date(dd/mmm/yyyy):	14d. Name (Typed or Printed): **Jesus A. Velderrain**	14e. Date(dd/mmm/yyyy): **29/MAR/2018**

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 Block1, 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 Block1. Statements in Blocks 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

1. Approving Civil Aviation Authority/Country: **FAA/United States**	2. **AUTHORIZED RELEASE CERTIFICATE** **FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG**	3. Form Tracking Number: 20180004486218Y14 5011906547-430
4. Organization Name and Address: HONEYWELL INTERNATIONAL INC 1720 East Grant Street PHOENIX AZ 85034 Production Approval PT1222NM		5. Work Order/Contract/Invoice Number: MX70040112 Page 1 of 1

6.Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status / Work:
001	ROTOR ASSY, TURBINE - FIRST STAGE AXIAL	3840310-4	1	17-156101-07419	NEW

12. Remarks:

AIRWORTHINESS APPROVAL.

THIS ROTOR ASSY, TURBINE - FIRST STAGE AXIAL IS A SUBCOMPONENT OF A TSO AUTHORIZATION.

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.:
Cornel Bonchis	ODA-602216-NM		
13d. Name (Typed or Printed):	**13e. Date (dd/mmm/yyyy):**	**14d. Name (Typed or Printed):**	**14e. Date(dd/mmm/yyyy):**
Cornel Bonchis	**21/MAR/2018**		

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 Block1, 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 Block1. Statements in Blocks 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

1. Approving Civil Aviation Authority/Country:	2.	3. Form Tracking Number:
FAA/United States	**AUTHORIZED RELEASE CERTIFICATE** **FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG**	20180004534091Y15 331193751

4. Organization Name and Address:		5. Work Order/Contract/Invoice Number:
Honeywell International Inc 1944 E Sky Harbor Circle PHOENIX AZ 85034	Repair Station ZN3R030M	MX70040112 331110226 Page 1 of 1

6.Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status / Work:
001	TURBINE ROTOR ASSEMBLY SECOND STAGE	3840165-4	1	13-156101-00379	OVERHAULED

12. Remarks:

THE SERVICE SPECIFIED HAS BEEN ACCOMPLISHED IN ACCORDANCE WITH:
IRM 49-26-85 Rev 31, AUG/02/2017
ORI P31167 Rev B, MAY/03/2017
ORI P34391 Rev K, MAY/03/2017

REFERENCE CAFÉ FOR A SUMMARY OF THE MAINTENANCE/WORK PERFORMED
TSN 10098:09
CSN 8874

SEE ATTACHED DOCUMENTS AS APPLICABLE FOR WORK PERFORMED

CERTIFIES THAT THE WORK SPECIFIED IN BLOCK 11/12 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 NO. EASA 145.4136

13a. Certifies the items identified above were manufactured in conformity to:		14a. ☒ 14 CFR 43.9 Return to Service ☒ Other regulation specified in Block 12	
☐ Approved design data and are in a condition for safe operation. ☐ Non-approved design data specified in Block 12.		Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.	
13b. Authorized Signature:	13c. Approval/Authorization No.:	14b. Authorized Signature: Joe Profita	14c. Approval/Certificate No.: **ZN3R030M**
13d. Name (Typed or Printed):	13e. Date(dd/mmm/yyyy):	14d. Name (Typed or Printed): **Joseph Profita**	14e. Date(dd/mmm/yyyy): **30/MAR/2018**

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 Block1, 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 Block1. 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.

Shop Visit
Honeywell
uly 2013

9100 S. Dadeland Blvd., Suite 1500, Miami, FL 33156 +1-305-271-6650
info@longreach.com www.longreach.com

1. Approving National Aviation Authority/Country	2.	3. Form Tracking Number:
FAA/United States	**AUTHORIZED RELEASE CERTIFICATE** **FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG**	890003577614Y15 314975339

4. Organization Name and Address:		5. Work Order/Contract/Invoice Number:
Honeywell International Inc 1944 E Sky Harbor Circle PHOENIX AZ 85034	Repair Station ZN3R030M	TL70040540 314959456 Page 1 of 1

6.Item:	7. Description:	8. Part Number:	9. Eligibility:*	10. Quantity:	11. Serial / Batch Number:	12. Status / Work:
001	131-9[A] APU	3800708-1	N/A	1	P-4032	OVERHAULED

13. Remarks :

THE SERVICE SPECIFIED HAS BEEN ACCOMPLISHED IN ACCORDANCE WITH:
EM 49-27-29 Rev 7, DEC/31/2011

TSN: 10899:35 TSO:-0- CSN: 12487 CSO:-0- TSR/CSR:-0-

SEE ATTACHED DOCUMENTS AS APPLICABLE FOR WORK PERFORMED

HONEYWELL CERTIFIES THAT THE WORK SPECIFIED IN BLOCKS 12/13 WAS CARRIED OUT IN ACCORDANCE WITH EASA PART 145 AND, WITH RESPECT TO THAT WORK, THE COMPONENT IS CONSIDERED READY FOR RELEASE TO SERVICE UNDER EASA PART 145 APPROVAL NUMBER: EASA 145.4136

14. Certifies the items identified above were manufactured in conformity to:	19. ☒ 14 CFR 43.9 Return to Service ☒ Other regulation specified in Block 13	
☐ Approved design data and are in condition for safe operation ☐ Non-approved design data 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: Mario Gasca 28
17. Name (Typed or Printed):	18. Date (m d y):	22. Name (Typed or Printed): **MARIO GASCA**
		21. Approval/Certificate No.: **ZN3R030M**
		23. Date (m d y): **JUL 17 2013**

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 Block1, 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 Block1. Statements in Block 14 and 19 do not constitute installation certification. In all cases, aircraft maintanance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

69749

Honeywell

NDC / Life Limited Parts

Date	TSN	CSN	APU P/N 3800708-1 S/N P-4032	CUSTOMER
7/17/13	10899:35	12487	Model 131-9A	ABC AEROLINEAS SA DE CV

Noun	P/N	S/N	Status	Noun	P/N	S/N	Status
FAN	3616140-7	P-3608	3E	STARTER	2704506-2	4431	1
FUEL CONTROL	441921-5	CUC14551	1	LUBE MODULE	4131020-4	4164	3
AIR OIL COOLER	160494-1	2502	2	IGN EXCITER	3888058-7	110245	3E
SURGE VALVE	3291238-2	5545	3	LOAD VALVE	3291432-1	1646	3E
DMM	3876287-1	GE6916	4	IGV ACTUATOR	3886188- 3	5945	4
GENERATOR	DNR	SHIPLESS					

REPAIR CODES 1-BENCH TEST 2-REPAIR 3-OVERHAUL 4- USED AS IS 5-NEW E- EXCHANGED

Noun	P/N	S/N	Time	Cycles
TIE SHAFT	3822504-3	08P16645	10899:35	12487
L/C IMPELLER	3822400-5	07-03501-12207	N/A	N/A
E/C IMPELLER	3822391-6	08-03501-14281	10899:35	12487
1ST T-WHEEL	3840310-3	13-156101-00945	0	0
2ND T-WHEEL	3840165-4	13-156101-00379	0	0

REPAIR ORDER: **314959456**

HONEYWELL AEROSPACE CERTIFIED REPAIRED STATION ZN3R030M

INSPECTOR: *MARIO GASCA*

Shop Visit
Honeywell
September 2008

9100 S. Dadeland Blvd., Suite 1500, Miami, FL 33156 +1-305-271-6650
info@longreach.com www.longreach.com

Honeywell

International Inc.

Engines & Systems

ACCEPTANCE TAG

Certificate of Conformance

OUTLINE / KIT P/N	REV.	SERIAL NO.	CUSTOMER NAME	CUSTOMER CODE	MODEL	CODE
3800708-1	G	P-4032	AIRBUS DEUTSCHLAND GMBH	MWG	131-9[A]	N/A

SERIES	CHANGES	SHIPPER NO.	ALLOCATION	SALES ORDER NO.
11	NONE	NONE	2098(REL)	421539-006

INSPECTION SIGNATURE & STAMP	FAA FORM 8130-3 IN LOG BOOK	DRY WEIGHT	F.T. DATE
359		353.5 LBS.	Sep 19 2008

NDC COMPONENTS

PART NUMBER	NOMENCLATURE	SERIAL NUMBER	SERIES
160494-1	OIL COOLER W/VALVE	2502	2
2704506-2	STARTER MOTOR	2884	3
3291238-2	SURGE CONT VALVE	5545	2
3291432-1	LOAD CONTROL VALVE	2403	2
3616140-7	FAN	P-3734	1
3876226-1	TOTAL PRESS SEN	081121463148	NONE
3876287-1	DATA MEMORY	GE6916	1
3886188-2	ACTUATOR VANE	5972	NONE
3888058-7	EXCITER IGN	086971102044	NONE
3888438-1	ENGINE HARNESS	6481621599	NONE
4131020-4	LUBE MODULE	4164	3
4141028-3	DEPRIME VALVE	1086	1
441921-5	FUEL CONT.	CUC15630	NONE

TRACEABLE PARTS

PART NUMBER	SERIAL NUMBER	LOT NUMBER	HOURS
3822391-6	08-03501-14281	08P210	00:00
3822400-5	07-03501-12207	08P216	00:00
3822504-3	08P16645	NONE	00:00
3840160-8	080335702123	08P251	00:00
3840165-4	08-01345-05762	NONE	00:00

LOOSE ITEMS

PART NUMBER	NOMENCLATURE	SERIAL NUMBER	SERIES

This certifies that the materials and/or articles noted hereon were procured and/or manufactured under a Quality Assurance System acceptable to the Government and that all applicable certificates and records are on file and available for review by authorized customer representatives

CLASS I and II product approved under FAA Part 21

PX2310-1

ACCEPTANCE TEST DATA SHEET
131-9[A]

USED WITH
31-13939
REV. B

)NIT OUTLINE: 3800708-1 MODEL: 131-9[A] UNIT S/N P- 4032

TEST CELL NO.: D103 RUN NO.: 0016 DATE 09/18/08

PRODUCTION RELEASE NO.: 2098 REPAIR ORDER NO.: NA

ECB P/N 3888344-221204 S/N 1252 SLAVE YES ✓ NO

)IL TYPE Mil-L-23699 FUEL TYPE ASTM-D-1655

AIRFLOW MEASURING SECTION SIZE 8.07 X 4.00

PERFORMANCE SUMMARY

DESCRIPTION			COMBINED LOAD ECS +83KW AT 38C		MES +54KW AT 50C	
			REQUIRED	ACTUAL	REQUIRED	ACTUAL
PBCOR	BLEED PRESSURE, BAR (PSIA)	MIN	3.59 (52.0)	3.613 (52.4)	3.58 (51.9)	3.666 (53.2)
WBCOR	BLEED AIRFLOW, KG/SEC (LB/MIN)	MIN	1.167 (154.4)	1.181 (156.2)	N/A	1.087 (143.8)
EGTCOR	EXHAUST GAS TEMP., °C (°F)	MAX	585.0 (1085)	557.7 (1036.)	582.0 (1080)	552.5 (1026.)
WFCOR	FUEL FLOW , KG/HR (LB/HR)	MAX	128.0 (282.2)	125.1 (275.8)	118.5(261.2)	114.3 (252.0)

PERFORMANCE DATA ADJUSTED TO S.L., 38C/50C, INSTALLED CONDITIONS. EGTCOR AND WFCOR ARE ALSO CORRECTED TO MINIMUM BLEED PRESSURE.

INITIAL IGV POSITION 4.1.3(B) 92.0 DEGREES, INITIAL PBCOR (53.4) BAR (PSIA)
FINAL IGV POSITION 4.1.3(B) 88.0 DEGREES, FINAL PBCOR (52.5) BAR (PSIA)
ECS OFFSET=(FINAL IGV-INITIAL IGV)= -4.0 DEGREES

OTHER ACCEPTANCE DATA

ITEM	PARAGRAPH	PARAMETER	UNITS	DATA POINT	VALUE	REQUIRED
FLOW SENSOR CHECK	4.2.1(G)	WBCDNA	KG/SEC (LB/MIN)	5	.369 (48.8)	FIGURE 7
FLOW SENSOR CHECK	4.2.1(J)	WBCDNA	KG/SEC (LB/MIN)	6	.372 (49.3)	FIGURE 7
FLOW SENSOR ACCURACY	4.2.1(K)	WC	- -	- -	2.07	+/-5

:V STABILITY (4.2.2) SCV IS STABLE YES ✓ NO
:NIMUM SURGE MARGIN (4.2.3) UNIT DID /DID NOT ✓ SURGE
)U START TIME 39 SEC 38 SEC 44 SEC (3.7)
)U FAULTS OBSERVED 5.1(B) NONE ✓ OTHER
)U DRY WEIGHT(3.1): 160.3 (353.5) KG (LB)
'ARTER BONDING TEST (3.2) FLANGE/ADAPTER .110 MILLIOHMS, ADAPTER/HOUSING .198 MILLIOHMS
)U BONDING TEST (3.2) TEST PERFORMED YES NO X IF YES, ATTACH APU BONDING DATA SHEETS
'TAL NUMBER OF STARTS(DURING ATP): 5
TAL OPERATING TIME(DURING ATP): 2:10 HR/MIN

AK CHECK WITH BLACK LIGHT: COMPLETE ✓ DMM INITIALIZATION: COMPLETE ✓

IT STATUS: ACCEPT ✓ REJECT

CERTIFY THE ABOVE DATA ARE TRUE AND CORRECT, AND IN ADDITION, THE UNIT HAS SUCCESSFULLY MET ALL OTHER ST REQUIREMENTS SPECIFIED IN THE LATEST REVISION OF THE APPLICABLE TEST SPECIFICATION INDICATED ABOVE

	SIGNATURE	DATE
TECHNICIAN	[signature]	9-19-2008
SUPERVISOR	S. NICHOLLS FT 176	9-19-08
QUALITY ASSURANCE	[signature] QO 114	9-19-08

TECHNICIAN : K Lindeman

ACCEPTANCE TEST DATA SHEET
131-9[A] APU

P/N 3800708-1 APU S/N : P-4032 DATE : 09/18/08

USED WITH 31-13939 REV. B

ATP REFERENCE		UNITS	4.1.1 D NO LOAD	4.1.2 B SHAFT LOAD	4.1.3 D 38°C (100°F) COMBINED LOAD	4.1.4 C 50°C (122°F) MES
QUANTITY						
BAROMETRIC PRESSURE (PBAR)		BAR (PSIA)	.973 (14.11)	.972 (14.10)	.973 (14.11)	.972 (14.10)
AVERAGE INLET TEMPERATURE (TI)		°C (°F)	23.58 (74.4)	22.33 (72.2)	24.23 (75.6)	22.96 (73.3)
UNIT INLET TEMPERATURE (TENIVA)		°C (°F)	23.32 (74.0)	22.81 (73.1)	24.12 (75.4)	23.56 (74.4)
OIL PRESSURE		BAR (PSIG)	4.798 (69.6)	4.682 (67.9)	4.664 (67.6)	4.689 (68.0)
OIL TEMPERATURE		°C (°F)	84.2 (183.5)	96.6 (205.9)	98.6 (209.5)	93.5 (200.2)
OIL TEMPERATURE SUMP ECB (ECB-TOIL)		°C (°F)	89.0 (192.2)	105.0 (221.0)	107.0 (224.6)	101.0 (213.8)
FUEL INLET TEMPERATURE		°C (°F)	28.6 (83.5)	25.1 (77.3)	28.9 (84.0)	25.1 (77.2)
FUEL INLET PRESSURE		BAR (PSIA)	2.095 (30.4)	2.087 (30.3)	2.029 (29.4)	2.050 (29.7)
GEARBOX PRESSURE		BAR (PSIG)	19.77 (.29)	-15.42 (-.22)	-31.82 (-.46)	-25.78 (-.37)
COMPRESSOR DISCHARGE STATIC PRESSURE		BAR (PSIA)	6.355 (92.2)	6.630 (96.2)	6.888 (99.9)	6.854 (99.4)
COMPRESSOR DISCHARGE TEMPERATURE		°C (°F)	300.7 (573.)	305.1 (581.)	314.7 (598.)	312.5 (594.)
TURBINE DISCHARGE TEMPERATURE (UNIT RAKES)	# 1	°C (°F)	364.5 (688.)	418.6 (785.)	531.5 (989.)	513.1 (956.)
	# 2	°C (°F)	369.5 (697.)	422.7 (793.)	535.1 (995.)	513.5 (956.)
EXHAUST GAS TOTAL TEMPERATURE	ACTUAL	°C (°F)	309.1 (588.)	390.3 (734.)	531.9 (989.)	509.3 (949.)
	CORRECTED*	°C (°F)	[redacted]	[redacted]	557.7 (1036.)	552.5 (1026.)
BLEED ORIFICE INLET TEMPERATURE		°C (°F)	[redacted]	[redacted]	186.9 (368.)	187.5 (370.)
BLEED ORIFICE INLET PRESSURE		BAR (PSIA)	[redacted]	[redacted]	3.533 (51.2)	3.792 (55.0)
BLEED ORIFICE DIFFERENTIAL PRESSURE		MBAR (PSID)	[redacted]	[redacted]	112.2 (1.628)	99.8 (1.448)
EXHAUST STATIC PRESSURE		MBAR (PSIA)	960.9 (13.94)	954.0 (13.84)	965.6 (14.01)	967.5 (14.03)
IGV POSITION		DEG	[redacted]	[redacted]	87.97	92.09
CORRECTED BLEED AIRFLOW (WBCDNA)		KG/SEC (LB/MIN)	[redacted]	[redacted]	.431 (57.1)	.399 (52.8)
BLEED AIRFLOW (WB)	ACTUAL	KG/SEC (LB/MIN)	[redacted]	[redacted]	1.232 (163.0)	1.205 (159.5)
	CORRECTED*	KG/SEC (LB/MIN)	[redacted]	[redacted]	1.181 (156.2)	1.087 (143.8)
BLEED TOTAL PRESSURE (PB)	ACTUAL	BAR (PSIA)	[redacted]	[redacted]	3.715 (53.9)	3.950 (57.3)
	CORRECTED*	BAR (PSIA)	[redacted]	[redacted]	3.613 (52.4)	3.666 (53.2)
BLEED TOTAL TEMPERATURE (TB)	ACTUAL	°C (°F)	[redacted]	[redacted]	201.6 (395.)	206.4 (404.)
	CORRECTED*	°C (°F)	[redacted]	[redacted]	213.6 (417.)	228.8 (444.)
FUEL CONSUMPTION	ACTUAL	KG/HR (LB/HR)	77.4 (170.6)	95.2 (210.0)	126.5 (279.0)	121.0 (266.7)
	CORRECTED*	KG/HR (LB/HR)	[redacted]	[redacted]	125.1 (275.8)	114.3 (252.0)
SHAFT OUTPUT (PWGEN)	ACTUAL	KVA	.05	80.59	68.90	44.45
SHAFT OUTPUT / δ (SHPSL)	CORRECTED*	KW	.07	98.81	84.45	54.51
UNIT VIBRATION	COOL. FAN	MM/SEC (IPS)	4.55 (.18)	5.19 (.20)	5.44 (.21)	5.56 (.22)
	GEARBOX	MM/SEC (IPS)	4.48 (.18)	8.56 (.34)	8.86 (.35)	8.33 (.33)
	TURBINE	MM/SEC (IPS)	2.75 (.11)	2.28 (.09)	2.63 (.10)	2.24 (.09)
APU SPEED		RPM	48799.	48803.	48790.	48801.
SPECIFICATION REQUIREMENTS	MIN BLEED FLOW	KG/SEC (LB/MIN)			1.167 (154.4)	
	MIN BLEED PRESS.	BAR (PSIA)			3.59 (52.0)	
	MAX IGV POSITION	DEG			92.50	3.58 (51.9)
	MAX FUEL FLOW	KG/HR (LB/HR)			128.0 (282.2)	
	MAX EGT	°C (°F)			585 (1085)	118.5 (261.2)
(CORRECTED)	SHAFT LOAD -0 + 2	KW (HP)	0.0 (0.0)	98.0 (131.4)	83.0 (111.3)	582 (1080)
						54.0 (72.4)
		TIME	21:51	06:50	22:22	06:30
		DATE	09/18/08	09/18/08	09/18/08	09/18/08
DIGITAL DATA POINT NO.		XXXX	1	2	3	4

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

EQU: 320-0732 VER: 1.10 REV: 01/27/08 IDMS:320-2052 VER: 4.55 REV: 06/16/05

LLP's

9100 S. Dadeland Blvd., Suite 1500, Miami, FL 33156 +1-305-271-6650
info@longreach.com www.longreach.com

LLP
P/N 3840310-3
S/N 17-156101-07419

9100 S. Dadeland Blvd., Suite 1500, Miami, FL 33156 +1-305-271-6650
info@longreach.com www.longreach.com

Honeywell

LIFE LIMITED PART LOG

ASSEMBLY NAME:

PART NUMBER:

SERIAL NUMBER:

LIFE LIMITED PART NAME: ROTOR ASSY, TURBINE - FIRST STAGE AXIAL

PART NUMBER: 3840310-4

SERIAL NUMBER: 17-156101-07419

MANUFACTURED PER FAR PART 21 UNDER PRODUCTION CERTIFICATE PC413

SIGNATURE OR ACCEPTANCE STAMP: A-82

DATE INSTALLED	DATE REMOVED	ENGINE SERIAL NUMBER	TIME ON PART THIS INSTALLATION		TOTAL TIME ON PART		SIGNATURE / FAA NUMBER
			CYCLES*	HOURS	CYCLES*	HOURS	
3/29/18		P-4032	0.0	0.0	0.0	0.0	[signature] CRS ZN3R030M

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

PX-3107-76C

YQML_FRMQM00004

LIFE LIMITED PART MAINTENANCE RECORD

DATE	MAINTENANCE PERFORMED	AUTHORIZED SIGNATURE

PX-3107-76 BACK

1. Approving Civil Aviation Authority/Country: **FAA/United States**	2. **AUTHORIZED RELEASE CERTIFICATE** **FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG**	3. Form Tracking Number: 20180004486218Y14 5011906547-430
4. Organization Name and Address: HONEYWELL INTERNATIONAL INC 1720 East Grant Street PHOENIX AZ 85034 Production Approval PT1222NM		5. Work Order/Contract/Invoice Number: MX70040112 Page 1 of 1

6.Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status / Work:
001	ROTOR ASSY, TURBINE - FIRST STAGE AXIAL	3840310-4	1	17-156101-07419	NEW

12. Remarks:

AIRWORTHINESS APPROVAL.

THIS ROTOR ASSY, TURBINE - FIRST STAGE AXIAL IS A SUBCOMPONENT OF A TSO AUTHORIZATION.

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.:
Cornel Bonchis	ODA-602216-NM		
13d. Name (Typed or Printed):	**13e. Date (dd/mmm/yyyy):**	**14d. Name (Typed or Printed):**	**14e. Date(dd/mmm/yyyy):**
Cornel Bonchis	**21/MAR/2018**		

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 Block1, 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 Block1. 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.

Honeywell

NDC / Life Limited Parts

Date	TSN	CSN	APU P/N	S/N	CUSTOMER
3/29/18	20997:44	21361	3800708-1 Model 131-9A	P-4032	ABC AEROLINEAS SA DE CV

Noun	P/N	S/N	Status	Noun	P/N	S/N	Status
FAN	3616140-7	P-2759	2	STARTER	2704506-4	6473	1
FUEL CONTROL	441921-5	CUC14551	2	LUBE MODULE	4131020-4	4164	2
AIR OIL COOLER	160494-1	303	2	IGN EXCITER	DNR	--	--
SURGE VALVE	3291238-2	5545	3	LOAD VALVE	3291432-2	1646	3E
DMM	3876287-1	GE6916	4	IGV ACTUATOR	3886188-3	0713	3E
GENERATOR	DNR	SHIPLESS	--				

REPAIR CODES 1-BENCH TEST 2-REPAIR 3-OVERHAUL 4- USED AS IS 5-NEW E- EXCHANGED

Noun	P/N	S/N	Time	Cycles
TIE SHAFT	3822504-3	08P16645	20997:44	21361
L/C IMPELLER	3822400-5	07-03501-12207	N/A	N/A
E/C IMPELLER	3822391-6	08-03501-14281	20997:44	21361
1ST T-WHEEL	3840310-4	17-156101-07419	0	0
2ND T-WHEEL	3840165-4	13-156101-00379	10098:09	8874

REPAIR ORDER: **331110226**

HONEYWELL AEROSPACE CERTIFIED REPAIRED STATION ZN3R030M

INSPECTOR: *ALFONSO VELDERRAIN*

✳ interjet		AIRCRAFT	A320-214	DATE	29-Apr-20	APU P/N	3800708-1
		MSN	---	A/C TSN	---	APU S/N	P-4032
APU LLP STATUS		A/C REGISTRATION	OFF WING	A/C CSN	---	MODEL	131-9[A]
APU TSN	25.832,00	APU CSN	26.347	APU TSLSV	4.835	APU CSLSV	4.986

DESCRIPTION	PART NUMBER	SERIAL NUMBER	PART TOTAL CYCLES	LIFE LIMIT (*)	REMAINING CYC
COMPRESSOR ROTOR	3822391-6	08-03501-14281	26.347	30.000	3.653
TURBINE SHAFT	3822504-3	08P16645	26.347	30.000	3.653
1ST TURBINE ROTOR	3840310-4	17-156101-07419	4.986	30.000	25.014
2ND TURBINE ROTOR	3840165-4	13-156101-00379	13.860	30.000	16.140

(*) Life limit interval are in accordance with Engine Maintenance Manual EM 49-27-29 Revision 12, Aug 14, 2018 and Honeywell SB 131-49-8053 (Airbus SB A320-49-1103) last revision

Edgardo Ulises Barrientos
Powerplant Director
Interjet
ABC Aerolineas S.A. de C.V.

LLP
P/N 3840165-4
S/N 14-156101-03740

9100 S. Dadeland Blvd., Suite 1500, Miami, FL 33156 +1-305-271-6650
info@longreach.com www.longreach.com

ULTIMATE LIFE PART CARD

PART NAME: 2ND STAGE TURBINE WHEEL PART NUMBER: H.A

SERIAL NUMBER: 14-156101-03740 ASSY. PART NUMBER: 3840165-4

DATE		ENGINE	AIRCRAFT	TIME ON PART THIS INSTALLATION		TOTAL TIME ON THIS PART		REMARKS
INSTALLED	REMOVED	SERIAL NO	SERIAL NO.	CYCLE	HOURS	CYCLE	HOURS	
8/14/14		P-1053		00:00	00:00	00:00	00:00	NEW
	11/04/21	P-1053		14601	7358	14601	7358	OARR954D

Honeywell

Honeywell International Inc.
Engines & Systems P.O. Box 5218
Phoenix, Arizona 85072-2181

AX6167-2B

ULTIMATE LIFE PART REPAIR RECORD

DATE	MAINTENANCE PERFORMED	AUTHORIZED SIGNATURE
01/14/2022	TSN: 7358 CSN: 14601. THIS LIFE LIMIT CARD RECONSTRUCTED	
	FROM INFORMATION SUPPLIED BY THE CUSTOMER. ALL INFORMATION	
	IS ON FILE AT THE REPAIR STATION UNDER WORK ORDER 000109	OARR954D
01/14/2022	TSN: 7358 CSN: 14601 OVERHAULED REFERENCING 49-26-85	
	REV 36. DATED 24 JUN 2021	OARR954D

1. Approving Civil Aviation Authority/Country: **United States**	2. **AUTHORIZED RELEASE CERTIFICATE** **FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG**	3. Form Tracking Number: **000109**
4. Organization Name and Address: SETNIX A SETNA iO COMPANY	**SETNIX, LLC** **402 W. FAIRMONT DRIVE** **TEMPE, AZ 85282** **CRS # OARR954D**	5. Work Order/Contract/Invoice Number: **025167**

6. Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status/Work:
1	**2nd Stage Turbine Wheel**	**3840165-4**	**1 EA**	**14-156101-03740**	**Overhauled**

12. Remarks:

OVERHAULED TO ZERO TIME CRITERIA.
WORK ACCOMPLISHED REFERENCING IRM 49-26-85, REV 36, DATED 24 JUN 2021
ALL INFORMATION IS ON FILE AT THE REPAIR WORK STATION UNDER WO 000109

TSN: 7,358 CSN: 14,601
REMOVED FROM ESN: P-1053

Certifies that the work specified in Block 11/12 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-EASA.145.6982".

13a. Certifies the items identified above were manufactured in conformity to:		14a. [X] 14 CFR 43.9 Return to Service [X] Other regulation specified in Block 12	
☐ Approved design data and are in a condition for safe operation. ☐ Non-approved design data specified in Block 12.		Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.	
13b. Authorized Signature:	13c. Approval/Authorization No.:	14b. Authorized Signature:	14c. Approval/Certificate No.: **OARR954D**
13d. Name (Typed or Printed):	13e. Date (dd/mmm/yyyy):	14d. Name (Typed or Printed): **EDWIN ONG**	14e. Date (dd/mmm/yyyy): **14/Jan/2022**

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.

SF 425

SETNiX
A SETNA iO COMPANY

Component Identification and Disposition Report

Part No: 3840165-4	Nomenclature: 2nd STAGE TURBINE WHEEL	Customer: SETNAIO
Serial No: 14-156101-03740	W.O. 000109	Date: 14 JAN 2022

1.0 Origin. (Check one)
Part is: From original work order ☒ If not from original W.O, obtained where N/A

2.0 Cleaning Process (check all applicable)
Part was: Degreased ☒ Paint Removal ☐ Glass ☒ Plastic ☐ N/A ☐

3.0 Inspection Process (check all applicable)
Part was: Visual ☒ Dimensional ☒ Magnetic particle ☐ F.P ☒ Bench Check ☐
Removed to facilitate maintenance ☐ Identification only ☐ N/A ☐

Inspection process results: Pass ☒ Fail ☐

If failed, explanation
N/A

NDT Technician (If NDT'd) S Quijano

4.0 Disassembly (check one)
Part was: Completely disassembled ☐ Partially disassembled ☐ N/A ☒
Findings N/A

No defects noted ☐ Technician N/A

5.0 Corrective Action
This component was overhauled IAW ATA 49-26-85
Revision 36 Dated 24 Jun 2021

No corrective action required ☒ Technician I. Medina

6.0 Setnix internal use only:
Return to Service ☒ Technician I. Medina
Note: If repairs have been performed, an inspector must review the repair(s) and countersign before returning item to service.

Inspector _____ Dated 14 JAN 2022

DATE	ENGINE HOURS	ENGINE CYCLES	REMARKS, INSPECTIONS, REPAIRS, AND ADJUSTMENTS	SIGNATURE
8/14/14	TSN 24314	CSN 54464	APU P/N 3800592-1 S/N P-1053 Model 131-9D	
	TSO 0	CSO 0	**DESCRIPTION OF WORK PERFORMED:** ENGINE INSPECTED, HEAVY MAINTENANCE PERFORMED AND TESTED	
			IAW DELTA 131-9D CONFIGURATION SPECIFICATIONS MANUAL 47733 TSR/CSR: 0	
			**********	
			INSPECTIONS COMPLIED WITH: NONE	
			SERVICE BULLETINS COMPLIED WITH: SEE SERVICE BULLETIN SECTION OF LOG BOOK.	
			PARTS REPAIRED OR REPLACED THIS VISIT: TRACE INPUT PAGE, ON FILE AT THIS REPAIR FACILITY.	
			NDC / LIFE LIMITED PARTS: 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 **318315039**	
			HONEYWELL AEROSPACE CERTIFIED REPAIR STATION ZN3R030M	
			INSPECTOR:	GMartinez III 143 *GABRIEL MARTINEZ III*

Honeywell

NDC / Life Limited Parts

Date	TSN	CSN	APU P/N 3800592-1 S/N P-1053	CUSTOMER
8/14/14	24314	54464	Model 131-9D	DELTA AIRLINES

Noun	As Received P/N	As Received S/N	As Shipped P/N	As Shipped S/N	Status
POWER SECTION	3801104-3	P-1053	3801104-3	P-1053	3
GEARBOX ASSY	3805038-6	P-1053	3805038-6	P-1053	2
FAN ASSY	3616140-4	P-176	3616140-4	P-176	2
SURGE VALVE	109854-5	138C	109854-5	138C	3
LOP SWITCH	3876255-2	011509	3876255-2	011509	4
TOTAL P SENSOR	3876226-1	6656-2-15	3876226-1	6656-2-15	1
IGNITION UNIT	3888000-7	97208857	3888000-7	97208857	4
OIL COOLER	160492-1	17-198	160492-1	16-160	3E
STARTER	2704482-4	65-125	2704482-4	65-125	1
DMM	3876287-1	GE076	3876287-1	GE076	4
IGV ACTUATOR	3886188-2	0080	3886188-3	6751	3E
FUEL CONTROL	3883600-2	16301	3883600-2	16301	1
OIL PUMP	4131010-2	A200	4131010-2	A293	3E
GENERATOR	DNR	--	SHIPLESS	--	--

Noun	As Received P/N	As Received S/N	As Shipped P/N	As Shipped S/N	Time	Cycles	Status
TIESHAFT	3822398-4	10P23099	3822398-4	10P23099	2995	6711	3
E/C IMPELLER	3822391-7	020350104887	3822391-7	020350104887	8479	18994	3
1st DISK	3840161-1	060335703651	3840310-3	14-156101-01624	0.0	0.0	5
2nd T-WHEEL	3840165-4	070134503287	3840165-4	14-156101-03740	0.0	0.0	5

REPAIR CODES 1-BENCH TEST 2-REPAIR 3-OVERHAUL 4- USED AS IS 5-NEW E- EXCHANGED

REPAIR ORDER: **318315039**

HONEYWELL AEROSPACE CERTIFIED REPAIRED STATION ZN3R030M

INSPECTOR: GMartinez III 143 *GABRIEL MARTINEZ III*

1. Approving Civil Aviation Authority/Country:	2.	3. Form Tracking Number:
FAA/United States	**AUTHORIZED RELEASE CERTIFICATE** **FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG**	20140000120509Y14 5007589027-3680173-2
4. Organization Name and Address: Honeywell International Inc 1944 E Sky Harbor Circle PHOENIX AZ 85034	Production Approval PT1222NM	5. Work Order/Contract/Invoice Number: 4700663184 Page 1 of 1

6. Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status / Work:
001	TURBINE ROTOR ASSEMBLY SECOND STAGE	3840165-4	1	14-156101-03740	NEW

12. Remarks:

AIRWORTHINESS APPROVAL

THIS TURBINE ROTOR ASSEMBLY SECOND STAGE IS A SUBCOMPONENT OF A TSO AUTHORIZATION.

13a. Certifies the items identified above were manufactured in conformity to:	14a. ☐ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 12
☒ Approved design data and are in a condition for safe operation. ☐ Non-approved design data specified in Block 12.	Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.

13b. Authorized Signature:	13c. Approval/Authorization No.:	14b. Authorized Signature:	14c. Approval/Certificate No.:
Alan Smith	ODA-602216-NM		
13d. Name (Typed or Printed):	**13e. Date (dd/mmm/yyyy):**	**14d. Name (Typed or Printed):**	**14e. Date(dd/mmm/yyyy):**
Arlon Smith	**09/AUG/2014**		

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 Block1, 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 Block1. 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.

DELTA

APU Operation History Report

APU Model: GTCP131-9D
APU P/N: 3800592-1
APU S/N: P-1053

Total Hours: 30,755
Total Cycles: 49,237
Date: 8-Sep-2021

A/C #	Position	Install Date	APU Total Hours @ Inst	APU Hours Accrued	APU Total Cycles @ Inst	APU Cycles Accrued	Removal Date
Japan Airlines	ONLY	28-Oct-96	0	20945	0	30154	19-Feb-12
9260	ONLY	14-May-12	20945	2452	30154	4482	04-Jul-14
9232	ONLY	15-Sep-14	23397	2846	34636	6072	16-Jul-16
9217	ONLY	30-Dec-16	26243	1518	40708	2869	12-Dec-17
9235	ONLY	18-Mar-18	27761	2994	43577	5660	15-Oct-20

COMPLIANCE SYSTEMS MANAGEMENT - APU RECORDS OFFICIAL DOCUMENT
To the best of my knowledge, the data depicted in this report is valid and complete.
Any minor difference in hours is due to rounding unless otherwise noted.

Vivien Nguyen
Quality Assurance Specialist
Compliance Systems Management

DELTA

APU LIFE LIMITED PARTS STATUS

APU Model: GTCP131-9D
APU P/N: 3800592-1
APU S/N: P-1053

Total Hours: 30,755
Total Cycles: 49,237
Date: 8-Sep-2021

Description	Part Number	Serial Number	Total Cycles	Cycle Limit	Cycles Remaining
1ST DISK	3840310-3	16-156101-00327	8529	30000	21471
2ND T-WHEEL	3840165-4	14-156101-03740	14601	30000	15399

COMPLIANCE SYSTEMS MANAGEMENT - APU RECORDS OFFICIAL DOCUMENT
To the best of my knowledge, the data depicted in this report is valid and complete.

Vivien Nguyen
Quality Assurance Specialist
Compliance Systems Management

DELTA

Technical Operations Center
P.O. Box 20706
Atlanta, Georgia 30320

Date: September 3, 2021

Incident/Accident Clearance Statement

To Whom It May Concern:

APU serial number P-1053, details of which are specified below, has been operated by Delta Air Lines, Inc. during the period from 14MAY12 to 15OCT20.

Configuration details as of date of this statement:

Description	Type/Part No.	Serial No.	TSN	CSN
APU	3800592-1	P-1053	30,755.00	49,237

I hereby certify that, to the best of my knowledge, during the period stated above:

1. Neither the APU, nor any part installed have been;

    a. damaged during, or identified as the root cause of, a reportable incident or accident as defined by Annex 13 to the Chicago Convention, or

    b. subjected to severe stress or heat (such as in a major engine failure, accident, or fire) or has been submersed in salt water,

    unless its airworthiness status was re-established by an approved maintenance organisation in accordance with the applicable airworthiness regulations and instructions of the type certificate holder and/or supplemental type certificate holder and/or OEM of the part, and supported by an authorised airworthiness release certificate.

2. No part has been installed on the APU which was obtained from a military source or was previously fitted to a state aircraft as deemed by Article 3 of the Chicago Convention.

The undersigned has executed this statement on the date first above written.

Delta Air Lines, Inc.

By: *E. Jones*

Name: Edward Jones

Title: Sr. Coordinator

Compliance Systems Management

REV 3 DTD 07/30/2021

LLP
P/N 3822391-6
S/N 13-162053-59418

9100 S. Dadeland Blvd., Suite 1500, Miami, FL 33156 +1-305-271-6650
info@longreach.com www.longreach.com

Honeywell

LIFE LIMITED PART LOG

ASSEMBLY NAME:	PART NUMBER:	SERIAL NUMBER:
LIFE LIMITED PART NAME: COMPRESSOR ROTOR, CENTRIFUGAL E/C	PART NUMBER: 3822391-6	SERIAL NUMBER: 13-162053-59418
MANUFACTURED PER FAR PART 21 UNDER PRODUCTION CERTIFICATE PC413	SIGNATURE OR ACCEPTANCE STAMP: A428	

DATE INSTALLED	DATE REMOVED	ENGINE SERIAL NUMBER	TIME ON PART THIS INSTALLATION		TOTAL TIME ON PART		SIGNATURE / FAA NUMBER
			CYCLES*	HOURS	CYCLES*	HOURS	
1-9-2014		P-6163	0.0	0.0	0.0	0.0	22 CRS N3R030M

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

Honeywell

NDC / Life Limited Parts

Date	TSN	CSN	APU P/N 3800702-1 S/N P-6163	CUSTOMER
1/10/14	30188:47	29794	Model 131-9B	AEROVIAS DE MEXICO SA DE CV

Noun	P/N	S/N	Status	Noun	P/N	S/N	Status
SURGE VALVE	3291238-2	2165	3E	STARTER / GEN	28B545-7	28-B1184	2
FUEL CONTROL	441921-4	CUC10851	1	LUBE MODULE	4131020-3	1218	3E
DATA MODULE	3876287-1	GE-1929	4	LOAD VALVE	3291214-2	1729	3E
IGN UNIT	3888058-5	000218014735	4	IGV ACTUATOR	3886188-3	4537	4
OIL COOLER	160564-2	3233	4	TEMP VALVE	160550-1	1188	2

REPAIR CODES 1-BENCH TEST 2-REPAIR 3-OVERHAUL 4- USED AS IS 5-NEW E- EXCHANGED

Noun	P/N	S/N	Time	Cycles
TIE SHAFT	3822504-3	13P63470	0	0
L/C IMPELLER	3822400-5	10-162053-30157	N/A	N/A
E/C IMPELLER	3822391-6	13-162053-59418	0	0
1ST T-WHEEL	3840310-3	13-156101-06683	0	0
2ND T-WHEEL	3840165-4	13-156101-05677	0	0

REPAIR ORDER: **316583200**

HONEYWELL AEROSPACE CERTIFIED REPAIRED STATION ZN3R030M

INSPECTOR: *MARIO GASCA* 28

1. Approving National Aviation Authority/Country	2.	3. Form Tracking Number:
FAA/United States	**AUTHORIZED RELEASE CERTIFICATE** **FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG**	890003935096Y14 5006977175-3352315-3

4. Organization Name and Address:	Production Approval	5. Work Order/Contract/Invoice Number:
Honeywell International Inc 1944 E Sky Harbor Circle PHOENIX AZ 85034	PT1222NM	86621 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	13-162053-59418	NEW

13. Remarks :

AIRWORTHINESS APPROVAL

THIS COMPRESSOR ROTOR, CENTRIFUGAL E/C IS A SUBCOMPONENT OF A TSO AUTHORIZATION.

LN131034330

14. Certifies 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. ☐ 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.:
	ODA-602216-NM		
17. Name (Typed or Printed):	**18. Date (m d y):**	**22. Name (Typed or Printed):**	**23. Date (m d y):**
Adrian Jacquez	JAN 04 2014		

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 Block1, 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 Block1. Statements in Block 14 and 19 do not constitute installation certification. In all cases, aircraft maintanance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

* Installer must cross check eligibility with applicable technical data

IAERO AIRWAYS

2710 E Old Tower Rd | 202 Centreport Dr, Ste 400
Phoenix, AZ 85034 | Greensboro, NC 27409
Phone: 602.629.1221 · Fax: 602.926.8027

October 29, 2021

Subject: Non-Incident Statement

To Whom It May Concern:

The APU listed was removed from N277EA operated by Swift Air LLC. To the best of my knowledge, this unit has not been involved in any accident, incident, fire, or submersed in salt water. The APU was not obtained from any government, military or unapproved source.

APU Model	Part Number	Serial Number	Time Since New	Cycles Since New
GTCP85-131B	3800702-1	P-6163	43,233.9	40,854

Wesley Smith
Manager of Technical Services

Swift Air, LLC

APU ENGINE LLP WORKSHEET

Engine P/N:	3800702-1	**Engine Installation Date:**	22-Mar-2015	**Engine Last Shop Visit:**	10-Jan-2014
Engine S/N:	P-6163	**TET at Installation:**	32,675.7	**TET @ LSV:**	30,188.5
TET:	43,233.9	**TEC at Installation:**	32,297	**TEC @ LSV:**	29,794
TEC:	40,854			**Location:**	Honeywell
TSLV:	13,045.4	**Engine Removal Date:**			
CSLV:	11,060.0	**TET at Removal:**	43,233.9	**Disk Trace Status:**	All Disks Satisfactory
Previous Operator:	EASTERN	**TEC at Removal:**	40,854		

Nomenclature	Part Number	Serial Number	Disk Birth Date	Shop Date Disk Installed	Component TT at Install	Component TC at Install	Engine TT at Install	Engine TC at Install	Component Total Hours	Component Total Cycles	Published Life Limits	Remaining Cycles
APU LIFE LIMITED												
1st Stage Turbine Rotor	3840310-3	13-156101-06683	06-Jan-2014	10-Jan-2014	0.0	0	30,188.5	29,794	13,045.4	11,060	30,000	18,940
2nd Stage Turbine Rotor	3840165-4	13-156101-05677	04-Jan-2014	10-Jan-2014	0.0	0	30,188.5	29,794	13,045.4	11,060	30,000	18,940
Compressor Rotor	3822391-6	13-162053-59418	04-Jan-2014	10-Jan-2014	0.0	0	30,188.5	29,794	13,045.4	11,060	30,000	18,940
Turbine Shaft	3822504-3	13P63470	04-Jan-2014	10-Jan-2014	0.0	0	30,188.5	29,794	13,045.4	11,060	30,000	18,940

LLP
P/N 3822504-3
S/N 12P53775

9100 S. Dadeland Blvd., Suite 1500, Miami, FL 33156 +1-305-271-6650
info@longreach.com www.longreach.com

1. Approving Civil Aviation Authority/Country:	2	3. Form Tracking Number:
FAA/UNITED STATES	**AUTHORIZED RELEASE CERTIFICATE** FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG	F22-R0138

4. Organization Name and Address:	5.Work Order/Contract/Invoice Number:
TURBINEAERO REPAIR LTD 700/178 MOO 1, T.BANKAO, A.PANTONG CHONBURI 20160, THAILAND FAA: 74RY378D	SRT03044 - JT09128 CUST.PO#: 84612

6.Item:	7.Description:	8.Part Number:	9.Quantity:	10.Serial Number:	11.Status/Work:
1	SHAFT-TURBINE	3822504-3	1	12P53775	OVERHAULED

12. Remarks

This unit has been Overhauled by cleaned, visually / dimensional inspected per zero-time check, FPI, center lapped, plasma sprayed / machined to repair Diameter "D", Diameter "E", Diameter "F" and Diameter "G" I.A.W. IRM 49-26-85 Rev. 36 Dated 24 Jun 2021. TSN: 3,516 CSN: 15,776
All work performed are on file and refer to shop visit report for details work performed.
Incorporate applicable AD: NIL
Incorporate applicable SB/SIL: NIL

13a. Certifies the items identified above were manufactured in conformity to:	14a.
☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12.	☒ 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.:
			74RY378D
13d. Name (Typed or Printed):	**13e. Date (dd/mmm/yyyy)**	**14d. Name (Typed or Printed):**	**14e. Date (dd/mmm/yyyy):**
		SURERK WASEEPA	28/Jan/2022

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.

1. Approving Competent Authority / Country	2.	3. Form Tracking Number
EASA	**AUTHORISED RELEASE CERTIFICATE** **EASA FORM 1**	E22-R0137

4. Organization Name and Address:	5. Work Order/Contract/Invoice
TurbineAero Repair Ltd 700/178 Moo1, T.Bankao, A.Pantong 20160, Chonburi, Thailand	SRT03044 - JT09128 CUST.PO#: 84612

6.Item	7.Description	8.Part No.	9.Qty	10.Serial No.	11.Status/Work
1	SHAFT-TURBINE	3822504-3	1	12P53775	OVERHAULED

12. Remarks

This unit has been Overhauled by cleaned, visually / dimensional inspected per zero-time check, FPI, center lapped, plasma sprayed / machined to repair Diameter "D", Diameter "E", Diameter "F" and Diameter "G" I.A.W. IRM 49-26-85 Rev. 36 Dated 24 Jun 2021. TSN: 3,516 CSN: 15,776

All work performed are on file and refer to shop visit report for details work performed.

Incorporate applicable AD: NIL

Incorporate applicable SB/SIL: NIL

13a. Certifies 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 12.

14a. ☒ **Part-145.A.50 Release to Service** ☐ **Other regulation Specified in block 12**

Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, was accomplished in accordance with Part-145 and in respect to that work the items are considered ready for release to service.

13b. Authorised Signature	13c. Approval/Authorisation Number	14b. Authorised Signature	14c. Certificate/Approval Ref. No
			EASA.145.0844
13d. Name	**13e. Date (dd mmm yyyy)**	**14d. Name**	**14e. Date (dd mmm yyyy)**
		SURERK WASEEPA	28/Jan/2022

USER/INSTALLER RESPONSIBILITIES

This certificate does not automatically constitute authority to install the item(s)

Where the user/installer performs work in accordance with regulations of an airworthiness authority different than the airworthiness authority specified in block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts items from the airworthiness authority specified in block 1.

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

1 国家 Country	2. 中国民用航空总局 CAAC ☐ 符合性 Conformity ☒ 适航性 Airworthiness	3 证书编号 Form Tracking No.
P.R. China	批准放行证书/适航批准标签 **AUTHORIZED RELEASE CERTIFICATE/AIRWORTHINESS APPROVAL TAG**	**C22-R0054**

4 单位 Organization	5 工作单/合同单/货单 Work Order/Contract/Invoic
TurbineAero Repair Ltd **700/178 Moo 1, T Bankao, A Pantong, Chonburi 20160, Thailand**	**SRT03044 - JT09128/CUST.PO#: 84612**

6 序号 Item	7 内容 Description	8 件号 Part No.	9 适用性 Eligibility	10 数量 Qty	11 系列号/批号 Serial/Batch	12 产品状态 Status/Work
1	**SHAFT-TURBINE**	**3822504-3**	**NOT KNOWN**	**1**	**12P53775**	**OVERHAULED**

13 备注 Remarks

This unit has been Overhauled by cleaned, visually / dimensional inspected per zero-time check, FPI, center lapped, plasma sprayed / machined to repair Diameter "D", Diameter "E", Diameter "F" and Diameter "G" I.A.W. IRM 49-26-85 Rev. 36 Dated 24 Jun 2021. TSN: 3,516 CSN: 15,776
All work performed are on file and refer to shop visit report for details work performed.
Incorporate applicable AD: NIL
Incorporate applicable SB/SIL: NIL

14 新产品 New Parts

~~兹声明上述产品除第13项的其它规定以外，已按照上述国家适航条例进行制造/检查，并且该产品（出口产品）符合经批准的型号设计资料和进口国提出的专用要求。~~

~~Certifies that the Part(s) identified above except as otherwise specified in block 13 was(were) manufactured/inspected in accordance with the airworthiness regulations of the stated country and/or in the case of parts to be exported with the approved design data and with the notified special requirements of the importing country.~~

15 使用过的产品 Used Parts

兹声明上述产品除第13项的其它规定以外，已按照上述国家适航条例和进口国通知的特殊要求进行了工作，该产品处于安全可用状态可以批准放行使用

Certifies that the work specified above except as specified in block 13 was carried out in accordance with the airworthiness regulations of the stated country and the notified special requirements of the importing country and in respect to that work, the part(s) is (are) in condition for safe operation and considered ready for release to service. (over)

16 批准人签名 Signature	18 批准日期 Date **Jan/28/2022**	19 中国民航总局授权 Issued by or on behalf of the CAAC
17 批准人姓名（打印的） Name(Printed) **SURERK WASEEPA**		**F06600808**

AAC-038(12/94)

*参阅产品目录详细查找适用性
Cross-check eligibility for more details with parts catalogue

LIFE LIMITED PART CARD

Part Name T.SHAFT Part Number 3822504-3

Serial Number 12P53775 Part of Assy Part Number N/A

DATE		APU SERIAL NUMBER	AIRCRAFT SERIAL NUMBER	TIME ON PART THIS INSTALLATION		TOTAL TIME ON PART		REMARKS
INSTALLED	REMOVED			CYCLE	HOURS	CYCLE	HOURS	
27.12.2012	---	P-5551		0	0	0	0	313309260
	11.05.2021	P-5551				15776	3516	TVECA

Form QS 1412/2008 ÄZ: 00; 23.07.2008

ID: 38257

LIFE LIMITED PART REPAIR RECORD

DATE	MAINTENANCE PERFORMED	AUTHORIZED SIGNATURE
10. AUG. 2017	Overhauled IN ACCORDANCE TSN: 2205,70 CSN: 9950	Honeywell Aerospace GmbH Approval Certificate Nr.: DE.145.0022 M. Seibel
	WITH THE CURRENT MANUAL NDT CHECK PERFORMED	

Honeywell Aerospace GmbH
FrankfurterStr. 41 – 65
65479 Raunheim - Germany

APU SERVICE RECORD

DATE	ACCUMULATIVE TOTALS				P/N : 3800702-1	S/N : P-5551
27122012	HOURS		CYCLES			
	TSN	/ TSO	CSN	/ CSO	TSR /	CSR
	7647,40	/ N/A	29982	/ N/A	0 /	0

DESCRIPTION OF WORK PERFORMED

TYPE MAINTENANCE : Repaired and Modified
EM 49-26-95 REV.6; 131-9(B); SERIES: 17; P/O: MV120173;
S.A.S. ERS WORKSCOPE FOR APU 131-9B DATED 28 APRIL 2010 PERFORMED.

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 : 313309260

TRACEABLE LIFE LIMITED / LIFE CONTROLLED PARTS

ITEM	ROTOR	ASSY	S/N	HRS	CYC	LEFT	LIMIT	EXPOSED
LC.ROTOR	3822400-5	N/A	12-162053-48006	0	0	O/C	N/A	☑
EC.ROTOR	3822391-6	N/A	12-162053-49553	0	0	30000	30000	☑
T.SHAFT	3822504-3	N/A	12P53775	0	0	30000	30000	☑
1T.ROTOR	3840161-1	3840160-8	11-168522-01766	0	0	30000	30000	☑
2T.WHEEL	3840165-4	N/A	12-156101-06862	0	0	30000	30000	☑

LIMIT (ROTOR LIFE LIMIT)
Life Limit (Cycles) are not to be exceeded, when "N/A" Life Limits do not apply

NAMEPLATE DATA CONTROLLED

ITEM	P/N	S/N	ST	ITEM	P/N	S/N	ST
GENERATO	28B545-7	60-A0527	4	O.L.SWIT	3876298-3	0858	0
FCU	441921-5	CUC12589	4	LUBEMODU	4131020-3	1736	0
DMM	3876287-1	GE975	4	LCV	3291214-2	226	1
SCV	3291238-2	880	2	IGN.UNIT	3888058-5	980218000442	4
ACTUATOR	3886188-3	9150	5E	OILCOOLE	160564-2	865	2
OILTEMPV	160550-1	49-560	4				
	*TSN:	6861					
	*CSN:	23909					

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
DGSAS 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
KCASR APPROVED MAINT. ORG. NO.: DGCA/AMO/069

H. Lehmann — STAMP — 27.12.2012 DATE

Form QS 546/93 ÄZ: 13; 22.11.2012

1. Approving National Aviation Authority/Country:	2.	3. Form Tracking Number:
FAA/United States	**AUTHORIZED RELEASE CERTIFICATE** **FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG**	890003093347Y14 902469793-10 890003075541Y14 902459767-10

4. Organization Name and Address:	Production Approval		5. Work Order/Contract/Invoice Number:
Honeywell International Inc 111 South 34th Street Phoenix AZ 85072	PT1222NM	Honeywell International Inc Units 2-4, Chevron Eaton Road Hemel Hempstead, HP2 7DR United Kingdom	4702235020-000010 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	12P53775	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:	19. ☐ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 13		
☒ Approved design data and are in a condition for safe operation. ☐ Non-approved design data specified in Block 13.	Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block13 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: N. Lancaster	16. Approval/Authorization No.: **ODA-602216-NM**	20. Authorized Signature:	21. Approval/Certificate No.:
17. Name (Typed or Printed): **Neil Lancaster**	18. Date (m d y): **NOV 28 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 Block1, 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 Block1. Statements in Block 14 and 19 do not constitute installation certification. In all cases, aircraft maintanance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

* Installer must cross check eligibility with applicable technical data

BACK TO BIRTH HISTORY

Currently Fitted To:	0
APU Type:	GTCP 131-9 (B)
APU P/N	3800702-1
APU S/N:	P-5551
APU CSN:	45 758

Item: Turbine Shaft

Part Number: 3822504-3

Serial Number: 12P53775

As of: 5-Mar-20

Life Limit (Cycles):	30 000
Life Limit (Hours):	N/A
Current TSN:	-
Current CSN:	15 776
Remaining Cycles:	14 224

	Installation						Removal					Remarks
	Date	APU S/N	APU Times		Component Times		Date	APU Times		Component Times		
			TSN	CSN	TSN	CSN		TSN	CSN	TSN	CSN	
1	27-dec-12	P-5551	7 647	29 982	0	0	10-jul-17	9 853	39 932	2 205	9 950	overhauled
2	10-aug-17	P-5551	9 853	39 932	2 205	9 950	05-mar-20	11 163	45 758	3 516	15 776	
3												
4												

Stefan Kock
Senior Project Manager
Scandinavian Airlines System
Airline Operations

APU
Life Limited Parts

Model: GTCP 131-9 (B)
Mfr Date: 14-Nov-99
P/N: 3800702-1
S/N: P-5551

Current Position:
APU TSN: 11 163
APU CSN: 45 758
As of: 5-Mar-20

MPD Item	Description	Part Number	Serial Number	Component CSN	Limit	Cycles Remaining
49-052-00	Compressor Rotor	3822391-6	17-162053-23920	5 826	30 000	24 174
49-082-00	Turbine Shaft	3822504-3	12P53775	15 776	30 000	14 224
49-062-00	Stg 1 Turbine Disc	3840310-4	17-156101-01093	5 826	30 000	24 174
49-072-00	Stg 2 Turbine Disc	3840165-4	17-156101-01152	5 826	30 000	24 174

Stefan Kock
Project Manager
Scandinavian Airlines System
Airline Operations

STATEMENT

INCIDENTS / ACCIDENTS

TYPE: APU GTCP131-9B PN 3800702-1 SN: P-5551

TT: 11163 TC: 45758 (APU hours and cycles)

The undersigned hereby certifies to the best of my knowledge that the material specified above according to attached ICAO definitions:

- Has not suffered an incident or accident, major failure, or fire; nor has the Engine been subject to extreme stress or heat nor have any part which may have been installed on the Engine been acquired from any government or military or non EASA/FAA certified source, and
- Has not been immersed in salt water or otherwise exposed to corrosive agents outside normal operation.
- Does not have any parts installed other than OEM parts and parts repaired in accordance with OEM approved repairs.

Last operator: SAS removed from LN-RRB MSN 32276 on 05MAR2020

.

Attachment: ICAO Annex 13 Chapter 1 "Definitions" and Attachment C "List of examples"

Stockholm, Sweden
28OCT2021

Stefan Kock
Product Manager
Powerplant Maintenance Planning, STOME-E
Scandinavian Airlines System Denmark-Norway-Sweden
Airline Operation

Statements

9100 S. Dadeland Blvd., Suite 1500, Miami, FL 33156 +1-305-271-6650
info@longreach.com www.longreach.com

AD Statement

9100 S. Dadeland Blvd., Suite 1500, Miami, FL 33156 +1-305-271-6650
info@longreach.com www.longreach.com

ENGINE MODEL: 131-9A
ENGINE SERIAL NUMBER: P-4032
CUSTOMER: ABC AEROLINEAS SA DE CV
REPAIR ORDER: 2018-331110226-001

SERVICE RECORD
AIR WORTHINESS DIRECTIVES STATUS

AD NUMBER	REV	DESCRIPTION	WHERE ACCOMP	WHEN ACCOMP

NO AIRWORTHINESS DIRECTIVES APPLICABLE TO THIS ENGINE MODEL.

HONEYWELL INTERNATIONAL
REPAIR STATION # ZN3R030M

INSPECTOR SIGNATURE: _____
ALFONSO VELDERRAIN

DATE: 3/29/18

SB Statement

9100 S. Dadeland Blvd., Suite 1500, Miami, FL 33156 +1-305-271-6650
info@longreach.com www.longreach.com

APU SERVICE BULLETIN STATUS REPORT
131-9 [A] // SN P-4032

AIRCRAFT MODEL: A320-214
AIRCRAFT MSN: OFF WING
AIRCRAFT REG.: -
AIRCRAFT TOTAL TIME: -
AIRCRAFT TOTAL CYCLE: -

REPORT DATE: 29-Apr-20
APU TOTAL TIME: 25,832.00
APU TOTAL CYCLE: 26,347

ITEM	SERVICE BULLETIN	DESCRIPTION	COMPLIANCE DOCUMENT	REPETITIVE	INTERVAL			LAST DONE			NEXT DUE			REMAINING			STATUS	REMARKS
					HOURS	CYCLE	DAYS	HOURS	CYCLES	DAYS	HOURS	CYCLES	DAYS	HOURS	CYCLES	DAYS		
1	131-49-7791 R3	RE-INITIALIZATION OF DATA MEMORY MODULE PN 2876287-1	WO 2018-331110226-001	YES	-	-	-	20,998	21,361	26-Mar-18	-	-	-	-	-	-	OPEN	TO COMPLIED WITHIN THE NEXT SHOP VISIT. IT'S REPETITIVE EACH SV ONLY IF MISMATCH IN APU TIMES IS ENCOURAGED AS DESCRIBED IN THE SB PARA 1.
2	131-49-7989 R0	REPLACE TURBINE SEAL GASKET, PN 3844705-1 WITH PN 3844705-2	WO 2013-314959456-001	NO	-	-	-	10,899	12,487	13-Jul-13	-	-	-	-	-	-	CLOSED	EMBODIED IN SHOP VISIT IN JULY, 2013
3	131-49-8008 R0	REPLACE THE FAN ASSEMBLY, PN 3616140-7 WITH 3616140-10	-	NO	-	-	-	-	-	-	-	-	-	-	-	-	OPEN	TO BE COMPLIED WITH IN NEXT SHOP VISIT.
4	131-49-8015 R0	REPLACE COMPRESSOR DUPLEX BEARING ASSEMBLY PARTS	WO 2013-314959456-001	NO	-	-	-	10,899	12,487	13-Jul-13	-	-	-	-	-	-	CLOSED	EMBODIED IN SHOP VISIT IN JULY, 2013
5	131-49-8028 R1	STANDARD STORAGE AND PRESERVATION GUIDELINES FOR AIRBUS AUXILIARY POWER UNITS	WO 2018-331110226-001	YES	-	-	-	20,998	21,361	26-Mar-18	-	-	-	-	-	-	OPEN	TO COMPLIED WITHIN THE NEXT SHOP VISIT. REPETITIVE AT EACH TIME THE APU IS UNINSTALLED FOR SV SHIPMENT.
6	131-49-8063 R0	REPLACE FIRST STAGE TURBINE ASSY, PN 3840160-5, -7, -8 OR PN 3840303-1 & STATIONARY SEAL ASSY, PN 3844758-5, WITH FIRST STG TURBINE ASSY, PN 3840310-3 & STATIONARY SEAL ASSY PN 3844758-6	WO 2013-314959456-001	NO	-	-	-	10,899	12,487	13-Jul-13	-	-	-	-	-	-	CLOSED	EMBODIED IN SHOP VISIT IN JULY, 2013
7	131-49-8103 R1	INSTALL NEW CLAMPS TO PREVENT CONTACT BETWEEN KDF THE TURBINE BEARING RETURN TUBE AND SECONDARY FUEL MANIFOLD	WO 2014-318701041-001	NO	-	-	-	13,166	15,290	22-Sep-14	-	-	-	-	-	-	CLOSED	EMBODIED IN SHOP VISIT IN SEP, 2014
8	131-49-8110 R0	REPLACE LOAD CONTROL VALVE, PN 3291432-1 WITH PN 3291432-2	WO 2018-331110226-001	NO	-	-	-	20,998	21,361	26-Mar-18	-	-	-	-	-	-	CLOSED	EMBODIED IN SHOP VISIT IN MAR, 2018
9	131-49-8117 R2	REPLACE THE STARTER MOTOR, PN 2704506-2 OR -3 WITH PN 2704506-4, ON 131-9[A] ENGINE MODELS	-	NO	-	-	-	-	-	-	-	-	-	-	-	-	OPEN	TO BE COMPLIED WITH IN NEXT SHOP VISIT.
10	131-49-8203 R0	REPLACE/REWORK OIL COOLER RETURN TUBE ASSEMBLY,PN 3881763-1 WITH PN 3881763-2, AND OIL COOLER SUPPLY TUBE ASSEMBLY, PN 3881764-1WITH PN 3881764-2, AND ADD GEARBOX TUBE RETAINER, PN 70722243-1, OIL	-	NO	-	-	-	-	-	-	-	-	-	-	-	-	OPEN	TO BE COMPLIED WITH IN NEXT SHOP VISIT.
11	131-49-8217 R0	REPLACE STATIONARY AIR SEAL, PN 3844738-6 WITH PN 3844738-7, ON THE 131-9[A] APU	WO 2018-331110226-001	NO	-	-	-	20,998	21,361	26-Mar-18	-	-	-	-	-	-	CLOSED	EMBODIED IN SHOP VISIT IN MAR, 2018

APU SERVICE BULLETIN STATUS REPORT
131-9 [A] // SN P-4032

AIRCRAFT MODEL: A320-214
AIRCRAFT MSN: OFF WING
AIRCRAFT REG.: -
AIRCRAFT TOTAL TIME: -
AIRCRAFT TOTAL CYCLE: -

REPORT DATE: 29-Apr-20
APU TOTAL TIME: 25.832,00
APU TOTAL CYCLE: 26.347

ITEM	SERVICE BULLETIN	DESCRIPTION	COMPLIANCE DOCUMENT	REPETITIVE	INTERVAL			LAST DONE			NEXT DUE			REMAINING			STATUS	REMARKS
					HOURS	CYCLE	DAYS	HOURS	CYCLES	DAYS	HOURS	CYCLES	DAYS	HOURS	CYCLES	DAYS		
12	131-49-8225 R0	REPLACE FIRST STAGE DUAL-ALLOY TURBINE (DAT) ROTOR, PN 3840310-3 WITH PN 3840310-4, FOR THE 131-9[A] AUXILIARY POWER UNIT (APU)	WO 2018-131110226-001	NO	-	-	-	20.988	21.361	26-Mar-18	-	-	-	-	-	-	CLOSED	EMBODIED IN SHOP VISIT IN MAR, 2018
13	131-49-8244 R1	REPLACE THE FAN ASSEMBLY, PN 3616140-10 WITH 3616140-11	-	NO	-	-	-	-	-	-	-	-	-	-	-	-	OPEN	TO BE COMPLIED WITH IN NEXT SHOP VISIT.

Edgardo Ulises Barrientos
Powerplant Director
Interjet
ABC Aerolíneas S.A. de C.V.

Removal Tag

9100 S. Dadeland Blvd., Suite 1500, Miami, FL 33156 +1-305-271-6650
info@longreach.com www.longreach.com

Form Number: QA-0050
Date: 01/02/2017

AERSALE
PARTS REMOVAL AND IDENTIFICATION TAG

Registration No. XA-ING	Insp. By: Date:
MSN 4304	Part No. 3800708-1
Service Order/Operation No. 2205/7101	Serial No. P-4032

Nomenclature / Panel No.
APU

Location Removed From:
APU compartment

Removed By Initials / Badge No. / Date
S. Porretta 501471/3033 08/27/20

Discrepancy

Non-Routines Generated

Times & Cycles Statement

9100 S. Dadeland Blvd., Suite 1500, Miami, FL 33156 +1-305-271-6650
info@longreach.com www.longreach.com

interjet

Date: 26-Mar-20

TO WHOM IT MAY CONCERN

STATEMENT OF AUXILIARY POWER PLANT HOURS & CYCLES

P-4032

APU Type	GTCP131-9A				
Serial Number:	P-4032	TSN:	25.832,00	CSN:	26.347

Operated/Possessed: From December 10th, 2008 to March 26th, 2020

This is to certify that the above mentioned HOURS & CYCLES are true as of the dated letter in respect of the AUXILIARY POWER UNIT.

Edgardo Ulises Barrientos
Fleet Administration & Powerplant Engineering Manager
Interjet
ABC Aerolíneas, S.A de C.V.

Oil Statement

9100 S. Dadeland Blvd., Suite 1500, Miami, FL 33156 +1-305-271-6650
info@longreach.com www.longreach.com

interjet

Date: 26-Mar-20

TO WHOM IT MAY CONCERN

OILS & FLUID SPECIFICATION

P-4032

APU Type	GTCP131-9A			
Serial Number:	P-4032	TSN: 25.832,00	CSN:	26.347
Operated/Possessed:	From December 10th, 2008 to March 26th, 2020			
APU oil:	EASTMAN 2197			

This is to certify that the above mentioned fluids were used to service the APU during Interjet operation.

Edgardo Ulises Barrientos
Fleet Administration & Powerplant Engineering Manager
Interjet
ABC Aerolíneas, S.A de C.V.

PMA/DER Statement

9100 S. Dadeland Blvd., Suite 1500, Miami, FL 33156 +1-305-271-6650
info@longreach.com www.longreach.com

✱ interjet

Date: 26-Mar-20

TO WHOM IT MAY CONCERN

NO PMA PARTS STATEMENT

P-4032

APU Type	GTCP131-9A			
Serial Number:	P-4032	TSN: 25.832,00	CSN:	26.347
Operated/Possessed:	From December 10th, 2008 to March 26th, 2020			

This letter is to certify No part has been installed on the APU that is classified as PMA, which is not listed as authorized by the manufacturer or listed in IPC.

Edgardo Ulises Barrientos
Fleet Administration & Powerplant Engineering Manager
Interjet
ABC Aerolíneas, S.A de C.V.

Log Book

9100 S. Dadeland Blvd., Suite 1500, Miami, FL 33156 +1-305-271-6650
info@longreach.com www.longreach.com

Honeywell

Gas Turbine

ENGINE LOG BOOK

ENGINE, GAS TURBINE

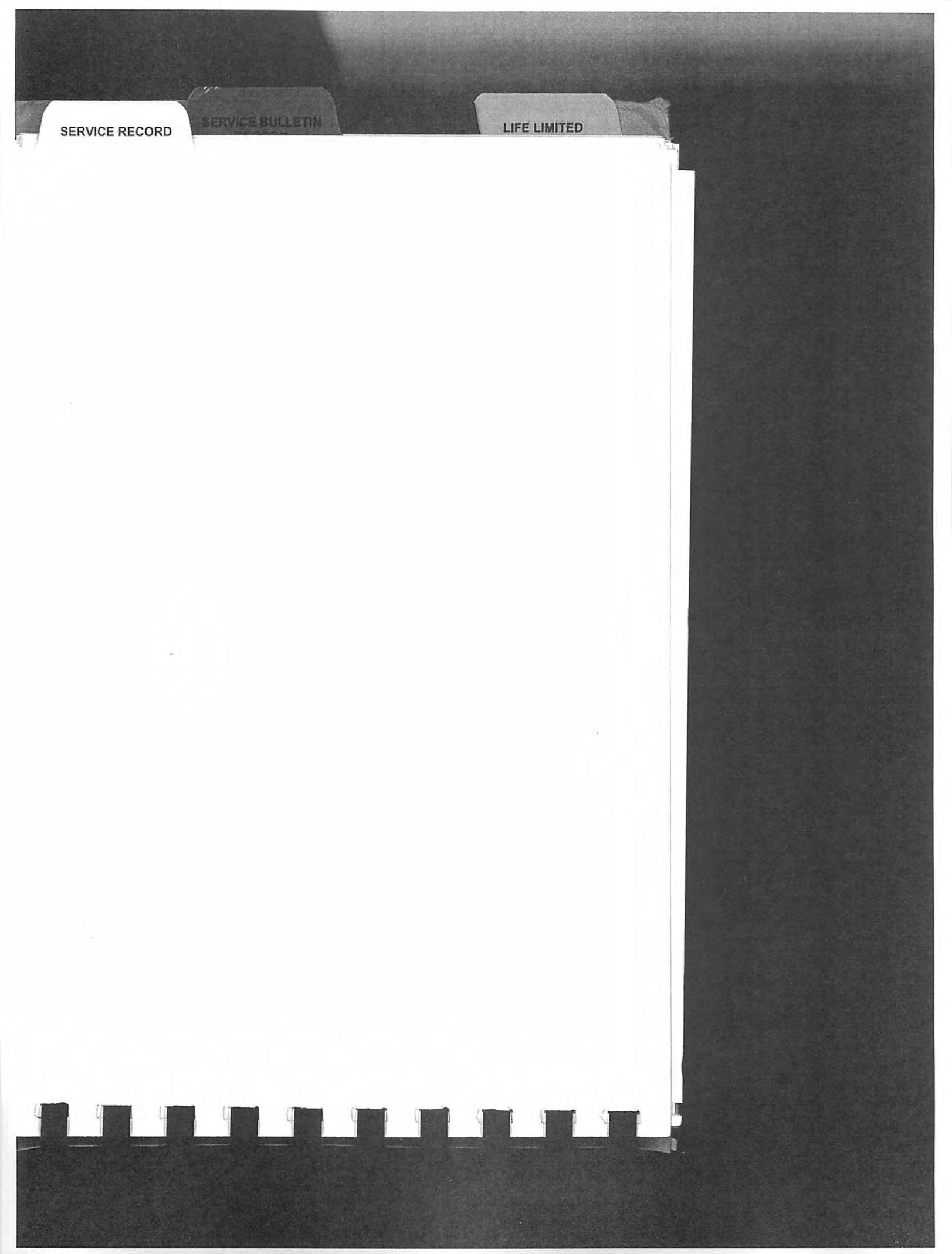
PART NO. 3800708-1
MODEL NO. 131-9A
SERIAL NO. P-4032.

APU Data

Delivery Date _____

Model No. 131-9[A] **Serial No.** P-4032 **Total APU Weight** 353.5 lbs

See applicable technical manuals for leading particulars.


SERVICE RECORD
SERVICE BULLETIN
LIFE LIMITED

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	
9/19/08	Ø	Ø	Ø	Ø	3A00708-1 NEW PRODUCTION UNIT P-4032
					SERIES 11 CHANGE NONE
					Leo Hostallero 26
02/10/08	ϕ	ϕ	ϕ	ϕ	INSTALLED IN AC 3690 AG CG
JAN 31, 2011	5188	6192	5188	6192	Routine Control. David Lopez. PPE David López
FEB 28, 2011	5339	6429	5339	6424	Routine Control. David López PPE PPE D
MAR 31, 2011	5491	6672	5491	6672	Routine CANCELED David López PPE OCT, 2011
APR 30, 2011	5641	6919	5641	6914	Routine Control. DUE David López PPE
MAY 31, 2011	5828	7162	5827	7162	Routine Control. COLUMN MISMARK PPE
JUN 30, 2011	6080	7367	6080	7367	Routine Control. David López PPE
JUL 31, 2011	6294	7624	6294	7624	Routine Control. David López PPE
AUG 31, 2011	6528	7902	6528	7902	Routine Control. David López PPE
SEP 30, 2011	6752	8149	6752	8149	Routine Control. David López PPE
					TOTALS TO DATE

SERVICE BULLETIN

LIFE LIMITED

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	
JAN 31, 2011	5188	5188	6192	6192	Routine control. David López. PPE
FEB 28, 2011	5339	5339	6429	6429	Routine control. David López PPE
MAR 31, 2011	5491	5491	6672	6672	Routine control. David López PPE
APR 30, 2011	5641	5641	6914	6914	Routine control. David López PPE
MAY 31, 2011	5828	5828	7162	7162	Routine control. David López PPE
JUN 30, 2011	6080	6080	7367	7367	Routine control. David López PPE
JUL 31, 2011	6294	6294	7624	7624	Routine control. David López PPE
AUG 30, 2011	6528	6528	7902	7902	Routine control. David López PPE.
SEP 30, 2011	6752	6752	8149	8149	Routine control. David López PPE.
OCT 31, 2011	6977	6977	8399	8399	ROUTINE CONTROL MARIANO GARCIA PPE
NOV 30, 2011	7182	7182	8637	8637	ROUTINE CONTROL MARIANO GARCIA PPE
DEC 31, 2011	7382	7382	8866	8866	ROUTINE CONTROL MARIANO GARCIA PPE
JAN 31, 2012	7599	7599	9117	9117	ROUTINE CONTROL MARIANO GARCIA PPE
FEB 29, 2012	7776	7776	9333	9333	ROUTINE CONTROL MARIANO GARCIA PPE
MAR 31, 2012	7910	7910	9475	9475	ROUTINE CONTROL MARIANO GARCIA PPE
APR 30, 2012	8121	8121	9706	9706	ROUTINE CONTROL MARIANO GARCIA PPE
					TOTALS TO 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	
May 31, 2012	8364	8364	9962	9962	Routine Control Mariano Garcia PPE
Jun 30, 2012	8599	8599	10212	10212	Routine Control Mariano Garcia PPE
Jul 31, 2012	8845	8845	10461	10461	Routine Control Mariano Garcia PPE
Aug 31, 2012	9195	9195	10656	10656	Routine Control Mariano Garcia PPE
Sep 30, 2012	9428	9428	10896	10896	Routine Control Mariano Garcia PPE
Oct 31, 2012	9637	9637	11112	11112	Routine Control Mariano Garcia PPE
Nov 30, 2012	9877	9877	11340	11340	Routine Control Mariano Garcia PPE
Dec 31, 2012	10079	10079	11593	11593	Routine Control Mariano Garcia PPE
Jan 31, 2013	10323	10323	11831	11831	Routine Control Mariano Garcia PPE
Feb 28, 2013	10525	10525	12072	12072	Routine Control Mariano Garcia PPE
Mar 31, 2013	10765	10765	12343	12343	Routine Control Mariano Garcia PPE
Apr 30, 2013	10898	10898	12487	12487	Removed from A/C 3690 Mariano Garcia
					TOTALS TO DATE

SERVICE BULLETIN RECORD

LIFE LIMITED

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	
					TOTALS TO DATE

DATE	ENGINE HOURS	ENGINE HOURS	REMARKS, INSPECTIONS, REPAIRS, AND ADJUSTMENTS	SIGNATURE
7/17/13	**TSN** 10899:35	**CSN** 12487	**APU P/N** 3800708-1 **S/N** P-4032 **Model 131-9A**	
	TSO 0	**CSO** 0	**DESCRIPTION OF WORK PERFORMED:** ENGINE DISASSEMBLED TO THE EXTENT NECESSARY TO PERFORM	
			OVERHAUL, INSPECTED, REPAIRED AND TESTED IAW MANUFACTURER MANUAL 49-27-29 AND CUSTOMER INSTRUCTIONS. TSR/CSR:0.	
			**********	
			INSPECTIONS COMPLIED WITH: N/A	
			SERVICE BULLETINS COMPLIED WITH: SEE SERVICE BULLETIN SECTION OF LOG BOOK.	
			PARTS REPAIRED OR REPLACED THIS VISIT: SEE TRACE INPUT PAGE	
			NDC / LIFE LIMITED PARTS: 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 **314959456**	
			HONEYWELL AEROSPACE CERTIFIED REPAIR STATION ZN3R030M	
			INSPECTOR:	*MARIO GASCA*

Honeywell

SERVICE BULLETIN RECORD

LIFE LIMITED

ENGINE MODEL: 131-9A
ENGINE SERIAL NUMBER: P-4032
CUSTOMER: ABC AEROLINEAS SA DE CV
REPAIR ORDER: 2013-314959456-001

SERVICE RECORD
TRACEABILITY PARTS REWORKED OR REPLACED

PART NAME	PART NUMBER	S/N	LOT NBR	CONDITION	QTY	DOC NBR
COOLER OIL	160494-1	2502	315023462	Repaired	1	49-94-3
STARTER MOTOR	2704506-2	4431	315023915	Functionally Tested	1	49-41-3
VALVE SURGE	3291238-2	5545	315024109	Overhauled	1	49-52-3
LOAD CONTROL	3291432-1	1646	314161870	Overhauled	1	49-52-2
FAN ASSY	3616140-7	P-3608	314668936	Overhauled	1	49-51-0
E/C COMPRESSOR	3822391-6	08-03501-14281	315022142	Overhauled	1	49-26-8 ORI P31
SHAFT MATCHED	3822510-2	NA	314863528	Overhauled	1	49-26-8 ORI P31 ORI P31
BEARING	3822666-2	13-151725-04195	NA	New	1	
CASE CPRSR	3827152-3	NA	315019214	Overhauled	1	49-26-8 ORI P31
DIFFUSER	3827325-3	NA	315032033	Overhauled	1	49-26-8 ORI T40
HOUSING BEARING	3827426-3	NA	314862947	Overhauled	1	49-26-8 ORI P31
HOUSING ASSY	3827429-1	NA	315021894	Overhauled	1	49-26-8 ORI P31
CASE ENGINE	3827504-3	NA	315021741	Overhauled	1	49-26-8 ORI P30
NOZZLE FUEL	3830416-1	2AEF0230	30885453	Overhauled	1	49-30-0
NOZZLE FUEL	3830416-1	2ALN0261	30875918	Overhauled	1	49-30-0
NOZZLE FUEL	3830416-1	98-1233	30876657	Overhauled	1	49-30-0
NOZZLE FUEL	3830416-1	9902633	30876739	Overhauled	1	49-30-0
NOZZLE FUEL	3830416-1	MF042AAF0209	30875839	Overhauled	1	49-30-0
NOZZLE FUEL	3830416-1	MF042AAF0244	30876654	Overhauled	1	49-30-0

ENGINE MODEL: 131-9A
ENGINE SERIAL NUMBER: P-4032
CUSTOMER: ABC AEROLINEAS SA DE CV
REPAIR ORDER: 2013-314959456-001

SERVICE RECORD
TRACEABILITY PARTS REWORKED OR REPLACED

PART NAME	PART NUMBER	S/N	LOT NBR	CONDITION	QTY	DOC NBR
NOZZLE FUEL	3830416-1	MFR0011532	30876344	Overhauled	1	49-30-01
NOZZLE FUEL	3830416-1	MFR0104130	30876497	Overhauled	1	49-30-01
NOZZLE FUEL	3830416-1	MFR0300343	30875950	Overhauled	1	49-30-01
NOZZLE FUEL	3830416-1	MFR032NA02069	30876737	Overhauled	1	49-30-01
CHAMBER COMBUSTION	3830461-6	NA	257204	Overhauled	1	49-26-85 ORI P35597
TURBINE ROTOR 2ND	3840165-4	13-156101-00379	NA	New	1	
BEARING	3840242-1	13-162255-10544	NA	New	1	
TURBINE ROTOR 1ST	3840310-3	13-156101-00945	NA	New	1	
NOZZLE SEG	3844760-2	NA	XS038-282-8	Overhauled	1	49-26-85 ORI P30516
NOZZLE SEG	3844760-2	NA	XM358-512	Overhauled	1	49-26-85 ORI P30516
NOZZLE SEG	3844760-2	NA	XS038-282-4	Overhauled	1	49-26-85 ORI P30516
NOZZLE SEG	3844760-2	NA	XS038-282-6	Overhauled	1	49-26-85 ORI P30516
NOZZLE SEG	3844760-2	NA	XL483-047	Overhauled	1	49-26-85 ORI P30516
NOZZLE SEG	3844760-2	NA	XN173-528	Overhauled	1	49-26-85 ORI P30516
NOZZLE SEG	3844760-2	NA	XS038-282-3	Overhauled	1	49-26-85 ORI P30516
NOZZLE SEG	3844760-2	NA	XS038-282-1	Overhauled	1	49-26-85 ORI P30516
NOZZLE SEG	3844760-2	NA	XS038-282-5	Overhauled	1	49-26-85 ORI P30516
NOZZLE SEG	3844760-2	NA	XS038-282-2	Overhauled	1	49-26-85 ORI P30516

ENGINE MODEL: 131-9A
ENGINE SERIAL NUMBER: P-4032
CUSTOMER: ABC AEROLINEAS SA DE CV
REPAIR ORDER: 2013-314959456-001

SERVICE RECORD
TRACEABILITY PARTS REWORKED OR REPLACED

PART NAME	PART NUMBER	S/N	LOT NBR	CONDITION	QTY	DOC NBR
NOZZLE SEG	3844760-2	NA	XS038-282-7	Overhauled	1	49-26-3 ORI P3
STATOR SECOND	3844864-1	445	F24131	Overhauled	1	49-26-3 ORI P32
RETAINER	3844917-1	NA	PH-349792-1	Repaired	1	49-26-3
HOUSING	3844923-1	NA	314890718	Overhauled	1	49-26-3 SB 49-7 ORI P34
EXCITER	3888058-7	110245	102258	Overhauled	1	49-41-0
WIRING HARNESS	3888438-1	NA	313931477	Overhauled	1	49-11-0 ORI P35 ORI P37
LUBE MODULE	4131020-4	4164	315023609	Overhauled	1	49-90-9 49-26-3
CONTROL FUEL	441921-5	CUC14551	315024166	Functionally Tested	1	49-30-0

HONEYWELL INTERNATIONAL
REPAIR STATION # ZN3R030M

INSPECTOR SIGNATURE: _____
MARIO GASCA

DATE: 7/17/2013

DATE	ACCUMULATED ENGINE HOURS	ACCUMULATED ENGINE CYCLES	REMARKS, INSPECTIONS, REPAIRS, AND ADJUSTMENTS	SIGNATURE
NOV 5, 13	10899	12487	INSTALLED ON A/C MSN 3149 HOUR SOH = 0 CYCLES SOH = 0	MARIANO GARCIA
DEC 31, 13	11112	12717	ROUTINE CONTROL H$O: 218 C$O: 230	MARIANO GARCIA
SEP 30, 13	11355	12969	ROUTINE CONTROL H$O: 456 C$O: 482	MARIANO GARCIA
OCT 31, 13	11550	13198	ROUTINE CONTROL H$O: 651 C$O: 711	MARIANO GARCIA
NOV 30, 13	11766	13452	ROUTINE CONTROL H$O: 867 C$O: 965	MARIANO GARCIA
DEC 31, 13	11964	13686	ROUTINE CONTROL H$O: 1065 C$O: 1199	MARIANO GARCIA
JAN 31, 14	12165	13935	ROUTINE CONTROL H$O: 1266 C$O: 1448	MARIANO GARCIA
FEB 28, 14	12329	14137	ROUTINE CONTROL H$O: 1430 C$O: 1650	MARIANO GARCIA
MAR 31, 14	12545	14375	ROUTINE CONTROL H$O: 1646 C$O: 1888	MARIANO GARCIA
APR 30, 14	12756	14602	ROUTINE CONTROL H$O: 1857 C$O: 2115	MARIANO GARCIA
MAY 31, 14	12974	14839	ROUTINE CONTROL H$O: 2075 C$O: 2352	MARIANO GARCIA
JUN 30, 14	13162	15042	ROUTINE CONTROL H$O: 2263 C$O: 2555	MARIANO GARCIA
JUL 31, 14	13366	15290	ROUTINE CONTRO H$O: 2467 C$O: 2803	MARIANO GARCIA
AUG 08, 14	13366	15290	REMOVED FROM A/C MSN 3149 H$O: 2467 C$O: 2803	MARIANO GARCIA

SERVICE BULLETIN RECORD

LIFE LIMITED

DATE	ENGINE HOURS	ENGINE HOURS	REMARKS, INSPECTIONS, REPAIRS, AND ADJUSTMENTS	SIGNATURE
9/24/14	TSN 13366	CSN 15290	**APU P/N** 3800708-1 **S/N** P-4032 **Model 131-9A**	
	TSO N/A	CSO N/A	**DESCRIPTION OF WORK PERFORMED:** 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.	
			**********	
			INSPECTIONS COMPLIED WITH: N/A	
			SERVICE BULLETINS COMPLIED WITH: SEE SERVICE BULLETIN SECTION OF LOG BOOK.	
			PARTS REPAIRED OR REPLACED THIS VISIT: SEE TRACE INPUT PAGE	
			NDC / LIFE LIMITED PARTS: 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 **318701041**	
			HONEYWELL AEROSPACE CERTIFIED REPAIR STATION	
			ZN3R030M	
			INSPECTOR: MIKE COCHRAN (104)	

SERVICE BULLETIN RECORD

LIFE LIMITED

ENGINE MODEL: 131-9A
ENGINE SERIAL NUMBER: P-4032
CUSTOMER: ABC AEROLINEAS SA DE CV
REPAIR ORDER: 2014-318701041-001

SERVICE RECORD

TRACEABILITY PARTS REWORKED OR REPLACED

PART NAME	PART NUMBER	S/N	LOT NBR	CONDITION	QTY	DO NO
COOLER OIL	160494-1	303	AEY55204	Overhauled	1	49-4
MOTOR	2704506-2	4431	318768533	Overhauled	1	49-4
VALVE SURGE	3291238-2	5545	318769720	Functionally Tested	1	49-5
FAN ASSY	3616140-7	P-2759	318542353	Overhauled	1	49-5
BEARING	3822666-2	14-151725-04593		New	1	
CASE CPRSR DR	3827152-3		318762575	Overhauled	1	49-2 ORI P
NOZZLE FUEL	3830416-1	2AFB0587	31186613	Overhauled	1	49-3
NOZZLE FUEL	3830416-1	2BTE0203	31187778	Overhauled	1	49-3
NOZZLE FUEL	3830416-1	2BTE0421	31187567	Overhauled	1	49-3
NOZZLE FUEL	3830416-1	9902465	31186642	Overhauled	1	49-3
NOZZLE FUEL	3830416-1	9904151	31190366	Overhauled	1	49-3
NOZZLE FUEL	3830416-1	AAA23988	31191799	Overhauled	1	49-3
NOZZLE FUEL	3830416-1	AAA23999	31192201	Overhauled	1	49-3
NOZZLE FUEL	3830416-1	MFR0101608	31190359	Overhauled	1	49-3
NOZZLE FUEL	3830416-1	MFR0104259	31192699	Overhauled	1	49-3
NOZZLE FUEL	3830416-1	MFR9907970	31192224	Overhauled	1	49-3
BEARING	3840242-1	14-162255-08886		New	1	
BEARING	3860835-2	14-162255-04747		New	1	
BEARING	3860835-2	14-162255-16933		New	1	
BEARING	3860865-1	14-162255-14132		New	1	
BEARING	3860865-1	14-162255-14229		New	1	
HOUSING ASSEMBLY	3863426-3	02P14519	317452298	Overhauled	1	49-2 ORI P ORI P

ENGINE MODEL: 131-9A
ENGINE SERIAL NUMBER: P-4032
CUSTOMER: ABC AEROLINEAS SA DE CV
REPAIR ORDER: 2014-318701041-001

SERVICE RECORD

TRACEABILITY PARTS REWORKED OR REPLACED

PART NAME	PART NUMBER	S/N	LOT NBR	CONDITION	QTY	DOC NBR
GEARSHAFT CLUSTER	3870205-1	14P70516		New	1	
LUBE MODULE	4131020-4	4164	318768855	Repaired	1	49-90-57
VALVE SOLENOID	692546-4	08374	318769815	Functionally Tested	1	49-26-85

HONEYWELL INTERNATIONAL
REPAIR STATION # ZN3R030M

INSPECTOR SIGNATURE: [signature] (104)
MIKE COCHRAN

DATE: 9/24/14

DATE	ACCUMULATED ENGINE HOURS	ACCUMULATED ENGINE CYCLES	REMARKS, INSPECTIONS, REPAIRS, AND ADJUSTMENTS	SIGNATURE
JUN15,15	13366	15290	APU INSTALLED ON A/C MSN 3690	MARIANO GARCIA PP&APE
DEC31,15	15,137	16,747	USAGE MONITORING MARIANO GARCIA	PP & APU ELG
JUN30,16	16,590	17,963	USAGE MONITORING MARIANO GARCIA	PP & APU ELG
DEC31,16	18,228	19,154	USAGE MONITORING MARIANO GARCIA	PP & APU ELG
JUN30,17	19,708	20,366	USAGE MONITORING MARIANO GARCIA	
DEC16,17	20,965	21,344	APU REMOVED FROM A/C AA-ABC (MSN 3690) DUE TO OIL INTERNAL LEAKAGE	MARIANO GARCIA PP & APU ELG

SERVICE BULLETIN RECORD

LIFE LIMITED

DATE	ENGINE HOURS	ENGINE HOURS	REMARKS, INSPECTIONS, REPAIRS, AND ADJUSTMENTS	SIGNATURE
3/29/18	TSN 20997:44	CSN 21361	APU P/N 3800708-1 S/N P-4032 Model 131-9A	
	TSO N/A	CSO N/A	**DESCRIPTION OF WORK PERFORMED:** ENGINE DISASSEMBLED TO THE EXTENT NECESSARY TO PERFORM REPAIR, INSPECTED, REPAIRED AND TESTED IAW MANUFACTURER'S MANUAL 49-27-29 REV 11 AND CUSTOMER INSTRUCTIONS. TSR/CSR:0. ********** **********	
			INSPECTIONS COMPLIED WITH: N/A	
			SERVICE BULLETINS COMPLIED WITH: SEE SERVICE BULLETIN SECTION OF LOG BOOK.	
			PARTS REPAIRED OR REPLACED THIS VISIT: SEE TRACE INPUT PAGE	
			NDC / LIFE LIMITED PARTS: 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 **331110226**	
			HONEYWELL AEROSPACE CERTIFIED REPAIR STATION ZN3R030M **INSPECTOR:**	*ALFONSO VELDERRAIN*

SERVICE BULLETIN RECORD

LIFE LIMITED

ENGINE MODEL: 131-9A
ENGINE SERIAL NUMBER: P-4032
CUSTOMER: ABC AEROLINEAS SA DE CV
REPAIR ORDER: 2018-331110226-001

SERVICE RECORD

TRACEABILITY PARTS REWORKED OR REPLACED

PART NAME	PART NUMBER	S/N	LOT NBR	CONDITION	QTY	DOC NBR
COOLER OIL	160494-1	303	331184608	Repaired	1	49-94-34
MOTOR OUTLINE	2704506-4	6473	331149495	Functionally Tested	1	49-41-20
VALVE SURGE	3291238-2	5545	331185043	Overhauled	1	49-52-31
VALVE LOAD	3291432-2	1646	331171682	Overhauled	1	49-52-35 SB 49-9011
FAN ASSY	3616140-7	P-2759	331149424	Repaired	1	49-51-07 ORI P35830 ORI P35994
BEARING	3822666-2	18-151725-00908	NA	New	1	
DIFFUSER COMPRESSOR	3827054-2	NA	331455356	Overhauled	1	49-26-85 ORI T40235
HOUSING BEARING	3827426-3	NA	142728	Overhauled	1	49-26-85 ORI P32526 ORI P31730
NOZZLE FUEL INJ	3830416-1	AAC43214	5093381	Overhauled	1	49-30-01
NOZZLE FUEL	3830416-1	AAC43216	5093377	Overhauled	1	49-30-01
TURBINE ROTOR	3840165-4	13-156101-00379	331193751	Overhauled	1	49-26-85 ORI P31167 ORI P34391
BEARING SET	3840242-1	18-162255-01982	NA	New	1	
ROTOR ASSY	3840310-4	17-156101-07419	NA	New	1	
HOUSING ASSEMBLY	3863426-3	1115026100846	330676059	Overhauled	1	49-26-85 ORI P35609 ORI P36150 ORI P35192
SENSOR PRESS DIFF	3876227-2	081121419513	331199753	Functionally Tested	1	49-26-85
ACTUATOR	3886188-3	0713	331548040	Overhauled	1	49-50-07 SB B55968-49-02

ENGINE MODEL: 131-9A
ENGINE SERIAL NUMBER: P-4032
CUSTOMER: ABC AEROLINEAS SA DE CV
REPAIR ORDER: 2018-331110226-001

SERVICE RECORD

TRACEABILITY PARTS REWORKED OR REPLACED

PART NAME	PART NUMBER	S/N	LOT NBR	CONDITION	QTY	DOC NBR
LUBE MODULE	4131020-4	4164	331149711	Repaired	1	49-26-85 49-90-57
CONTROL FUEL	441921-5	CUC14551	331149574	Repaired	1	49-30-99
VALVE SOL NO	692546-4	08374	331149039	Functionally Tested	1	49-26-85

HONEYWELL INTERNATIONAL
REPAIR STATION # ZN3R030M

INSPECTOR SIGNATURE: _____ DATE: 3/29/18
ALFONSO VELDERRAIN

SERVICE BULLETIN RECORD

LIFE LIMITED PARTS


SERVICE BULLETIN RECORD
AIRWORTHINESS DIRECTIVES
LIFE LIMITED PARTS

ENGINE MODEL: 131-9A
ENGINE SERIAL NUMBER: P-4032
CUSTOMER: ABC AEROLINEAS SA DE CV
REPAIR ORDER: 2018-331110226-001

SERVICE RECORD
SERVICE BULLETIN COMPLIANCE

SERVICE BULLETIN	REV	DESCRIPTION	WHERE ACCOMP	WHEN ACCOMP
131-49-7791	3	AIRBORNE AUXILIARY POWER - GAS TURBINE ENGINE - RE-INITIALIZATION OF DATA MEMORY MODULE (DMM), PN 3876287-1, ON THE 131-9[A] APU	PHX	3/26/2018
131-49-8110	OR	REPLACE LOAD CONTROL VALVE, PN 3291432-1 WITH PN 3291432-2	PHX	3/28/2018
131-49-8217	0	AIRBORNE AUXILIARY POWER - GAS TURBINE ENGINE - REPLACE STATIONARY AIR SEAL, PN 3844738-6 WITH PN 3844738-7, ON THE 131-9[A] APU	PHX	3/28/2018
131-49-8225	0	AIRBORNE AUXILIARY POWER - GAS TURBINE ENGINE - REPLACE FIRST STAGE DUAL-ALLOY TURBINE (DAT) ROTOR, PN 3840310-3 WITH PN 3840310-4, FOR THE 131-9[A] AUXILIARY POWER UNIT (APU)	PHX	3/28/2018
49-8028	1	AIRBORNE AUXILIARY POWER - GAS TURBINE ENGINE - STANDARD STORAGE AND PRESERVATION GUIDELINES FOR AIRBUS AUXILIARY POWER UNITS	PHX	3/29/2018

HONEYWELL INTERNATIONAL
REPAIR STATION # ZN3R030M

INSPECTOR SIGNATURE: _____
ALFONSO VELDERRAIN

DATE: 3/29/18

AIRWORTHINESS DIRECTIVES

LIFE LIMITED PARTS

ENGINE MODEL: 131-9A
ENGINE SERIAL NUMBER: P-4032
CUSTOMER: ABC AEROLINEAS SA DE CV
REPAIR ORDER: 2014-318701041-001

SERVICE RECORD
SERVICE BULLETIN COMPLIANCE

SERVICE BULLETIN	REV	DESCRIPTION	WHERE ACCOMP	WHEN ACCOMP
49-8103	1	INSTALL NEW CLAMPS TO PREVENT CONTACT BETWEEN THE TURBINE BEARING RETURN TUBE AND SECONDARY FUEL MANIFOLD	PHX	9/22/2014
49-7791	2	RE-INITIALIZATION OF DATA MEMORY MODULE, PN 3876287-1. (ACCOMPLISH ONLY IF THE DMM IS CORRUPTED	PHX	8/28/2014
49-8028	OR	STANDARD STORAGE AND PRESERVATION	PHX	9/24/2014

HONEYWELL INTERNATIONAL
REPAIR STATION # ZN3R030M

INSPECTOR SIGNATURE: 104
MIKE COCHRAN

DATE: 9/24/14

LIFE LIMITED PARTS

ENGINE MODEL: 131-9A
ENGINE SERIAL NUMBER: P-4032
CUSTOMER: ABC AEROLINEAS SA DE CV
REPAIR ORDER: 2013-314959456-001

SERVICE RECORD
SERVICE BULLETIN COMPLIANCE

SERVICE BULLETIN	REV	DESCRIPTION	WHERE ACCOMP	WHEN ACCOMP
49-7989	0	SB 49-7989 AIRBORNE AUXILIARY POWER - GAS TURBINE ENGINE	PHX	7/13/2013
49-8015	OR	REPLACE COMPRESSOR DUPLEX BEARING ASSEMBLY PARTS	PHX	7/13/2013
49-8063	OR	REPLACE FIRST STAGE TURBINE ASSEMBLY, PN 3840160-5/-7/-8 OR PN 3840303-1, AND STATIONARY SEAL ASSEMBLY, PN 3844738-5, WITH FIRST STAGE TURBINE ASSEMBLY, PN 3840310-3 AND STATIONARY SEAL ASSEMBLY, PN 3844738-6	PHX	7/13/2013
49-8028	OR	STANDARD STORAGE AND PRESERVATION GUIDELINES FOR AIRBUS AUXILIARY POWER UNITS.	PHX	7/17/2013

HONEYWELL INTERNATIONAL
REPAIR STATION # ZN3R030M

INSPECTOR SIGNATURE: _____
MARIO GASCA

DATE: 7/17/2013

AIRWORTHINESS
DIRECTIVES